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Doctoral Dissertation

ENGLISH FOR SPECIFIC PURPOSES TEACHER EDUCATION:

AN INNOVATIVE ONLINE APPROACH

Elis Kakoulli Constantinou

Limassol, February 2021

CYPRUS UNIVERSITY OF TECHNOLOGY

FACULTY OF FINE AND APPLIED ARTS

DEPARTMENT OF MULTIMEDIA AND GRAPHIC ARTS

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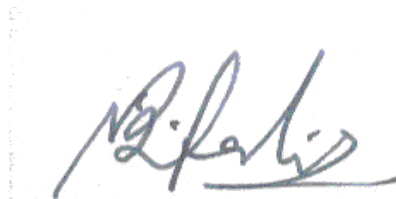
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Acknowledgements

And if you find her poor, Ithaka won't have fooled you.

Wise as you will have become, so full of experience,

you will have understood by then what these Ithakas mean[1].

ABSTRACT

Despite the fact that the need for English for Specific Purposes (ESP) programmes has grown exceedingly during the last decades, a literature review demonstrates that Teacher Education (TE) in ESP is under-researched. Most ESP educators are General English (GE) teachers with insufficient training in ESP. The necessity for ESP TE has been intensely reported in the literature over the years. This study is a Technical Action Research (TAR) investigation, which aims at addressing the gap that exists in the area of ESP TE, which concerns the lack of flexible online solutions outside the bounds of formal university education that can help ESP practitioners develop their teaching practices. More specifically, the study focuses on the neglected need for ESP TE among a group of 24 language instructors, consisting of ESP practitioners representing different ESP fields or English as a Foreign Language (EFL) teachers. These language instructors expressed interest in educating themselves on issues of ESP teaching methodology or updating their knowledge on the latest developments in ESP teaching practices. The 24 language instructors came from different countries and different educational contexts.

The study follows a cyclical pattern of continuous improvement evolving in two cycles, namely Stage 1 and Stage 2. Stage 1 begins with the identification of the problem, through a literature review, anecdotal evidence, and an analysis of the 24 language instructors' needs in terms of ESP TE. Based on the results, the researcher develops an intervention, the Online Reflective Teacher Education course in English for Specific Purposes (ReTEESP Online), founded on social constructivism, connectivism and a sociocultural perspective to TE with elements from the reflective model of TE and critical pedagogy. The course is designed following a backward approach as suggested by Wiggins and McTighe (2005) and principles of efficient online TE. After its pilot testing, the course is finalised and implemented with the 24 language instructors during February 26 – April 8, 2018. The tools used for the delivery of the course are the G Suite for Education, Skype (and later Zoom), Facebook, Messenger, and YouTube. Data are collected through an electronic questionnaire administered to the instructors at the beginning of the study, participants' reflective journals, the facilitator's field notes, discussions they have on Messenger and on Google Classroom and focus groups/ interviews that take place after the completion of the course. The findings of Stage 1 provide a basis for the refinement of the proposed course in Stage 2.

The reflection on the teachers' and facilitator's experience with the course leads to its refinement in Stage 2, which results in the creation of the ReTEESP Online: The Sequel. The sequel course is implemented during May 20 – May 31, 2019 with the same group of participants, and data are collected through the same tools. The thematic analysis in both stages reveals teachers' characteristics and professional experiences. It also shows many positive aspects of the course, such as the teachers' and facilitator's acquisition of new knowledge that they can apply in their teaching and development of networking. The analysis also reveals challenges, such as time constraints, tight deadlines and teachers' engagement with professional and personal obligations, which result in teachers' limited engagement with the course, in some cases, and lower participation in Stage 2. The analysis also shows that certain technical difficulties are encountered as well. The challenges faced in both stages are addressed with flexibility, and through the facilitator's continuous communication with the teachers. The changes introduced are based on the teachers' feedback, the researcher's own reflections and the pedagogies underlying the course. Suggestions for future improvements involve ideas for teachers' collaboration in teaching and research, exchange visits, preservation of the community of practice (CoP) that has been created, and inclusion of more challenging and collaborative tasks in the course. In addition, the results of the analysis show the need for ESP TE to be ongoing. The study yields important results in relation to what constitutes effective ESP TE in this context.

The study contributes to the body of knowledge in ESP TE and is useful to ESP practitioners, ESP teacher educators and course designers, stakeholders and professionals who wish to engage in TAR. It also generates ideas for future research.

Keywords: ESP, ESP Teacher Education, Technical Action Research, Social Constructivism, Connectivism, Reflection, Communities of Practice, Online Teacher Education

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LIST OF ABBREVIATIONS

AR: Action Research

BALEAP: British Association of Lecturers in English for Academic
                   Purposes

CALL: Computer Assisted Language Learning

CELTA: Certificate in Teaching English to Speakers of Other Languages

CLIL: Content and Language Integrated Learning

CPD: Continuous Professional Development

CUT: Cyprus University of Technology

CoP: Community of Practice

EAP: English for Academic Purposes

ECTS: European Credit Transfer System

EFL: English as a Foreign Language

EGAP: English for General Academic Purposes

ELT: English Language Teaching

EMI: English as a Medium of Instruction

EOP: English for Occupational Purposes

ESAP: English for Specific Academic Purposes

ESP: English for Specific Purposes

FLT: Foreign Language Teaching

GE: General English

HE: Higher Education

ICT: Information and Communication Technology

LC: Language Centre

LMS: Learning Management System

LSP:	Language for Specific Purposes
PD:	Professional Development
PSTeacher:	Pilot Study Teacher
ReTEESP Online:	Online Reflective Teacher Education Course in English for Specific Purposes
RQ :	Research Question
SLT:	Second Language Teaching
SLTE:	Second Language Teacher Education
TAR:	Technical Action Research
TE:	Teacher Education
TEAP:	Teaching English for Academic Purposes
TEFL:	Teaching English as a Foreign Language
TESP:	Teaching English for Specific Purposes

CHAPTER 1. INTRODUCTION

1.1 Introduction

The economic, political, social, and technological advancements occurring during the last decades have led to the establishment of English for Specific Purposes (ESP) as one of the main fields of language teaching. Rapid internationalisation along with the predominance of English as a global language or English as a lingua franca resulted in an increase in the numbers of students attending ESP courses. Recent research endeavours in the ESP field (Paltridge & Starfield, 2013; Papadima-Sophocleous, Kakoulli Constantinou, & Giannikas, 2019; Sarré & Whyte, 2017) and the expansion of ESP in Higher Education (HE) around the world demonstrate the significance of ESP. These developments are also reflected in the assembling of various professional organisations dealing with ESP, conferences dedicated to issues pertaining to ESP and Language for Specific Purposes (LSP) in general, and more publications focusing on ESP topics. These advancements are taking place both internationally and locally; according to Johns (2013), apart from different international endeavours, there have also been numerous localised efforts to publish and disseminate research on ESP/ LSP in different parts of the world such as Latin America, Europe, Asia and the USA.

Despite all these developments in the ESP field, and the importance of ESP in academia and in today's job market, the field of ESP Teacher Education (TE) remains an area which needs further development. Research in the area of ESP TE has not been given much attention, and the opportunities ESP practitioners have for ESP TE and professional development (PD) in different parts of the world are limited (Abedeen, 2015; Basturkmen, 2010; Basturkmen, 2019; Bell, 2002; Bezukladnikov & Kruze, 2012; Bojović, 2006; Bracaj, 2014; Chen, 2012; Mahapatra, 2011). Therefore, the majority of ESP practitioners are General English (GE) instructors who were expected to teach ESP at some point in their lives, having received very little or no specialised education in teaching ESP. This challenge becomes more intense when language instructors are requested to teach English to multiple disciplines which they know little about.

Considering the importance of English for students' academic performance and future professional careers, the topic of ESP TE, more than ever, deserves careful attention by research. Sensing these limitations in the literature and the necessity for provision of ESP

TE opportunities, the incentive behind the present study was generated. The section that follows explains the rationale and gives an overview of the study.

1.2   Rationale and overview of the study

In this context of constant socioeconomic development and technological advancement, where humanity is experiencing the movement of massive populations of immigrants, ESP is flourishing, and research in the area is continuously enriched with new findings. LSP in general has been embraced by universities in different parts of the world, and strong emphasis is placed on equipping graduates with the necessary skills to become global citizens (Loranc-Paszylk, 2019; Rosell-Aguilar, Beaven, & Fuertes Gutiérrez, 2018).

Nevertheless, despite the popularity of ESP, and LSP in general, and the rapid development of these disciplines, issues related to ESP TE remain unexplored. Research in ESP has been traditionally dominated by a concern with teaching materials rather than teaching methods, and ESP experts mainly focused on discourse analytic procedures in an effort to identify the language that learners from different disciplines should acquire (Whyte & Sarré, 2017). As a result, research in the area of ESP TE is very limited. This gap of issues related to ESP teaching has been identified by several researchers in the field through the years. As Basturkmen (2017, p. 319) notes,

> … very few published empirical studies directly concern teachers or teaching with the result that little is known about topics such as how ESP teachers develop their knowledge of specialist discourse or how ESP teachers might draw on research-based linguistic descriptions in devising pedagogical descriptions.

Apart from lack of research dedicated to ESP TE, there is also a lack of opportunities for ESP TE, a fact presented in the literature and supported by an investigation of the existing ESP TE courses, which proved to be low in number, mostly offered at an MA level, on-site, demand the physical presence of the trainees, and cannot cater for the needs of ESP practitioners who cannot leave their teaching positions in order to receive TE.

All these factors resulted in the majority of ESP practitioners being GE teachers with no specialisation in ESP teaching. My personal experience as an ESP practitioner at the Language Centre (LC) of the Cyprus University of Technology (CUT) confirms this.

When I was hired at the CUT LC in 2007, I was a GE teacher merely acquainted with the concept of ESP in the context of my MA in Applied Linguistics studies. Being requested to teach ESP to students from different Departments of the University was an extremely challenging task for me. Very soon I realised that my colleagues were in the same situation, sharing the same feelings and facing the same challenges as me. Since then, my journey into the world of ESP was a journey of continuous development through the study of the different disciplines that I had to teach, the acquisition of new knowledge, practice, research, collaboration with colleagues, students and experts in the different fields. This journey was enriched with the obtainment of new experiences from attending conferences, symposia, workshops and other events focusing on ESP, becoming a member of different professional organisations, learning about new developments in the field and presenting my work to colleagues from different parts of the world, the majority of which shared similar problems and anxieties.

Looking back at this journey, having met colleagues from different parts of the world and seeing new colleagues entering the profession, I felt that there were lessons learnt that I had to share. For this reason, this study focuses on the formulation of an online community through an open call on social media addressed to ESP practitioners or language instructors who wished to teach ESP from different parts of the world, interested in receiving ESP TE. I strongly believe that the experiences that can be gained from participating in an international community and through collaborating with colleagues from different parts of the world are far richer than the experiences gained in a restricted local educational context; that was the reason why the open call was not addressed only to local language instructors.

A review of the latest trends in TE reveals that nowadays ESP TE could be received beyond the limits of formal education (e.g. MA courses) using technology. More specifically, ESP TE could take place through the delivery of online courses based on the specific needs of the ESP practitioners that allow the attendance of practitioners from different parts of the world and the creation of online networks and communities of practice (CoPs). Based on these trends, this study offers a remedy to the problem of lack of ESP TE or the instructors' wish to be updated on the latest developments in the field through the design of an online ESP TE course that fosters collaboration, networking and reflection.

The best research methodology for this study is considered to be Action Research (AR), because it aims at addressing the common problem that these language instructors face: they all need to receive ESP TE, each of them for a different reason, either because they are entirely inexperienced in the field of ESP or because they are interested in acquiring more knowledge on ESP matters and be updated on the latest developments in the field. The iterative cycles of AR are regarded as the most effective way to improve this situation. The study bears the characteristics of Technical Action Research (TAR); the researcher acts as the "authority figure" (Grundy, 1983, p. 25) who designs an intervention based on previous research that can potentially provide a kind of remedy to the problem that this group faced. This intervention comes in the form of an online ESP TE course, named ReTEESP Online (Online Reflective Teacher Education course in English for Specific Purposes). The proposed programme does not claim to be a panacea, but it attempts to improve the situation.

The study develops in two cycles of continuous improvement, following the principles of TAR. More specifically, the study begins with an identification of the problem at the start of the first cycle; this problem concerns the lack of ESP TE or the insufficient ESP TE that this group of 24 language instructors received so far. This is done through a review of the literature and a collection of anecdotal evidence, which proves that lack of ESP TE is a problem faced by the majority of ESP practitioners in general, and an analysis of these 24 language instructors' needs in terms of ESP TE. Based on previous research and on this group's ESP TE needs, the researcher designs the intervention, an online ESP TE programme, the ReTEESP Online. This is based on social constructivism and connectivism and sociocultural TE models with elements from the reflective model of TE and critical pedagogy. The programme and the research tools are pilot tested with six ESP practitioners before their actual implementation with the 24 language instructors. The implementation of the course is followed by reflection by the participants and the course facilitator. The tools that are used for the study are a questionnaire administered to the instructors at the beginning of the study to define their profiles and analyse their needs, participants' reflective journals, the facilitator's field notes, discussions they have on Messenger and on Google Classroom and focus groups/ interviews that take place after the completion of the course. The second cycle of the study commences with a review of

the reflections from the first cycle and the refinement of the course. Following similar processes, the second cycle proceeds with the implementation of new parts added to the course, the ReTEESP Online: The Sequel, and reflection follows which leads to the drawing of the final results of the study that can inform future improvements made to the course. Data are collected through the use of the same instruments as in the first cycle.

This section aimed at presenting the rationale, the reasoning behind this study, and it also offered a brief overview of the study. The next session provides the reader with information regarding the structure of this thesis.

1.3   Structure of the thesis

Chapter 1 constitutes an introduction to the study, providing the reader with some background information on the study, talking about how this study was conceptualised and what its main objectives and processes were. The remaining chapters are organised as follows:

Chapter 2 contextualises the study placing it within the relevant literature. In this chapter special emphasis is placed on a review of ESP and its attributes, language TE in general and an examination of the situation in ESP TE in particular. Finally, the chapter concludes with implications for ESP TE, as these were drawn from research conducted in the field.

Chapter 3 focuses on research methodology, describing the purpose and scope of the study, the research questions (RQs) and concentrating on AR in general and TAR in particular and its characteristics and qualities. The chapter develops by providing the landscape for this TAR and discussing the processes followed to ensure validity and reliability and compliance with research ethics guidelines. The chapter also gives information regarding the participants in the study and the research methods.

The two chapters that follow, Chapter 4 and Chapter 5, are detailed descriptions of the two cycles of the TAR study, Stage 1 and Stage 2 respectively. The chapters follow the steps of this TAR, and both include a reflection section, in which the findings of the study are discussed in detail and a conclusion, which provides a brief summary of the findings.

Chapter 6 provides a discussion of the key findings of the study, with regards to the four overarching RQs of the study.

Finally, the study concludes with Chapter 7, where the final conclusions are drawn along with a description of the limitations and strengths of the study, its contribution to knowledge, future actions and future research directions.

CHAPTER 2. LITERATURE REVIEW

2.1   Towards laying the foundations for English for Specific Purposes Teacher Education today

This chapter aims at reviewing the existing literature in the area of ESP and ESP TE providing a context for the present TAR study. The purpose of the chapter is to identify and examine previous research on the topics of ESP and ESP TE providing thus a theoretical background for this research and showing how this research associates with the work that has already been done in the field.

The chapter starts with a review of the research in ESP focusing on the most important developments in the field, and it proceeds with examining research in the area of language education in general and ESP TE in particular. The chapter evolves in such a way so that, towards the end, implications for ESP TE programmes nowadays are formed. These implications constitute the foundations of the ESP TE programme that this study proposes.

2.2   Understanding ESP and its dimensions

Before any discussion regarding ESP commences, firstly, it would be wise to explain what ESP involves and how it evolved though the years. This will lead to better understanding of the special nature of ESP.

ESP is part of a broader field of language learning, the field of LSP, which concerns courses in which "the methodology, the content, the objectives, the materials, the teaching, and the assessment practices all stem from specific, target language uses based on an identified set of specialized needs" (Trace, Hudson, & Brown, 2015, p. 2). Since its emergence, numerous definitions of ESP can be found in the literature. Johnson and Johnson (1998, p.105) described ESP as a "broad and diverse field of English language teaching" that refers to "language programmes designed for groups or individuals who are learning with an identifiable purpose and clearly specified needs." Dudley-Evans and St John (1998) gave a definition of ESP in which they discussed some "absolute" and "variable" characteristics (pp. 4-5). The "absolute characteristics" that they referred to involve the following: 1) the fact that ESP is designed to meet the specific needs of the

learners, and 2) that it uses the methodologies and activities of the specific discipline it associates with; by "methodology" Dudley-Evans and St John (1998, p 4.) meant "the nature of the interaction" between the teacher and the learners. Regarding the "variable characteristics" of ESP, the two researchers claimed that ESP 1) may be designed for specific disciplines, 2) may use a methodology which is different than that of General English (GE), 3) mainly concerns adult learners either in tertiary education or in professional environments, and 4) is mainly designed for learners who have a sufficient knowledge of English, even though it could be also used with beginners. Dudley-Evans and St John's account of ESP pointed to the special nature of ESP and implied that there is a difference between what ESP and GE involve. This difference lies in the fact that ESP deals with discipline related issues, language, skills, discourse and genres.

Some years later, Richards (2001, p. 28) defined ESP as the study of English "in order to carry out a particular role, such as that of foreign student in an English-medium university, flight attendant, mechanic, or doctor". In other words, according to this definition, ESP involves learning English in the context of a particular profession or a particular field of study; some examples of ESP courses could be an English course which focuses on academic writing, an English course specifically designed to meet the needs of students of Nursing, an English course for students of Hotel and Tourism Management, an English course for police officers who wish to improve their use of English for their profession, and so on and so forth. Along the same lines, more recently, Paltridge and Starfield (2013, p. 2) suggested that ESP "refers to the teaching and learning of English as a second language where the goal of the learners is to use English in a particular domain".

The fact that ESP is discipline-related led to the development of various "branches" according to the context in which it occurs. Literature in the field illustrates that ESP could be classified according to its purpose or time (Basturkmen, 2010; Dudley-Evans, T. & St John, 1998; Robinson, 1991). As far as its purpose is concerned, generally, ESP is classified into English for Occupational (or Professional) Purposes (EOP) and English for Academic Purposes (EAP) (Ruiz-Carrido, Palmer-Silveira, & Fortanet-Gomez, 2010). There are many subdivisions of EOP depending on the discipline it serves i.e. English for Business, English for doctors, English for pilots, etc. EAP could be subdivided into English for General Academic Purposes (EGAP) and English for Specific Academic

Purposes (ESAP), and ESAP could be further subdivided depending on the specific field of study i.e. ESAP for Hotel and Tourism Management, ESAP for Mechanical Engineering, ESAP for Nursing, etc. As far as time is concerned, ESP courses could take place before the learners' studies or work experience, during their studies or work experience or after their studies or work experience (Basturkmen, 2010).

In order to gain better understanding of what ESP involves, it is necessary to see the context in which it evolved. ESP emerged in the 1960s in an era of economic development and change, because of the growing numbers of university students in the UK, USA and Australia, due to developments in science, business and technology and, finally, the increasing numbers of migrants, who needed language to be able to work (Dudley-Evans & St John, 1998; Richards, 2001). This was the restless post-World War II era. Through his paper "Alternatives to daffodils - or Scientist thou never wert", Strevens (1971) adumbrated the situation at the time, arguing that in all educational levels and across all disciplines, trainees faced the problem of having English courses "largely inadequate for their needs" (Strevens, 1971, p. 7) or in worse cases no English courses at all. Moreover, most English language teachers received training specialised in literature; thus, the courses they offered were literature-oriented having little to offer to students of science. What science students needed was "learning English as used in the universe of discourse of science or technology" and not "English as used in the universe of the educated non-scientist and literary specialist" (Strevens, 1971, pp. 9-10).

Despite the fact that ESP only became prominent after the 1960s, earlier evidence of use of LSP can be found in different parts of the world dating back thousands of years. In a historical account of LSP, Van Der Yeught (2018) made reference to Sumerian clay tablets containing descriptions of medicine preparation; he also pointed to the ancient Greeks and Romans who were responsible for the development of discourse for various areas such as medicine, architecture, astronomy, geometry and law.

ESP, as its name denotes, has a specialised nature. However, as Hutchinson and Waters (1987, p. 18) support, there are no "specialised varieties" of English. There are not many types of English, but there are rather different purposes for which the language might be used. Similarly, one could claim that there is no specific kind of teaching methodology for ESP, but a rather adaptive one with activities based on students' specialism with an authentic purpose, which are based on the students' needs (Kenny, 2016). The present

research embraces this view that the specialised nature of ESP does not relate to a specific type of English, but the term "specific" rather refers to the purpose the language is used for. In the light of the above, this research also agrees with the claim that ESP teaching methodology normally does not differ from GE language teaching methodology. As with the teaching of GE, ESP teaching should be informed by the latest theories of language learning and language teaching, and the latest research in the field. Nevertheless, due to the fact that ESP by definition focuses on the use of language for specialised purposes, there are other parameters that ESP practitioners need to take into consideration, which make teaching ESP more complicated than teaching GE. Quoting Belcher (2009, p. 2), "the ESP approach requires a willingness on the part of the language educator to enter as a stranger into stranger domains – academic and occupational areas that may feel quite unfamiliar". On a similar note, Dudley-Evans and St John (1998), emphasise the different, more specialised nature of interaction between the teacher and the learners in an ESP class, arguing that it could be very different from a GE class. The wide range of domains that ESP practitioners are often requested to teach makes things even more complex.

It is this complicated and multifarious character of ESP teaching that ESP TE should have at its core. Language teaching graduates are well-equipped to perform effectively in the language classroom, and the numerous opportunities for post-graduation PD as well as the immensely rich research in the field help them tackle difficulties which they may encounter in their teaching. This is true for various branches of language teaching e.g. English Language Teaching (ELT), Foreign Language Teaching (FLT), Second Language Teaching (SLT), etc. Nonetheless, this is not the case with ESP teaching, where training is currently very restricted compared to the growth of ESP nowadays; this is discussed further in this chapter. ESP TE should aim at preparing ESP practitioners for the complicated task of teaching ESP, which as aforementioned is such because the language instructor walks in unknown territories.

The specialised nature of ESP entails that the analysis of learner's needs plays a prominent role in the teaching processes. Being one of the most important procedures in ESP, needs analysis is discussed in more detail in the next session.

2.2.1 Analysing learners' needs

Needs analysis is one of the foundations which ESP course design is based on (Dudley-Evans & St John, 1998; Belcher, 2009; Johns & Makalela, 2011; Flowerdew, 2013); this happens since the identifiable purpose for which the learners learn English is at the core of the learning process in contrast to other ELT fields, where learners acquire the language for no specific purpose. Basturkmen (2010, p. 17) describes needs analysis as follows:

> Because ESP focuses on teaching specific language and communication skills, ESP course design usually includes a stage in which the course developers identify what specific language and skills the group of language learners will need. The identification of language and skills is used in determining and refining the content for the ESP course. It can also be used to assess learners and learning at the end of the course. This process is termed 'needs analysis'.

According to Dudley-Evans and St John (1998), needs analysis involves the collection of professional information about the learners (tasks and activities learners will be using English for), personal information about the learners, English language information about the learners, learners' lacks, language learning information, professional communication information (how language and skills are used in the target situation), what is wanted from the course and information about the environment.

Needs analysis started as a simple process, and over the years it has become more sophisticated with a more "subjective" character (Basturkmen, 2010; Johns & Makalela, 2011). In previous years, needs analysis mainly involved an analysis of linguistic elements within texts found in the particular domain (Johns & Makalela, 2011) and a target situation analysis (Basturkmen, 2010; Flowerdew, 2013). According to Basturkmen (2010), nowadays needs analysis involves an analysis of the target situation, in other words, the identification of tasks and skills learners are requested to use English for, discourse analysis and present situation analysis; present situation analysis relates to the identification of what learners know and can do with the language with regards to their discipline. Moreover, needs analysis includes the processes of learner factor analysis, which concerns learners' perceptions of their needs and motivation, and finally teaching context analysis, which relates to an analysis of the teaching environment. All

this information bears important "pedagogical implications for syllabus design, course planning, material development and curriculum renewal" (Bocanegra-Valle, 2015, p. 75).

Needs analysis is often conducted by insiders (i.e. teachers, students, stakeholders, employers, colleagues, etc.) and sometimes by outsiders (i.e. professionals in the field, content teachers, ex-students, educators from other institutions, etc.) since their opinion may be regarded as more objective than that of the insiders, or by both insiders and outsiders together (Chovancová, 2014; Dudley-Evans & St John, 1998).

The nature of needs analysis processes could involve informal discussions between the ESP practitioner and the learners, or be formal through using various sources of information such as: surveys/ questionnaires, interviews, samples of student writing, analysis of authentic material related to the specific field, related literature, observations of professionals'/ learners' behaviour in their work or academic environment, analysis of tasks in which learners are involved in, and even the study of similar programmes of other institutions (Bosher & Smalkoski, 2002; Cowling, 2007; Dudley-Evans & St John, 1998). The results of needs analysis are either taken into consideration during the design phase of a new course, while the course is taking place, and is therefore an on-going process, or as part of a summative evaluation at the end of the course.

Since ESP programmes address specific groups of learners in specific contexts, needs analysis is an essential criterion for the success of the programme (Basturkmen, 2009; Belcher, 2006; Chostelidou, 2010; Cowling, 2007; Dudley-Evans & St John, 1998). Being such, it must necessarily have a major role in the syllabus of any ESP TE programme and thus in the programme designed in the context of this research.

The next section discusses another important characteristic of ESP, which must have a central role in every related programme, that of authenticity.

2.2.2 Embracing authenticity

Since the purpose of an ESP programme is to provide learners with the knowledge of English required to be able to use the language in specific academic or professional situations, it is of paramount importance that learners become familiar with the language used in real life situations and be given the opportunity to make use of it. In other words, learners should be exposed to real life language use in their field of study or professional

area, and for this reason, the materials and content of the course should be based on realistic examples of language use. Such realistic examples are offered through the use of authentic material, e.g. real professional reports, emails, extracts from interviews, lectures, documentaries, and also through providing the learners with opportunities to come into contact with authentic communication situations in their discipline. Even though authenticity is a concept often found in literature on language teaching in general, as far as ESP is concerned, because of its specialised nature, it occupies a central role.

According to Dudley-Evans and St John (1998) the term 'authenticity' is used not to refer to genuineness of material alone, since this does not ensure meaning and provision of knowledge for learners. Authenticity is used more broadly to refer also to the way in which learners interact with a particular text and the meaning and knowledge which the text provides to the learners. It should be present at all levels of the teaching and learning process in the ESP classroom, where learners need to be exposed to a specialist discourse; it should concern the materials used as well as the tasks assigned to the learners. Such broad account of authenticity was also adopted by Gilmore (2007, p. 98), who expressed the view that since authenticity has been given numerous explanations, one could claim that "it can be situated in either the text itself, in the participants, in the social or cultural situation and purposes of the communicative act, or some combination of these".

The benefits of authenticity have been reported in the related literature through the years: it enhances learners' motivation, promotes learner autonomy and immerses the learners in real world language communication (Breen, 1985; Sifakis, 2005; Buendgens-Kosten, 2014; Shuang, 2014; Illés & Akcan, 2016) However, authenticity has also been the subject of controversy (Peacock, 1997; Vaičiūnienė & Užpalienė, 2012). Some researchers argued that authentic materials do not necessarily increase motivation and that the level of difficulty of an authentic text depends on the learner. Moreover, the selection of which authentic texts to bring in the classroom based on motivation and difficulty level contradicts the notion of authenticity (Badger & MacDonald, 2010). Others claimed that sometimes methodology is neglected for the sake of authenticity, therefore learners do not acquire the linguistic competence they should from an ESP programme (Widdowson, 1979 as cited in Pérez Cañado & Esteban, 2005).

In spite of all the concerns, as aforementioned, due to the nature of ESP courses, authenticity in ESP is considered essential. According to Benavent and Penamaria (2011),

authenticity constitutes an opportunity for the ESP learners to become familiar with real language use in the context of their discipline, and most of the time, this keeps the learners motivated.   What is more, Pérez Cañado and Esteban (2005) suggested that it is for the teacher to decide whether to use authentic material or not depending on the situation, the nature of the course, the results, in other words, of the needs analysis. In any case, even if the ESP practitioner considers a coursebook as appropriate for the ESP course that they teach, it is advisable that the coursebook is enriched with authentic material not only in the sense of genuineness, but also in the way they create meaning for the learners. Such material could be used to meet the objectives set in the course curriculum, and it could be integrated in the course in a contextualised manner. In that way, methodology and pedagogy are not neglected for the sake of authenticity. The merits of employing authenticity in ESP courses were also extensively discussed by Zohoorian, Baghban and Pandian (2011), who claimed that ESP practitioners, who very often assume the role of material providers, could consider the advantages inherent in authentic materials and tasks.

Nowadays, with the help of technology, authenticity can be easily embraced by ESP learners and practitioners. Adopting the view that the classroom is not just a room with four walls, the ESP practitioner can extend students' learning experiences to the outside world. Through the help of technology and the World Wide Web, practitioners have infinite resources, and additionally, students can become active participants in the learning process and in the syllabus and lesson planning phases (Sifakis, 2003). Furthermore, close collaboration with subject teachers and professionals in the field can be established (Kassim & Ali, 2010); specialists in the field can be consulted with regards to topics, materials and resources they give to the students, and they could also come into direct contact with students through the provision of extra-curricular activities such as invited lectures, educational visits or even through more systematic processes such as the ones suggested by Leggott (2017), which involve embedding employer engagement within the ESP curriculum. An example of such practices was the module 'Working with Languages' for all final year students on any language degree at Leeds Beckett University, in the context of which, students worked in teams to carry out an authentic market research project to help a local company to move into a new export market (Leggott, 2017, p. 31).

Other such instances of authentic exposure to language also involve the collaboration between ESP practitioners and vocational teachers (or content teachers) or even specialists in the field, which may prove very beneficial for language learners. Platt (1993, p. 154) reported on a study conducted by the National Centre for Research in Vocational Education in the USA, which concluded that such collaboration can be successful when vocational teachers view language teachers as "potential allies" rather than "counterparts", and when this "alliance" is founded on respect. The value of collaboration with content teachers was also raised by Esteban and Martos (2002), Northcott and Brown (2006) and Fortanet-Gomez and Räisänen (2008). Similarly, Atai and Taherkhani (2018) claimed that, despite their differences, it is necessary for ESP teachers and content teachers to collaborate, since such collaborations yield positive results.

Being one of the major characteristics of ESP, the concept of authenticity carries important implications for ESP teaching. Thus, it should be among the elements of ESP TE programmes, and therefore, of the ESP TE programme that this research proposes.

Another important factor for the success of an ESP programme is the instructor. The following section concentrates on the role of the ESP educator and the implications it carries for ESP TE.

2.2.3 Outlining the role of the ESP practitioner

The discussion on the nature of ESP and its qualities, apart from having implications for ESP course design and implementation, also determines the profile of the ESP educator. Generally, ESP teachers are GE teachers who suddenly switch into the field of ESP without knowing what to expect and how to handle the unexpected. Even though Streven's (1988, pp.41-42) description of the ESP teacher dates back to the late 1980s, one could easily claim that it still describes the situation of ESP teachers today:

> Who is the ESP teacher? Almost always he or she is a teacher of General English who has unexpectedly found him/herself required to teach students with special needs. The experience is often a shock! Sometimes the shock is unpleasant, because so many elements are unfamiliar or puzzling. Sometimes the shock is a pleasant one, because the teaching is so directly relevant to the needs of well-motivated learners. Most often the shock is a mixture of the welcome and the unwelcome.

The reason behind ESP teachers often being in a condition of 'shock', as Streven (1988) affirmed, lies in the difference between what GE and what ESP teachers do. Katsarska (2017, p. iii) characterised ESP practitioners as "a special breed of language teachers who have taken the road less traveled".

Dudley-Evans and St John (1998) suggested that the ESP teacher has a multifaceted role which varies from that of the GE teacher, a view supported also by others nowadays (Esteban & Martos, 2002; Bojović, 2006; Bracaj, 2014; Johns, 2013; Latha, 2014). ESP teachers are required to perform many roles and hence do much more than simple teaching. On that account, Dudley-Evans and St John (1998, p.13) used the term 'practitioner' rather than 'teacher' in order to show the multidimensional nature of ESP educators' work. They expressed the view that the ESP practitioner has many key roles: that of the teacher, course designer and materials provider, collaborator, researcher and finally evaluator.

Despite the fact that in certain cases GE teachers may also be requested to perform all these multiple duties, the specialised nature of ESP courses complicates things for ESP practitioners. First of all, in the case of ESP, learners have specialised needs, and in some cases, it is difficult for the practitioners to handle these needs, due to their unfamiliarity with the specific discipline. Secondly, learners are usually adults and most of the times experts in their fields. Consequently, teachers have a different status in an ESP class, since they are not the only carriers of knowledge (Dudley-Evans & St John, 1998); the ESP classroom is a much more democratic place than a GE classroom, because the teacher and the learners are more or less equals, with the teacher inviting the views of learners on a regular basis. This is what Crocker (1981, p.13) had in mind, when he characterised the LSP teacher as a "learning facilitator", rather than as the only source of knowledge in the knowledge acquisition process; they are facilitators since they work together with the learners during the learning process.

According to Esteban and Martos (2002, p. 9), the fact that the ESP practitioner has a specialised role to perform implies that they need "additional training", which will make them competent in coping with learners' specific needs and using specialised materials. Jackson (1998, p. 151) identified several qualities and skills that the ESP practitioner needs to have in order to be successful, such as "flexibility adaptability, creativity, resourcefulness, well developed organisational and managerial/ leadership skills,

effective interpersonal and cross-cultural communication skills, and mature problem-solving and decision-making skills. Along the same lines, Bigych and Matsnieva (2018, p. 470) supported that ESP practitioners need to have a series of "research and designing skills". All these denote that ESP practitioners need to receive education that will provide them with the necessary competencies and skills. Unfortunately, only few graduate programmes prepare language educators to teach ESP (Belcher, 2006).

The present research adopts the view that the ESP educator has a multidimensional role to play in the teaching and learning process, and for this reason, often Dudley-Evans and St John's (1998) term "ESP practitioner" is used throughout this thesis. Moreover, the researcher agrees with the idea of the ESP practitioner being a learning facilitator, a co-explorer of knowledge rather than the one who knows everything. Acknowledging the complexity of this multifaceted role that ESP practitioners carry, this research also takes the stance that ESP practitioners need to be well-equipped to cope with all their duties and acquire proficiency in the content area.

The next section covers the latest developments in the field of ESP in order to provide a picture of ESP today.

2.2.4 Talking about ESP today

The growing demand for competence in using English to communicate in academic and professional environments resulted in the development of ESP and the increase in the number of ESP courses today. Since its emergence in the 1960s, the field has undergone numerous changes which have led to ESP becoming one of the most popular fields of language teaching.

The evolution that the ESP field is experiencing is seen in the number of publications that are released every year, with the number of journals dealing with ESP rising steadily, as presented in Table 1. Apart from the journals dedicated to ESP that appear in the table, journals such as *Applied Linguistics*, *TESOL Quarterly* and *English Language Teaching Journal* also publish papers on ESP.

Table 1. ESP Journals today

Journals	Year of release of first issue
English for Specific Purposes (formerly *The ESP Journal*)	1980
Ibérica	1996
Journal of English for Academic Purposes	2002
ESP World	2002
Asian ESP Journal	2005
ARTESOL ESP Journal	2011
Journal of Teaching English for Specific and Academic Purposes	2013
ESP Today	2013
Journal of Languages for Specific Purposes (JLSP)	2014
International Arab Journal of English for Specific Purposes	2018

Furthermore, there has been an increase in the number of ESP associations, with the International Association of Teachers of English as a Foreign Language (IATEFL) ESP Special Interest Group based in the United Kingdom and the TESOL's English for Specific Purposes Interest Section based in the United States of America being amongst the most popular ones. Other associations dealing with ESP issues are the Asociación Europea de Lenguas para Fines Específicos (AELFE), the European Association for the Teaching of Academic Writing (EATAW) and The Slovene Association for LSP Teachers operating in Europe. Moreover, a newly established association is the International English for Specific Purposes Teachers' Association (IESPTA). Their aim is to promote issues pertaining to ESP or LSP in general, disseminate good practices and give the floor to ESP practitioners and researchers to discuss challenges faced and the latest developments in the area. The increase in the number of associations focusing on ESP topics has also resulted in a rise in the number of Conferences, Seminars, Workshops, Webinars and other events dedicated to ESP.

A historical review of the evolution of ESP by Johns (2013) showed that, in its initial stages, ESP started with a focus on specific language features and rhetorical discourse analysis. Through the years, genre and corpus studies became central in the ESP field, and have not ceased to be popular. Moreover, Johns (2013) supported that, as the years passed, ESP became more sophisticated and specific, focusing on ESP issues from a specific point of view rather than looking at things from a broader spectrum.

Since the 1960s, there has been a shift in the topics on ESP, as these appear in publications in the field. According to Hewings (2002), who studied the articles published in the journal *English for Specific Purposes*, looking at the trends in the ESP topics that research has been dealing with the last years, there has been a decline in the number of papers examining the ESP field in general; on the contrary, agreeing with Johns (2013), Hewings supports that there has been a steady rise in the proportion of papers investigating issues pertaining to specific topics in ESP. For example, instead of dealing with ESP material in general, publications nowadays concentrate on material associated with a specific ESP discipline. Moreover, as Hewings notices, there is a tendency towards publishing research papers on EAP and Business English, a view which is also expressed by Alousque (2016). According to both researchers, amongst the ESP topics that seem to gain more interest through time is discourse analysis and genre analysis, whereas papers describing ESP programmes are reducing.

When talking about the developments in ESP, it is important also to mention that, apart from acquiring language skills, language education in general today aims at equipping students with 21st century skills, in other words, the necessary skills to enable them to become global citizens and be engaged in lifelong learning and thus succeed in every aspect of their lives, academic, professional, and personal (University of Oxford ELT Expert Panel, 2018). In the edited volume *Innovative language teaching and learning at university: enhancing employability,* Álvarez-Mayo, Gallagher-Brett, and Michel (2017) emphasise the importance of students acquiring employability skills, in other words, the skills required for a successful career. Along the same lines, the edited volume by Goria, Guetta, Hughes, Reisenleutner and Speicher (2019) focuses on how the work of language instructors in universities helps graduates to shift from university into the world of work.

In addition, the constant and rapid changes in the field of technology and the birth of the Fourth Industrial Revolution, which will eventually result in the transformation of

professions (Hirschi, 2018), has caused a rise in the use of technology in every area of language teaching, including ESP (Bárcena, Read, & Arús, 2014). The value of the use of new technologies in the language classroom has been repeatedly expressed in recent literature (Blake, 2013; Donaldson & Haggstorm, 2006; Walker & White, 2013). According to Bloch (2013), technology has been used extensively in ESP classes depending on the goals of the specific curriculum. Each technology has its own norms for language use, and thus it can serve a different purpose. New technologies can be a tool for language learning, and a source of authentic materials; they could serve as a place for publishing and sharing work and a means of communication between all the participants in the learning process (Arnó-Macià, 2014; Bloch, 2013). They also promote learner autonomy (Blin, 2012) and create opportunities for communication and engagement in partnerships with stakeholders worldwide (Arnó-Macià, 2014). As far as ESP is concerned, some of the technologies integrated in ESP teaching practices are social media (Plutino, 2017; Rosell-Aguilar, 2018;), different Learning Management Systems (Bloch, 2013; Maggioli, 2012), cloud technologies (Kakoulli Constantinou, 2018; Kakoulli Constantinou, 2019), telecollaboration platforms (Guadamillas Gómez, 2017; Sevilla-Pavón, 2016; Sevilla-Pavón & Haba-Osca, 2017) and virtual reality (VR) (Madini & Alshaikhi, 2017; Steuer, 1992). In a Doctoral Dissertation at the Mykolas Romeris University in Lithuania, Selevičienė (2020) highlights the effectiveness and acceptance of Web 2.0 technologies in the studies of ESP in HE. The researcher conducts a systematic literature review of the Web 2.0 technologies used in ESP, focusing on "pre-eminent international peer-reviewed scholarly journals" (Selevičienė, 2020, p. 35).

The recent developments in language teaching in HE have led to the rise of English as a medium of instruction (EMI), which Dearden (2014, p. 2) defined as "the use of the English language to teach academic subjects in countries or jurisdictions where the first language (L1) of the majority of the population is not English". Another development was the rise of CLIL, which involves immersion in an environment in which the learners are exposed to both the teaching of the subject and the foreign language (Woźniak & Acebes de la Arada, 2018).

In a more generic overview of where ESP is heading, Belcher (2004), suggested that ESP pedagogy is developing towards three directions: the sociodiscoursal, sociocultural, and sociopolitical. First of all, the sociodiscoursal trend refers to the research done in the area

of situated genre analysis and its implications for the teaching of ESP; secondly, the sociocultural approach refers to the importance of context and thus relates to cases of immersion in the target situation or simulation in the teaching of ESP; finally, the sociopolitical approach refers to the development of social awareness and other skills which learners may transfer in their broader social context for the common well-being. Belcher (2004, p. 177) asserts that the new technologies evolution has brought about changes even in genre studies since new "cyber-genres" have been created that combine colour, sound graphics and video. These developments imply that researchers involved in genre studies are in an on-going battle to analyse the new genres that constantly appear; this leads to the conclusion that perhaps ESP practitioners and experts in the area need to develop "conceptualization and operationalization of a more broadly inclusive multiliteracies approach to fostering and assessing genre" (Belcher, 2004, p.177), instead of struggling to analyse each genre. The situation with the studies of context is similar, since it is not feasible to study the context of all disciplines nowadays. What Belcher suggests is the provision of research-based definitions of expertise in a particular context, having the belief that this would help ESP pedagogy. Lastly, as far as cultural awareness is concerned, studies of discourses of peace and reconciliation in areas such as Europe or South Africa could assist ESP pedagogy to employ critical pedagogy more effectively and promote cultural awareness. In other words, what Belcher suggests is to embrace a broader, more general view of genre and contexts and see how ESP pedagogy could facilitate the advancement of more globally sensitive and socially active professionals and citizens in general.

In the introduction of the edited volume *New Directions in English for Specific Purposes Research*, Johns, Paltridge and Belcher (2011) conclude by stating that ESP research needs to focus on the assessment of learner needs, learners' identities and issues that they face. The researchers also raise the issues of discourse and context expressing the view that they should stay in the focus of ESP research and finally, they note the importance of the close collaboration between research, and the teaching and learning practices.

The multiple and rapid developments in ESP have resulted in many challenges that ESP practitioners face today. This bears important implications for ESP TE. All these developments in the ESP area, the new publications, the fora and the professional associations, the advancements in research and in the ESP teaching practices should

constitute the content of any ESP TE endeavour today. As Jendrych (2013) argues, novice ESP practitioners have a long and bumpy road in front of them, as they need to be informed about a lot of issues pertaining to their profession and be involved in continuous learning throughout their careers as ESP practitioners. Therefore, more attention needs to be given to issues concerning ESP TE by research, and more systematic and organised efforts should be made for provision of ESP TE to both potential and existing ESP practitioners. This effort must be constant and should aim at keeping ESP educators informed about all the multiple issues related to ESP.

This section concentrated on the latest developments in the field of ESP and its implications for ESP TE. The following section examines the different parameters related to ESP TE.

2.3 Considering ESP teacher education

In this section, discussion turns to issues related to ESP TE. Firstly, the purpose of TE is described and concepts such as 'teacher education', 'teacher training' and 'teacher development' are explained. Then the current state of ESP TE is outlined, emphasising its necessity in today's constantly developing world. After this, learning theories and general TE trends and their implications for ESP TE are discussed, and suggestions regarding ESP TE based on the literature are examined. Finally, the section concludes with suggestions concerning elements ESP TE should include.

2.3.1 Understanding the purpose of teacher education

Before any discussion on the issue of ESP TE begins, it would be useful to see the importance of TE, understand its purpose and clarify the difference between the concepts of 'teacher training', 'teacher education' and 'teacher development'.

Attempting to portray the complexity of teaching in our days, Hansen, (2008, p. 12) suggested that teachers today have a complicated role to play, since they need to consider all the following parameters:

1. the psychological, social and cultural aspects of students' learning and conduct
2. the logical and substantive aspects of subject matter

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3. the social, moral intellectual, even aesthetic dimensions of interaction in classrooms and schools, and

4. the politics of parent-teacher, teacher-administrator, and teacher-teacher relations in school setting

He also adds that teachers need to prepare students for a continuously changing world with economic, social, technological and environmental complications.

In the light of the above, TE for all educational levels and subjects is important. Teachers of every kind, who have this significant mission to fulfil, need to receive the necessary education that will provide them with all the essential qualities to become competent teachers and professionals in their fields. As Leung (2009, p. 49) claims, "a "professional" is a trained and qualified specialist who displays a high standard of competent conduct in their practice". Along the same lines, for Wallace (1991, p.5) professionalism is governed by the following qualities: "a basis of scientific knowledge; a period of rigorous study which is formally assessed; a sense of public service; high standards of professional conduct; and the ability to perform some specified demanding and socially useful tasks in a demonstrably competent manner". Therefore, the significance of TE lies in the fact that it assists teachers in the acquisition of professional expertise.

In the literature related to issues on TE, concepts such as 'teacher training', 'teacher education' and 'teacher development' sometimes appear interchangeably. It would be useful at this point to describe the differences between them (Feng, 2009; Hüttner, Smit, & Mehlmauer-Larcher, 2009; Richards & Farrell, 2005; Maggioli, 2012; Ur, 1997). According to Maggioli (2012, p. 6) teacher training refers to "the process used for helping teachers learn in short, highly focused courses in which the emphasis is on learning how to do things (i.e., the development of teaching skills)". On the other hand, teacher education refers to "a more integral and scientific way of helping people learn how to teach"; it involves a deep engagement "with theory, action, and reflection as a way to help future teachers develop those characteristics inherent to professional educators, no matter what subject they teach" (Maggioli, 2012, p. 7). It is a far more comprehensive approach to the acquisition of professional knowledge than teacher training which mainly involves the acquisition of skills. Lastly, teacher development deals with "the activities that professional teachers engage in after graduating and that are aimed at honing their professional knowledge, skills and dispositions" (Maggioli, 2012, p. 7; Ur, 1997).

According to Wallace (1991, p.3), teacher training and education are "presented or managed by others" whereas teacher development depends solely on the actions one takes for themselves. This distinction was also made by Richards and Farrell (2005).

This research adopts the terms 'teacher education' and 'teacher development' rather than 'teacher training'. The two terms are used to describe the aim of the intervention proposed, not because the concept of teacher training has negative connotations or should be regarded as inefficient, but because it is believed that the other two terms correspond better to the objectives of this study. More specifically, through the participants' engagement with theoretical and practical aspects of ESP, discussion, exchange of views, collaboration and constant reflection, the course that was developed in the context of this study aspired to educate teachers rather than train them. Furthermore, through maintaining the network after the completion of the course, informing the practitioners on the various ESP professional organisations that they can join and the different events related to ESP, the course also aimed at equipping the participants with the necessary tools to continue developing professionally.

The following section outlines the current state of ESP TE, emphasising its necessity in today's constantly developing world.

2.3.2 Talking about the opportunities for ESP teacher education today

In the previous section the importance of TE was highlighted. As far as ESP TE is concerned, due to the specialised nature of ESP, its discipline-related character and the multifaceted role of the ESP practitioner, ESP TE becomes essential. For this reason, every ESP practitioner should have access to TE opportunities in every stage of their careers. Despite the increased demand for ESP courses due to globalisation and social and professional mobility, unfortunately, ESP TE is underdeveloped in many countries of the world. Not only the research in the area is limited, but also opportunities for ESP TE are not many either. This is evident in the literature on ESP TE, and it can also be realised through an online search of existing ESP TE courses offered today.

As far as the literature is concerned, the need for more ESP TE opportunities is sensed in many parts of the world (Abdulaziz, Shah, Mahmood & Fazal e Haq, 2012; Abedeen, 2015; Adnan, 2011; Basturkmen, 2010; Bell, 2002; Bezukladnikov & Kruze, 2012; Bojović, 2006; Bracaj, 2014; Chen, 2012; Chostelidou, Griva, & Tsakiridou, 2009;

Doyran, 2012; Fortanet-Gomez & Räisänen, 2008; Huang, 2010; Kakoulli Constantinou & Papadima-Sophocleous, in press; Latha, 2014; Mahapatra, 2011; Rajabi, Kiany, & Maftoon, 2012; Savaş, 2009; Sifakis, 2005; Wright, 2012; Zavasnik, 2007). Moreover, as Bojović (2006) argues, ESP practitioners are also in need of networking with other ESP professionals around the world, as most of the times they feel isolated and lost in the complications of their profession. As already discussed, the vast majority of ESP practitioners worldwide today are teachers that have been prepared to teach GE classes but not to face the challenges of the unknown and complex environment of the ESP classroom (Campion, 2016; Pirsl & Popovska, 2016).

Despite the fact that ESP TE is a need expressed by many ESP researchers and practitioners worldwide, the examples of ESP TE courses that can be found are not many. An online search for existing ESP TE courses conducted by the researcher yielded the following results:

- MA in TESOL: English for Specific Purposes by the Durham University, UK (Durham University, 2019);
- MSc in TESOL with a specialism in EAP by the University of St Andrews, UK (University of St Andrews, 2019);
- MA in English: English for Specific Purposes of the University of North Carolina at Charlotte in the USA (UNC Charlotte Department of English College of Liberal Arts and Sciences, 2019);
- MA of Arts in English Language Education with specialisation in English as Specific Purposes (ESP) by De La Salle University, Manila (De La Salle University, 2019);
- MA in ESP by the Arab Academy for Science, Technology and Maritime Transport in collaboration with Cardiff's Metropolitan University, Egypt (Arab Academy for Science, Technology and Maritime Transport, n.d.);
- ESP Module offered by the Centre for English Language Teaching of the University of Vienna which leads to a Certificate in Teaching English for Specific Purposes (CerTESP) (University of Vienna, n.d.);
- Teacher Training for Teaching English for Specific Purposes (ESP) through the Intensive English Language Program (IELP) by the University of Albany, State

University of New York, USA (University at Albany State University of New York, n.d.)

Some of these courses involve MA or M.Ed. programmes of study with only an optional module in ESP or EAP:

- MA in TESOL (with an optional module specialising in English for Academic and Professional Purposes) by the University of Warwick, UK (Warwick, 2019);

- MA in ELT (with an optional module in ESP) by De Montfort University of Leicester, UK (De Montfort University, 2019);

- MA in Teaching English to Speakers of Other Languages (with an optional module in ESP) by the University of Westminster, UK (University of Westminster, 2019);

- MA in Applied Linguistics for English Language Teaching (with an optional module in EAP) by the University of York, UK (University of York, 2019).

- M.Ed. in the Teaching of English as a Foreign /International Language (TEFIL) (with an optional module in teaching ESP) by the Hellenic Open University, Greece (Hellenic Open University, 2018).

According to the information found on the website of each University, the above courses aim at preparing students to teach ESP. Generally, they focus on aspects such as theoretical foundations of ESP, ESP curriculum design and materials development, genre and discourse analysis, ESP pedagogy, assessment, programme evaluation and research. These aspects, as seen later on in section 2.3.6, are reported in the literature as aspects in which ESP practitioners indeed need to develop. Therefore, from this point of view, it can be claimed that, as far as their content is concerned, these courses are built on the needs of ESP practitioners. Regarding their delivery mode, most of these courses are delivered via lectures, seminars, in-depth discussions, workshops, tutorials, a combination of theory and practice and independent learning. The University of Warwick also places emphasis on research-led teaching as well as developing students' ability to reflect on the relationship between theory, research and practice (Warwick, 2019).

The purpose of this thesis is not to evaluate the existing ESP TE courses. Nevertheless, looking at these courses critically, one can notice the following: On the one hand, their content appears to be in line with the needs of most ESP practitioners, as described in the

literature (see section 2.3.6), and their delivery modes and teaching and learning methods are universally recognised. On the other hand, as explained in section 2.3.6, there are studies which show that there are ESP practitioners who would prefer more flexible solutions outside the bounds of formal university education to develop their practices. Such solutions could involve the creation of networks (Bojović, 2006; Duyen, 2014) and CoPs, which may foster collaboration between novice and more experienced teachers (Da Silva, Vial & Sarmento, 2017), and the organisation of short courses that allow practitioners to continue maintaining their job positions while receiving education (Chostelidou, Griva & Tsakiridou, 2009; Kakoulli Constantinou & Papadima-Sophocleous, in press). The existing ESP TE courses do not offer such flexibility, and generally they do not appear to adopt contemporary delivery modes such as online course delivery, which may create potentials that are not possible to achieve with on-site attendance, such as the possibility of having participants from many different countries of the world and the maintaining of the network created after the completion of the course. This kind of practices are more compatible with the latest theories of learning such as connectivism (described in section 2.3.3) and therefore more suitable to the learning styles of people today.

Apart from the few courses offered, in 2008 the British Association of Lecturers in English for Academic Purposes (BALEAP) published the *Competency Framework for Teachers of English for Academic Purposes* (BALEAP, 2008). The framework was created in an effort to offer the following, among other things: a description of good EAP practice to support PD of EAP teachers; accreditation of individual teacher portfolios as evidence of professional achievement; EAP teacher recruitment; course design for EAP teacher training; course accreditation for EAP teacher training. The framework was also regarded as a way to raise the profile of the profession. The basis of the framework lies in the professional knowledge, understanding and values of the EAP teachers, and the other areas of professional activity that it suggests are the following: Professional Development, Research and Scholarship; Programme Development; Academic Practices, The Student and Course Delivery. Each area is subdivided into specific areas of practice, each with their associated professional knowledge, values and professional activity described in detail in the framework through competency statements.

The framework was followed by the Teaching English for Academic Purposes (TEAP) Scheme released by BALEAP (2014), which included the TEAP practitioner competency framework and accreditation scheme. The scheme offers continuing PD pathways. It can be implemented through the compilation of the TEAP portfolio which consists of portfolio of evidence supporting the practitioner's competence in specific areas of professional activity, the practitioner's reflective account of professional practice and referee statements by colleagues to support the portfolio. As far as the portfolio of evidence is concerned, which is built gradually as the practitioner gains more experience, this includes indicative samples of lesson plans and rationale reports, new technology use reports, lesson observation feedback reports, needs analysis instruments, students' feedback, materials, reflective diary extracts, students test results and proof that their needs were met, and other evidence of the practitioner's work. The scheme can inform any EAP or ESP in general TE endeavours.

In addition to the courses mentioned and BALEAP activities in relation to EAP practitioners' PD, there are also seminars, conferences, lectures, webinars, symposia, colloquia, workshops and other events organised by professional associations and other private initiatives related to ESP that also contribute to the PD of ESP practitioners.

In conclusion, an exploration of the existing ESP TE opportunities offered around the world shows that ESP TE courses are few compared to the big number of ESP practitioners, and most of them are at an MA level, in some cases constituting only a part of an MA in TESOL, and offered on-site. The majority of these courses demand trainees' long commitment (at least one year of studies in the case of an MA) and their physical presence. What can language instructors who wish to receive ESP TE do in case they cannot attend an MA course? What happens after the course is completed? Is just attending one course at some point in an ESP practitioner's career enough for them to claim that they have received sufficient education in teaching ESP? Hansen (2008, p. 12) states the following on the matter:

> a college degree is insufficient to render a person a successful teacher, just as a degree does not automatically make a person a successful doctor, businesswoman, policeman, or botanist. The complexities in teaching which themselves evolve alongside the changing complexity of society, demand ongoing teacher education in both its formal and informal senses.

Campion (2016), whose research focuses on EAP teaching, supports that despite all the efforts and the TE courses that were designed, there has not been a definite decision whether TEAP education should come in the form of a full year MA or Diploma programme, be one part of an MA course or part of a shorter course of a more practical nature.

The reality is that, even though there are some ESP TE courses offered, the quality of which cannot be doubted, there is a need for more opportunities for ESP teacher training which are more practical, flexible, online, and perhaps cost-effective (Jung, 2005), so that they meet the needs of as many as possible current or future ESP practitioners. These opportunities need to engage the ESP practitioners in a continuous PD process, in other words they should be ongoing, and they should also aim at addressing the needs of ESP teachers in their own context. With the rapid developments in science and technology, just completing a formalised TE course, even though it might equip ESP practitioners with the fundamental knowledge and competencies they need to become ESP practitioners, is not sufficient nowadays.

The sections that follow concentrate on learning theories and how these have affected language TE, concluding with certain parameters which ESP TE should be built on.

2.3.3 The latest theories of learning and their implications for ESP teacher education

In order to examine the issue of ESP TE thoroughly, it is necessary to look at some of the most important theories on how people learn, as these evolved through the years. This will provide us with a deeper understanding of educational processes.

The study of the theories of learning goes deep into the past, since the desire of humans to understand themselves and the world they live in is not new. Issues that trouble research nowadays were similar to the issues discussed by philosophy and later on by psychology. In ancient Greece, rationalism, firstly expressed by Plato, was an important position on the acquisition of knowledge that referred to the idea that "knowledge derives from reason without recourse to the senses" (Schunk, 2012, pp. 5-6). In contrast to rationalism, empiricism referred to the idea that knowledge derives solely from experience, an idea articulated by Aristotle (Schunk, 2012, pp. 5-6). The ideas of the two influential

philosophers were extended to other countries and were elaborated by contemporary philosophers later on.

In more recent years, theories of learning were formed with the help of psychology. First of all, one of the major theories of learning was behaviourism, which emerged from the field of psychology towards the end of the 19th to the beginning of the 20th century and viewed "learning as a change in the rate, frequency of occurrence, or form of behavior or response, which occurs primarily as a function of environmental factors" (Schunk, 2012, p.21). The main proponents of behaviourism were Thorndike, Pavlov, Watson (Watson, 2017) and Skinner (Skinner, 1971), who viewed learning as "model-based" and stimuli-driven (Roberts, 1998, p. 14). Behaviourism was criticised as not being ethically correct, since it was based on the oversimplified view that behaviour is predictable. This implied that the individual takes no initiative in relation to their behaviour.

The second trend, cognitivism, was a more humanistic view of learning, which supported that learning occurs after internal processing of the new information rather than being driven by external factors such as the imitation of a specific model. The acquisition of knowledge is a rather mental activity which involves human cognitive processing (Schunk, 2012). Amongst the founders of cognitivism were Chomsky, Gagne, Piaget, Bruner, etc. This approach to learning was criticised for isolating the individual and for viewing the learning process as something completely separate from the social surroundings (Roberts, 1998).

A third trend in the theories of learning was constructivism, which remains popular. According to constructivism, the individual constructs their knowledge on the basis of prior representations/ knowledge of the world (Dewey, 1938). As we know it today, constructivism was formed at the beginning of the 20th century, after the influence of John Dewey, Jean Piaget and Lev Vygotsky, who emphasised the importance of previous knowledge and experiences in the construction of new knowledge. Piaget saw constructivism from a more individualistic and psychological perspective. However, Vygotsky (1978) thought of constructivism as a rather social process, highlighting the influence of the social context on the construction of knowledge (Powell & Kalina, 2009; Schunk, 2012), and thus he became the father of social constructivism.

With social constructivism, the seclusion and isolation of the individual, as this was experienced in the age of cognitivism, made way to the view of people as social beings.

Social constructivism was initially a theory about the nature of science, according to which "science, scientific knowledge, and scientific practices are socially determined" (Detel, 2001, p. 14264). It denoted that individuals create or construct knowledge through the interaction of their past experiences and what they already know and the ideas, experiences and activities with which they come in contact, in other words their social surroundings (Richardson, 1997). According to social constructivism, learning is achieved through social interaction, and students learn best when they collaborate and when they are engaged in problem-solving situations. Such activities provide them with opportunities to develop their problem-solving skills and creativity. Knowledge therefore is actively constructed and not passively received, and the teacher is a guide and co-explorer of knowledge instead of a knowledge provider. Social constructivism has influenced education in all levels and in various subjects including TE (Beck & Kosnik, 2006; Smith, 2001; Richardson, 1997; Richardson, 2005).

Apart from social constructivist approaches, another contemporary influential learning theory is connectivism, which was introduced by George Siemens (Siemens, 2005). Connectivism is a theory of learning which stresses the influence of technology and networking in the discovery of knowledge. According to Siemens (2005, p. 5), "[l]earning can reside outside of ourselves". As Kop and Hill (2008, p. 1) suggested, for Siemens "knowledge is actuated through the process of a learner connecting to and feeding information into a learning community". Such an approach to learning focuses on networking and understanding of where to look for knowledge rather than receiving ready-made information by the course facilitator. Like social constructivism, connectivism does not view the process of learning as an individualistic process. Connectivism rather supports that knowledge resides in networks.

Being amongst the most influential learning theories of our times, social constructivism and connectivism could constitute the basis of ESP TE programmes. Since according to social constructivism knowledge is constructed through interaction with the social environment, any TE endeavour should encourage communication, interaction and collaboration between the trainees and between the trainees and the facilitator. As Gordon (2008) suggested, knowledge is acquired through the exchange of ideas and construction of meaning. For this reason, trainees should be urged to explore and be engaged in problem-solving collaborative activities in order to acquire knowledge, instead of merely

receiving the knowledge by the facilitator or the material programme. Trainees should also reflect upon their practices in order to comprehend and contemplate on the knowledge that they acquire. Moreover, following the principles of a connectivist approach to learning, ESP TE could also take place through the formulation of networks of ESP practitioners interested in developing professionally. This could be achieved through the integration of new technologies in the ESP TE process.

This section discussed the different theories of learning that have developed through the years, concentrating on social constructivism and connectivism, two prevailing learning theories nowadays, and how these theories can affect ESP TE. All these can provide a theoretical basis on which this study can be built. Attention turns to TE models and how these may influence ESP TE.

2.3.4 Language teacher education models and their implications for ESP teacher education

The different learning theories, as seen in the previous section, influenced the field of TE, generating different TE models. In order to examine the issue of ESP TE efficiently, it is useful firstly to look at these broader language TE trends. In the literature in the field of TE, the following TE models have been identified through the years: the craft model, the technicist or applied model, the reflective model, the sociocultural model and the critical model of language TE. Each of these models carry different implications regarding how teachers can be equipped with the necessary knowledge and competences to reach professional expertise.

According to the first TE model, the craft model, dated back to the Middle Ages and Renaissance, the trainee imitates the expert's or the instructor's practice of the "craft" following the instructor's directions and advice in order to acquire professional competence (Wallace, 1991). Maggioli (2012) characterised this trend in TE as the "look and learn" tradition. This kind of model was rooted in the behaviouristic theories of learning that valued model imitation (Roberts, 1998), it reflected traditional teaching methodologies, and it implied that society is "static" (Wallace, 1991, p.6). However, such view was not representative of the modern world that develops rapidly and dynamically in only a short period of time. This criticism of the craft model led to the development of the applied science model.

The applied science model (Wallace, 1991, p.8) or technicist model of TE or the "read and learn" model (Maggioli, 2012) was firstly reported by Schön (1983; 1987), who referred to it as "technical rationality". It could be assumed that it was based on empiricist theories of learning, as it suggested that experts base their knowledge on findings of empirical science and they relate practice to this scientific knowledge. Thus, the expert provides the relevant scientific knowledge to the trainee, and it depends on the trainee to take the conclusions from the research findings and incorporate them into their practice. Miscommunication between research and practice and the delivery of many unmotivating and ineffective teacher training programmes constituted the main criticism of the applied science model. Nowadays, this gap between research and practice has not ceased to exist. In their influential edited volume titled *The Cambridge Guide to Second Language Teacher Education* (SLTE), Burns and Richards (2009) identified two strands in SLTE, one focusing on practical issues related to teaching and pedagogy and another focusing on the academic aspect of language learning and teaching. The relationship between the two strands is often "problematic", since the academic knowledge that teachers or potential teachers acquire, the "knowledge about", is usually difficult to be put into practice, in other words be connected with the "knowledge how" (Burns & Richards, 2009, p. 3). TE programmes today aim at bridging this gap through reflective teaching and the development of classroom research and AR.

The third model was the reflective model of TE (Wallace, 1991) or the "think and learn" model (Maggioli, 2012), based on constructivist theories and experiential learning. Following Schön (1983), Wallace (1991, pp.12-13) referred to two kinds of knowledge that the professional should acquire: "received knowledge" and "experiential knowledge". Received knowledge derives from research findings or theories that have been developed, it is received by the trainee and it is commonly accepted. Experiential knowledge, on the other hand, derives from the trainee's personal experience or "knowing-in-action", as Schön (1983) described it, and reflection. This experiential knowledge draws not only on the teaching practices of the teacher but also on their experience as part of a community of teachers that share their ideas and the challenges that they face in the context of the teacher training situation (Singh & Richards, 2006). Reflection is the process that provides insight to the "knowledge-in-action" and thus facilitates self-development and improvement.

This model of PD was connected to a "practising what you preach" approach, in other words, the belief that every teacher training programme should reflect in its practice all the theories and approaches that it wishes to convey to the trainees (Wallace, 1991, pp. 18-20). Only through experiencing this knowledge trainees will be able to value it and eventually implement it in their own teaching. Moreover, received knowledge is acquired when the training programme caters for different learning styles, learning strategies and study skills. Thus, any reflective teacher training course should encourage trainees' reflection on their learning styles, learning strategies and study processes in order to be successful.

Wallace (1991) admitted that there might be some disadvantages connected to his model, for example, reflection is a personal process that is based solely on the individual's understanding, it lacks focus in the discussion and furthermore, most of the times, it is an unstructured process. In order for reflection to be useful, it needs to be of good quality, that is, occur in a structured and consistent manner (Wallace; 1991). Referring to the importance of reflection, Prosser and Trigwell (1999) and Ramsden (2003) stressed the significance of promoting deep thinking and learning while reflecting. According to Prosser and Trigwell (1999), there are deep and surface approaches to learning; a deep approach to learning involves understanding ideas and seeking meanings. Learners adopt this approach to learning when they are motivated and interested in the task they are engaged, when they relate the task to their own experience, when they carry out the task using their awareness, when they can combine the parts of the task to form a whole, when they are capable of forming hypotheses, etc. Generally, the authors suggested that deep learning occurs where there is meaning and understanding. Ramsden (2003) agreed that deep thinking and learning occur when there is a focus on meaning, and when learners relate what they learn to what they already know and their everyday life. Furthermore, he expressed the view that a surface approach to learning involves quantity rather than quality, whereas a deep approach to learning involves both quality and quantity. The value of reflection that is based on deep thinking was supported by many other researchers apart from Wallace (1991) (Al-Ahdal & Al-Awaid, 2014; Anderson, 2020; Bartlett, 1990; Calderhead, 1989; Copeland, Birmingham, De la Cruz, & Lewin, 1993; Johnson, 2009; Richards & Ho, 1998). AR could be regarded as a key practice in the context of the reflective model since it urges teachers to identify problems that they may be facing and

invent solutions which they must reflect upon (Richards, 1989; Thorne & Qiang, 1996; Wyatt, 2011).

The reflective model of PD draws on constructivist approaches that suggest that trainees do not enter the process of PD with empty minds (Ma & Ren, 2011), since the 'conceptual schemata' or the 'constructs' that the trainee carries with them at the pre-training stage play a fundamental role in the PD process. Furthermore, as Roberts (1998) suggests, constructivist theories support the view that learners reconstruct their knowledge through self-reflection and interaction with the social context. Similarly, Wallace places the role of experiential knowledge which is acquired through teachers' interaction with the social environment, in the core of his model. The model also draws on Dewey's (1910) and Schön's (1983) view of reflective thinking and Kolb's (1984) learning through experience. Like all the other models, this model of TE has been the subject of criticism; it was maily criticised for focusing on "inward inspection", thus "losing touch with the sociocultural reality" (Tezgiden Cakcak, 2016, p. 128), since through reflection many times the teacher contemplates and acts individually.

As a response to this "weakness" of the reflective model for PD, a sociocultural model of TE came to the front (Franson & Holliday, 2009; Johnson, 2009), the "participate and learn" trend (Maggioli, 2012). The sociocultural perspective to TE is rooted in the social constructivist and connectivist theories of learning, since it encompasses principles on which these two learning theories are built upon. Teacher trainees are viewed as social beings, influenced by the social context for the acquisition of new knowledge.

The sociocultural perspective of PD places emphasis on professional networks and the creation of CoPs, where novice teachers interact with experienced teachers and through meaningful cooperation and collaboration "collective teaching and learning" is achieved (Maggioli, 2012, p. 14). The term "community of practice (CoP)" is recent (Wenger, 1998; Wenger & Snyder, 2000), even though such communities existed in the past. According to Wenger & Trayner-Wenger (2015, p. 1) "[c]ommunities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly". A CoP is formed by people who are involved "in a process of collective learning in a shared domain of human endeavor" (Wenger & Trayner-Wenger 2015, p. 1). These professional networks may operate online and may

be engaged in regular online quests for knowledge, which help them gain valuable insight on issues related to their profession.

Despite the fact that the sociocultural perspective to language TE is more appealing and more modernised compared to the previous three, as Maggioli (2012) suggests, it cannot completely replace the previous three trends. Teachers should join the community having acquired some knowledge previously, possibly through employing different techniques that could fall under the umbrella of any of the previous traditions, i.e. the craft, the applied science or the reflective model. To make his point, Maggioli (2012, p. 15) successfully used the metaphor of the Russian nesting dolls, which symbolise a unified whole, implying that the sociocultural perspective combines all four of the TE traditions, one contained in the other.

Apart from the sociocultural perspective to language TE, nowadays another trend that is becoming increasingly popular is critical language TE. This stems from critical pedagogy, concerned with social action and educational change, the results of global migration and social diversity (Hawkins & Norton, 2009; Johnston, 1999). Even though research on critical language TE is still in its infancy, global sociopolitical and economic changes demand that critical language TE elements are incorporated in any language TE attempt to promote teachers' sensitivity for social equality and justice. Hawkins and Norton (2009) assert the need to embrace critical awareness, critical self-reflection and critical relations in language education. They believe that the following aspects are necessary in language TE: a) a situated nature of programmes and practices, in other words a reference to the teacher learners' educational contexts, b) responsiveness to the teacher learners, their cultures, desires and backgrounds, c) engagement in collaborative dialogue, d) reflexivity and e) praxis, through the integration of theory and practice for educational and social change.

This journey into the development of language teacher education was conceptualised and presented by Kumaravadivelu (2003) in the influential book *Beyond methods: Macrostrategies for Language Teaching*, where the researcher described three types of teacher roles, as these were developed through history and seen earlier in the section: a) teachers as passive technicians, b) teachers as reflective practitioners, and c) teachers as transformative intellectuals. The first role, rooted in behavioristic theories of learning "leads to the disempowerment of teachers whose classroom behavior is mostly confined

to received knowledge rather than lived experience" (Kumaravadivelu, 2003, p.9). The second, refers to Dewey's (1910), Schön's (1983), and Wallace's (1991) model of the teacher who develops through reflection on their teaching practices. Finally, the role of the teacher as transformative intellectual, is a more up-to-date role, founded on the principles of critical pedagogy, expressed in Giroux's (1988) work. "As transformative intellectuals, teachers are engaged in a dual task: they strive not only for educational advancement but also for personal transformation" (Kumaravadivelu, 2003, p.14).

ESP TE can draw from all these developments in the field of TE in general and language TE in particular and embrace a sociocultural approach with elements from the other TE traditions. Following modern approaches to TE, ESP TE could lean towards a more practical, experiential and collaborative approach rather than adopting pure traditional approaches which are more theoretical and view teacher learners as passive receivers of knowledge (Crandall, 2000). Nevertheless, ESP could also incorporate some touches from the older traditions, such as the study of research in the ESP field. This would be in line with Maggioli's (2012) suggestion that elements of all TE traditions could be incorporated into a more comprehensive and inclusive perspective of TE.

This section aimed at examining the main language TE traditions as these have been formed through the years, being influenced by theories of learning, and their implications for ESP TE, and therefore for this research. The section which follows focuses on online TE and what it needs to be efficient.

2.3.5   Online teacher education

The TE trends examined in the previous section have led to many different forms of TE today ranging from formally provided courses to peer observation, seminars, workshops and self-directed research or AR. The development of technology, which has greatly affected language learning with CALL (Computer Assisted Language Learning) being in existence for several decades now, has also affected TE (Reinders, 2009), both in terms of including technology skills in the curriculum of TE programmes and in terms of having TE programmes delivered through the use of technology. In the introduction of the edited volume *Online Professional Development for Teachers: Emerging Models and Methods*, Dede (2006) notes that the need for PD tailored to the teachers' busy schedules, that provides teachers resources that are not available to them on site, has led to the

development of more online TE programmes. Such programmes could be completely online or blended, which involve some face-to-face interaction.

According to Anderson (2008b), "online learning is but a subset of learning in general", therefore everything that applies for learning in general also applies for online learning in particular. In this sense, online learning has been influenced by theories of learning, as presented in section 2.3.3. Despite the popularity of online learning in general, Ketelhut, McCloskey, Dede, Breit, & Whitehouse (2006, p. 237) expressed their disappointment about the "dearth of empirical research into online teacher professional development and by the lack of teacher voice in its design"; this was also pointed by Powell and Bodur (2019).

Even though online learning can draw from research on learning in general, there are certain parameters that need to be taken into account. Powell and Bodur (2019) argued that online PD does not produce quality outcomes, if technology is used simply as a delivery tool. Similarly, Maggioli (2012) claimed that online teacher learning is not just an alternative to on-site learning, but rather a way of synchronisation with new ways of learning and new TE models, as these were discussed in the previous sections. He also added that teacher learning online can be successful if it is built on sound pedagogical foundations. This view was also supported by many researchers in the field of TE (Dede, 2006; Duffy et al., 2006; Ketelhut et al., 2006; Powell & Bodur, 2019).

Expressing their views regarding the factors that affect online teaching in general, Henry and Meadows (2008) suggest that successful online courses are based on nine principles:

1. The online world is a medium unto itself. Special adjustments need to be made as online learning environments are different than regular classroom environments;
2. Content alone does not suffice. Learners must engage in meaningful activities and interaction;
3. Technology is a vehicle, not a destination;
4. Great online courses are defined by teaching, not technology;
5. Sense of community and social presence are essential to online excellence;
6. Excellent online course design demands expertise in many areas (pedagogy, knowledge of the subject matter, technical support);
7. A great web interface will not save a poor course; but a poor web interface will destroy a potentially great course;

8. Excellence comes from ongoing assessment and refinement;
9. Learners need extra help through the provision of guides, examples of course assignments, clear and detailed rubrics, etc.

Adopting a similar stance, Maggioli (2012) suggests that successful online instruction relies on three factors: a) a sense of presence, b) the ability to master the content, and c) ongoing assessment. Regarding the first factor, a) presence, this "involves social, psychological, and emotional aspects that need to be attended equally, if aspiring teachers are to feel that they are *there*, with *one another* and with the *instructor*" (Maggioli, 2012, p. 129). Participants in online learning environments need to perceive other participants as real people. Presence contributes to participants' engagement in the online learning process, and if it does not exist, it is difficult for engagement to exist either. Presence is a factor mentioned also by other researchers (Parsons et al., 2019). Concerning the second factor, b) the ability to master the content, this refers to the teachers' ability to cope with the course content and learn from it. This process involves more effort from the part of the course designer, who needs to have a clear programme structure, with clear course aims and objectives, guiding the teachers through each unit and its learning objectives, tasks, assessment processes, and reflection processes. Finally, c) ongoing assessment refers to teachers 'opportunities to evaluate the whole process of learning through the use of "higher-order thinking skills of application, analysis, synthesis, and evaluation in writing and reflecting on the event" (Maggioli, 2012, p. 133).

Powell and Bodur's (2019) research also yields useful implications for successful online TE. The researchers highlight needs assessment and the value of personalised PD which pays attention to teachers' professional contexts. They also emphasise the use of authentic tasks that can be easily transferred into classroom settings, social interaction and reflection. In agreement with Powell and Bodur (2019), Parsons et al. (2019) support that successful online PD is based on social learning theories that promote social interaction and also value the teachers' own context.

The evolvement of connectivism (Siemens, 2005) and the rise of the sociocultural perspective to TE led to the development of the open access movement and the creation of MOOCs (Massive Open Online Courses), which have started dominating HE since 2008 (Daniels, Adams, & McCaffrey, 2016; Hew & Cheung, 2014; Mota & Scott, 2014). According to Stevens (2013), a MOOC has lots of participants, it is open to anyone, it is

online, and it has a plan of action, as every other course. MOOCs allow participants to study anywhere at any time at their own pace and they are usually fairly short in duration, between 5 and 10 weeks, requiring limited lecturer input (Hall, Harrow, & Lorraine, 2015). These developments have led to the creation of networks and the formation of groups or professional CoPs, which allow the trainees to enjoy the benefits of working with colleagues from different parts of the world (Duke, Harper, & Johnston, 2013).

This section concentrated on efficient online TE, which carries implications for the development of online TE programmes in general and this study in particular. The guidelines presented in this section were followed in the design and implementation of the ESP TE programme proposed in this study. The section which follows focuses on different suggestions for ESP TE as these appear in the literature.

2.3.6 Reviewing suggestions for ESP teacher education expressed in the literature

Despite the fact that research in the area of ESP TE is neglected, discussions on the issue started decades ago and are still continuing, and there is a wide range of topics dealt with. This section explores research in the area of ESP TE and gathers useful suggestions regarding ways through which ESP practitioners can develop professionally. The review of the literature follows a chronological order to show the development of ESP TE issues through the years.

Figure 1 illustrates a number of publications on ESP TE (n=57) starting from the early 1980s, when the first publications were released, to 2020. What is interesting to note is that, even though the numbers are still low, there has been an increase in the numbers of ESP TE publications during the last two decades, especially in the case of research and review articles. Another interesting fact is that, even though these publications come from different countries around the globe, there is a consensus among the researchers that there is lack of ESP TE opportunities worldwide; hence, ESP practitioners strive to cope with the many challenges of their profession (Abedeen, 2015; Bracaj, 2014; Chostelidou et al., 2009). According to Basturkmen (2012), studies focus on the needs of the learners as well as on the specialist discourse, in other words on what to be taught in ESP programmes rather than how such programmes can be taught or implemented, a view which was earlier expressed by Watson Todd (2003) and Wu and Badger (2009).
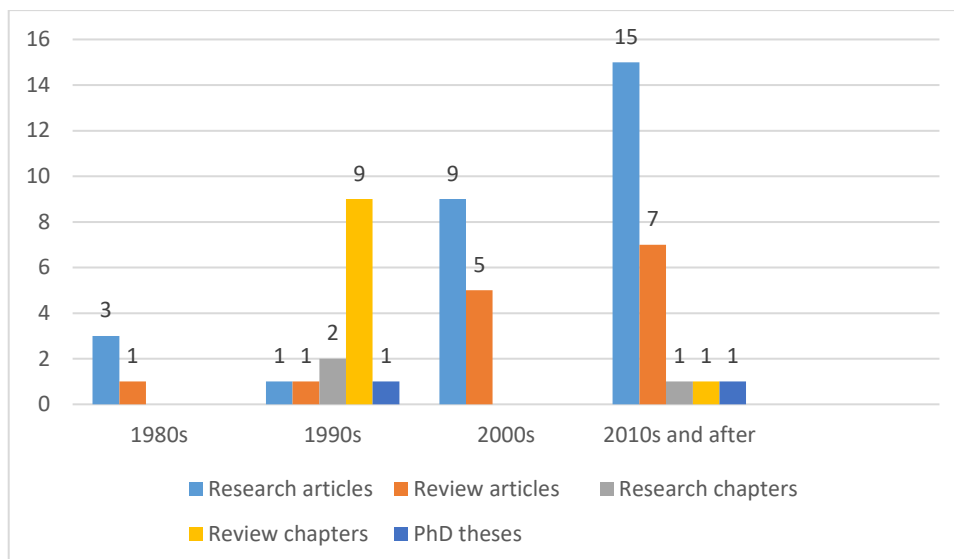
Figure 1. Publications on ESP Teacher Education through the years

Literature in the field of ESP TE or generally LSP TE covers a range of issues. Basturkmen (2014, p. 21) identified the following topics: the role of specialised knowledge in LSP TE, strategies teachers can use to cope with the lacks of subject knowledge, the choice of linguistic theories to inform pre-service ESP TE, the role of culture and context knowledge, teacher decision making, teacher development initiatives in different educational contexts, the role of LSP practitioners in relation to educational policies, and issues related to professional associations and conferences. The literature review on ESP TE conducted for the purposes of this study yielded important suggestions on A) the content of ESP TE, B) its nature and also C) the methodology for its delivery. Table 2 summarises all these suggestions expressed in the 57 publications on ESP TE, published during 1983-2020, which included research and review articles, chapters and PhD theses. The first column presents the suggestions, while the second gives the number of articles in which these suggestions were made.

Table 2. Suggestions for ESP TE in the literature from 1983 - 2020

Suggestions for ESP TE	References
A. The content of ESP TE	N=86
• Linguistic analysis	12
• Disciplinary culture	9
• Combination of theory and practice	8

• Needs analysis	8
• Research	8
- Action Research	6
• Cooperation collaboration with content teachers and specialists	7
• ESP methodology	5
• ESP theory	5
• Course design	4
• Latest approaches	3
• Materials development	3
• Case studies	2
• Student assessment	2
• Study skills	2
• ESP administration issues	1
• Focus on learning	1

B. The nature of ESP TE	N=25
• Lifelong	5
• Practice-based	5
• Context-based	4
• Based on teachers' needs	4
• Competence-based	3
• Textbook-based	3
• Not competence-based	1

C. Methodology/ Delivery techniques	N=108
• Not specified	21
• Learning by doing	17
• Authentic teaching practice	4
• Microteaching	2
- Research	6
- Task-based	1
- Collaboration	11
- Reflection	8
• Self-study	7
• Discussion	5

• Lectures/ Seminars/ Conferences	4
• Problem-solving	4
• Decision-making	4
• Classroom observations	3
• Critical pedagogy	3
• Case studies	3
• Networking	2
• Social constructivism	2
• Practise what you preach	1

As presented in the table, in terms of the content of ESP TE, research through the years suggested mainly a focus on linguistic analysis of the disciplinary language, study of the disciplinary culture, needs analysis, collaboration with subject specialists, and research, especially AR. Regarding the nature of ESP TE, the relevant literature suggested that this should be practice-based, lifelong, based on teachers' needs and on the context. Finally, as concerns the methodology and teaching techniques, it is worth mentioning that a big number of publications (n=21) did not refer to a methodology for ESP TE, while others were in favour of more experiential approaches, reflection and self-study. Based on the view that effective ESP TE should be founded on solid pedagogical principles stemming from theories of learning and research in the general field of TE, the fact that a methodology for ESP TE is not proposed in many of the publications shows a gap in the literature that needs to be filled.

The following sections are organised chronologically and show the development of research in the field of ESP TE through the years.

2.3.6.1 The 1980s

In the 1980s, Ewer (1983), whom Master (1997, p. 22) characterised as "the father of teacher education in ESP", supported that EFL/ ESL teacher trainees face attitudinal, conceptual, linguistic, methodological and organisational problems when they attempt to make the transition to ESP. With his work on English for Science and Technology (EST) TE at the University of Chile, he tried to deal with these problems. He suggested a combination of practical and theoretical classes, trainers' encouragement of trainees to

work independently and critically and teaching of key themes with sequential connections. In the same year, Kennedy (1983) observed that the focus on learners' needs led to the marginalisation of the language teacher, who was in need of teacher training. He suggested that teacher training programmes should be viewed as ESP programmes that integrate subject content, methodology and language. The content of the teacher training course should be grounded on teachers' needs which he separated into course needs (study skills and the variety of language the teacher will need to complete the course) and teaching needs (skills and the language that the teacher will be trained at and will be needed after the completion of the course). Swales and L'Estrange (1983), on the other hand, observed that course design dominated ESP TE, and they proposed that ESP TE should not only include elements such as course and syllabus design, linguistic features of ESP, methodology and materials production, but also ESP administration issues, which were generally neglected. In the same decade, Cortese (1985, p. 77), whose research was conducted in the Italian educational context, referred to time constraints that prevented teacher trainers from covering all the needs of ESP teacher trainees within a course, and she talked about a "'minimal-training' situation of 'giving' ESP in a nutshell".

2.3.6.2   The 1990s

In the 1990s, Boswood and Marriott (1994), who conducted their research at City Polytechnic of Hong Kong, observed that ESP teacher training programmes focused on issues such as course design and genre analysis, a view previously expressed by Swales and L'Estrange (1983), and that they failed to provide ESP practitioners with the skills to interact effectively with business English learners in the context of their discipline. Therefore, they proposed the application of ethnographic analysis to ESP TE, and suggested the balance between "academic ESP" and "business ESP" in order to develop "a unified professional discourse of business ESP" (Boswood & Marriott, 1994, p. 15). Reflecting Wallace's (1991) 'practicing what you preach' approach to TE, Boswood and Marriot also asserted that ESP teacher training methodology should reflect what is considered as appropriate ESP methodology (task-based, problem solving, and participant oriented at the time).

In 1997, a volume titled *Teacher Education for LSP*, edited by Ron Howard and Gillian Brown (1997), was released based on a selection of papers originally presented at the *LSP and Teacher Education* Symposium, held on 16-18 November 1994, at the University of

Edinburgh. The volume outlined the situation of LSP teaching and TE in the UK and the USA, emphasised the lack of LSP TE at the time and suggested different elements that could be incorporated in LSP TE. The volume commenced with Johnstone (1997) outlining the LSP situation in Scotland, Master (1997) recognising the inadequacy of ESP teacher training in the USA, and Howard (1997) discussing the limited number of ESP TE programmes in the UK at the time. The excitement that TE offers to LSP practitioners was commented upon in K. Richards' (1997) chapter, in which he described a case study of ESP teachers talking about their work and the training they received in a small language school. In the same chapter, Richards stressed the importance of needs analysis, focus on individual students, attention to teachers' own teaching context and the extension of short institution-based TE courses enriched with cooperative development. Dudley-Evans (1997), on the other hand, identified five key topic areas that could be included in LSP TE syllabus: LSP theory, LSP methodology, genre and discourse analysis, knowledge of subject content and disciplinary culture and cross-cultural studies. The researcher also supported that even though LSP teaching methodology appears to be similar to general language teaching methodology, the fact that the students are experts in their field while the ESP practitioner has little knowledge of the subject, changes the dynamics in the classroom, since the power that learners have in the LSP classroom is greater than in a general language classroom. Ferguson (1997) suggested that LSP practitioners should acquire specialised knowledge related to disciplinary cultures and values, the epistimological basis of different disciplines and genre and discourse. In the same volume, Tudor (1997) suggested that LSP TE programmes should transform following the wider educational changes by adding more contemporary elements and by focusing more on matters related to learning rather than teaching; for example, on the process of learning and the context in which it takes place. Teachers, in other words, needed to be trained on how learning takes place, and this would guide their teaching practice. Agreeing with the view that TE should be in line with the developments, Delcloque (1997) emphasised the training of the LSP practitioner in the use of technology. Furthermore, Glendinning (1997) and Yeo (1997) agreed on the value of a good coursebook, with the latter commenting on the importance of adopting a different ESP teacher training approach for users of locally produced textbooks, writers of locally produced textbooks and users of western textbooks. This could be achieved through

seminars, discussion groups, summer courses, networking and conference participation, among other techniques.

An interesting contribution to the volume was also made by Maclean (1997), who stated that TE at the time was mainly based on the traditional approach to PD, the "applied science" model of TE (Wallace, 1991) or "technical rationality" model (Schön, 1983; 1987) (the model was explained in section 2.3.4). Instead of relying on the application of theory into practice, Maclean suggested LSP practitioners' active participation in teaching LSP, in the context of their TE programme, so that they learn through a more experiential approach. This way teachers felt empowered and they had ownership and responsibility of the course, they acquired knowledge in their professional environment, the classroom, they had the opportunity to see for themselves the value of their work, and finally they acquired a complete set of materials upon completion of their PD programme. Adopting a similar approach to TE, Northcott (1997) too argued in favour of a more practical approach to ESP TE, aiming at combining academic knowledge and practice.

In another publication in the journal *English for Specific Purposes* a year later, Jackson (1998) expressed the view that ESP teacher training can be effective through the use of reality-based case studies. She supported that case studies can reflect the world of the ESP practitioner and thus, help trainees to gain experiences regarding the challenges that ESP teachers face. She also added that case studies could deal with curricular and pedagogical issues, classroom management, cross-cultural and interdisciplinary issues, and administrative and personnel issues.

Daoud (1999, p. 75), in her PhD thesis titled *EFL/ESP Teacher Development and Classroom Innovation through Teacher-Initiated Action Research*, identified a shift in language teacher education in general characterised by the following: 1. Shift in views of the non-native teacher; 2. Shift from training to continuous education or development; 3. Emphasis on teacher research and the classroom as focus of change; and 4. Emphasis on the teacher as the mediator of pedagogic change. In this context, she proposed teacher-initiated AR for EFL/ESP teacher development and classroom innovation with positive results in both areas.

2.3.6.3   The 2000s

In 2000, as a reaction to traditional forms of TE, following the steps of Daoud (1999) and embracing Maclean's (1997) suggestion for a participatory method of PD for ESP practitioners, Chen (2000) also suggested PD through teachers involvement in AR. Reporting on a study conducted in Taiwan, Chen talked about the lack of ESP teacher training, and the fact that existing ESP TT programmes were traditional, based on a "theory-into-practice" approach and inefficient, not focusing on the specific context of the ESP teacher trainee. The ESP self-training model that Chen proposed involved AR following a "practice-into-theory" approach through reflection, problem solving and decision-making. The success of this idea was illustrated through the description of the researcher's own development in ESP teaching through involvement in AR for the preparation of 4th year college students for reading an English textbook in Production/ Operations Management. The idea of using AR for PD was also expressed by other researchers later on, as shown in this section.

A participatory and practice-into-theory approach to enhancing ESP practitioners' knowledge was also proposed by Sullivan and Girginer (2002), who suggested using discourse analysis to enrich the knowledge on materials development and raise awareness. Their study was based on a personal experience with an ESP programme in a Civil Aviation School in Turkey, where one of the researchers had to document standard discourse transactions between pilots and air traffic controllers. The study had positive results, and even though time-consuming, it provided a rich resource for materials development.

The situation with ESP teaching was described by the IATEFL ESP Special Interest Group coordinator in the early 2000s (Bell, 2002). Bell described how GE teachers all over the world sought assistance when they were required to teach ESP courses, since traditional Teaching English as a Foreign Language (TEFL) courses did not prepare them for ESP. Bell suggested that both the students and the teacher should be regarded as sources of knowledge and power in the ESP classroom with an equally balanced relationship in which they collaborate and share knowledge. Furthermore, Bell proposed the "Framework of the three C's" in order for ESP practitioners to acquire the specialist knowledge required. He suggested that 1) they should have curiosity to learn about their

students' specialism, 2) they should collaborate with subject specialists and 3) have confidence about the knowledge on the subject which they will develop.

Sensing the change in language TE trends and favouring the Vygotskyan ideas to learning, Sharpling (2002) expressed his preference towards collaborative interaction in PD, which allows for knowledge construction, and he also praised lifelong learning. For Sharpling, the teacher can achieve PD through becoming a critical and reflective thinker, implementing self-evaluation and self-assessment. Sharpling also talked about the value of having formalised EAP TE.

In an attempt to describe the situation with the training of ESP practitioners, Bojović (2006) stressed the need for ESP practitioners to be appropriately trained, and she claimed that most ESP teacher training courses consisted of the following: 1) selection procedures so that only the effective teachers would be allowed to proceed in their career, 2) continuing personal education, 3) general professional training as an educator and as a teacher, and 4) special training as teachers of a foreign or second language for acquisition of certain skills, information and the theoretical background. Bojović (2006, p. 493) added that the teacher should be equipped with "the necessary tools, frameworks, and principles of course design to apply them to new material" and the material should be provided by experts in the field, and it should be authentic, up-to-date, and relevant to students' field of studies.

Venkatraman's (2007) research in India the following year suggested PD for teachers that mostly concentrated on a list of competencies identified for the specific teachers of English in India. The competencies that ESP teachers in India needed to have according to the study were general competencies, subject-specific competencies, which were categorised under listening, speaking, reading and writing skills, professional speaking and professional writing skills and special grammar items used especially in scientific and technical communication.

In a research study conducted in Slovenia, Zavasnik (2007) recognised the fact that there has not been much research in the area of teacher training needs analysis, and that it was not known whether existing ESP teacher training courses are effective or not. The study aimed at evaluating ESP educators' "(sub)competencies", comparing existing ESP teacher training programmes worldwide with the analysed needs in Slovenia and setting guidelines for future ESP teacher training needs. The results of the research illustrated

that specialised teacher training in ESP is necessary for successful ESP teaching. Furthermore, as Venkatraman (2007) emphasised the importance of competencies that teachers are required to have in India, Zavasnik (2007) adopted a similar competency-based framework to PD. The researcher supported that apart from linguistic competence, ESP educators need to develop certain teaching (sub)competencies such as evaluating, adapting and designing materials, gaining feedback from students, employing state-of-the-art methods, approaches and techniques and encouraging independent learning strategies.

Reporting on his work in Côte d'Ivoire, Kone (2007) supported a combination of content and pedagogy training in ESP TE. Content-based training referred to the teaching of the academic subject whereas pedagogy-based training meant the training needed to be able to teach ESP.

Furthermore, Räsänen (2008) described the approach followed at the University of Jyväskylä LC in Finland for teachers' PD. She explained that this was done through collegial AR since the mid-1990s, the purpose of which was the development of learners' and teachers' self-directed lifelong learning. The researcher claimed that the AR approach adopted, facilitated their PD, referring to it as "the primary tool for quality development and monitoring" (Räsänen, 2008, p. 250). This was yet another research in which AR was adopted for PD (along with Daoud's, 1999 and Chen's, 2000), meaning that AR gained popularity in language teaching circles, and also that in order to develop their knowledge and skills, ESP practitioners needed to be actively involved in a self-development process involving action-taking and reflection.

Chostelidou, Griva and Tsakiridou's (2009) research involved the identification and recording of the training needs of ESP teachers operating in the context of State Vocational Institutes in Greece. The researchers stressed the fact that ESP teacher training is essential, and that ESP pre-service training in the country is insufficient. Their study concluded that ESP teacher training should consist of both theory and practice, it should include the use of technology in the ESP classroom and also focus on needs analysis. It could also involve short-term ESP teacher training courses (e.g. two weeks long), preferably delivered by experts in the field. Additionally, as other researchers in the past, they argued in favour of ESP practitioners' collaboration with content instructors and team teaching (Fortanet-Gomez & Räisänen, 2008; Platt, 1993).

In another context in Turkey, Savaş (2009) stated that ESP practitioners are either ELT teachers with no specialised ESP training or content instructors who do not have the necessary skills to help learners acquire the language. They lack functional academic literacy (FAL), which involves acquisition of the complex language of the academic classroom, and knowledge of the discipline. He suggested that ESP teaching should be content-based, collaborative and interactive so that "both teachers and students scaffold each other" (Savaş, 2009, p. 397), and he proposed training EFL teachers through pre-service/ in-service programmes or through collaborative work (team teaching) with content teachers. He proposed a new model solution especially for the Turkish context, which he calls "Acculturation during Undergraduate Study" (Savaş, 2009, p. 403), which involves specialisation of ELT teachers in the specific field they wish to teach during undergraduate studies.

Reporting on their research in Vienna, Hüttner et al. (2009) claimed that because it is impossible to predict the genres ESP practitioners will be asked to teach in the future, ESP TE must equip ESP practitioners to analyse ESP genres autonomously. For this reason, they supported that ESP TE should include theory connected with teaching practice. Hence, they suggested the adoption of Widdowson's (2003) model of mediation that connected linguistic theories (genre analysis and corpus linguistics) with teaching practice.

Describing the weak presence of ESP TE in China, Feng (2009) embraced Boswood and Marriott's (1994) and Northcott's (1997) idea that ESP TE should be theory-informed and also relevant to teaching practice, focus on the specific discipline and the particular purpose it serves and have a practical nature. Furthermore, in agreement with Daoud (1999) and Chen (2000), Feng maintained that ESP TE should be based on AR and aim at ongoing PD. More specifically, like other researchers in the past, Feng supported a self-training model involving AR in actual ESP settings encouraging reflective practice. The researcher also argued for a "joint-teaching model", which involved collaboration between ESP practitioners and content teachers (or subject teachers) (Feng, 2009, pp. 201-202).

In the same year, an article written by Morgan (2009) proposed ways teachers working in EAP contexts can act as transformative intellectuals, embracing a critical pedagogy for PD. More specifically, he described the implementation of a pre-service ''social issues

project'' for future EAP and ESL teachers. His work aimed at creating transformative intellectual EAP teachers, who see "the ''bigger picture'' and become aware of the larger socio-political and economic conditions (e.g. globalisation, neoliberalism) that shape educational agendas, academic rules and curricula, and the disciplinary content students are required to learn" (Morgan, 2009, pp. 88-89). This kind of awareness would be utilised in their language classrooms in the future through the transformative work they would put into practice.

2.3.6.4 *The 2010s and after*

In an attempt to provide an overview of the ESP TE situation as this was formed until the first decade of the new millennium, Mahapatra (2011) published an article which could be regarded as a historical review of training programmes in different countries like the USA, the UK, Saudi Arabia, Chile, Malaysia, Thailand, Romania, Cort de Ivory, etc. His article characterised ESP teacher training as "a neglected need" (p. 2). His review was separated into three periods: the time of Ewer's beginning of ESP training programmes (1970s), the post-Munby times (Munby, 1978) and the post-method era (1990s). The author concluded with the remark that research in ESP training is not rich and every training programme should concentrate on teachers in their specific context.

Examples in the literature in which the need for ESP TE is expressed are many. Rajabi, Kiany, and Maftoon's (2012) research proved the value of ESP TE by investigating the underlying effects of an ESP in-service teacher training programme on the beliefs and instructional practices of Iranian ESP teachers and students' performance. The authors agreed with Bojović (2006) that potential ESP practitioners should be provided with the necessary knowledge and tools to handle students' field of study. The researchers investigated the impact of an ESP in-service teacher training programme on the Iranian university ESP context. The programme focused on theoretical approaches of ESP, methods of ESP instruction, practical aspects of ESP instruction, methods of assessing the students' needs and methods of student evaluation. The study, which involved having experimental and control groups, revealed the benefits that teacher training had on the ESP instructors who had received training: their beliefs changed, their students performed better, and they were better equipped to teach ESP. In their conclusion, the researchers emphasised the need for collaboration among the language and the content teachers and for establishment of ESP teacher training programmes.

Ghanbari and Rasekh's (2012) research study is another study involving Iranian ESP teachers. More specifically, their study aimed at examining the route that two Iranian ESP teachers at Petroleum University of Technology in Ahwaz followed to develop professionally. In the article the researchers were in favour of Maclean's (1997) and Jackson's (1998) suggestions for a practice-into-theory approach to PD, referring to Elliot's (1991, p. 69) view that "theories are not validated independently and then applied to practice. They are validated through practice". The results of the study yielded four major categories, which constituted the sources of the two ESP teachers' PD: 1) The ESP programme that they taught, which served as a resource for their limited content knowledge; 2) Their journey to establishing themselves as authority figures in their classes; 3) The collaboration with colleagues from the department in the development of the curriculum; 4) The development of a repertoire of strategies through the years. In other words, they developed through experiential processes and interaction with students and colleagues. Recognising the limitations of their study, due to the small sample, the researchers supported that the four categories could potentially serve as a guide for ESP practitioners towards achieving PD in cases where no ESP TE is available.

A practical solution to the problem of lack of ESP TE, was given by Wright (2012), who claimed that, because of absence of ESP teacher training, the holders of the Certificate in Teaching English to Speakers of Other Languages (CELTA) find it challenging to work with adult learners, they lack specialised knowledge of the "carrier content", and they lack the skills needed to develop ESP materials. Apart from all these, they are often required to teach many different sectors of ESP at a time. In such cases, Wright suggested that the best way to cope with the situation is to rely on good coursebooks, which provide subject content and they serve as a "lifeline" that can guide inexperienced ESP practitioners into ESP teaching. This is essential when collaboration with content experts is impossible or when the educator is requested to teach ESP in more than one discipline.

Abdulaziz et al. (2012) stated the importance of ESP teacher training and ESP teaching respectively. They reported on the findings of a qualitative research study conducted in Pakistan, the objective of which was to examine and identify issues and challenges faced by ESP practitioners and come up with practical solutions to cope with these challenges. The findings presented a number of challenges mentioned by the ESP practitioners that participated in the research: student motivation, classroom size, course content selection,

designing/ redesigning syllabus, class heterogeneity, student evaluation, poor GE background, use of audiovisual aids and teaching methodology were listed as the most important challenges. The researchers showed that ESP teacher training is essential, teacher training programmes should be launched and workshops and seminars could be organised to increase teacher motivation and awareness. Such training programmes could be free of charge so that they are more attractive to participants.

In another educational context, in Russia, Bezukladnikov and Kruze (2012, p. 104) stated that "ESP exists only in a very halted fashion", like in other parts of the world. According to Bezukladnikov and Kruze (2012), ESP courses are inefficient with poor and inadequate teaching material, and teacher training professionals are very few. The authors stressed the importance of ESP TE that should be based on the needs of the participants. In their article they discussed the outline of an ESP pre-service teacher training course developed at Perm State Humanitarian-Pedagogical University, a continuation of the Basic Course on Methods of Teaching English. The course aimed at developing trainees understanding of ESP teaching based on language acquisition theories, giving them the opportunity to practice ESP teaching, expanding their professional expertise and academic experience and developing trainees' self-evaluation abilities for self-improvement. The course focused on four areas: Academic area, Professional area, Pedagogic area and Research Methods area. All of the areas however were interconnected and they formed a "unified whole" (p. 105).

The value of AR was once more praised in 2013 by Ali and Bano, whose study took place at the Mechanical Engineering Department of a public sector engineering university in Karachi, Pakistan. Like other researchers in the past (Chen, 2000; Daoud, 1999; Feng, 2009; Räsänen, 2008), Ali and Bano (2013) recognised that AR can be used to examine their role and can inform their decision-making processes. Moreover, they suggested that teachers' involvement in systematic reflection and analysis of practices leads to improvement of the teaching practice.

A research study which reflected contemporary theories of learning, such as social constructivism and connectivism as well as modern TE models, was the study presented by Krajka, Marczak, Tatar and Yildiz (2013). The study involved teacher development, more specifically the building of ESP teacher awareness, through computer-mediated tandem learning. The researchers elaborated on the value of intercultural awareness, and

how the ESP practitioner is expected to play the role of the intercultural mediator "between the learners' native culture and target culture" (Krajka et al., 2013, p. 2). The main aim of the study was to verify the relationship between increased intercultural teacher awareness and the use of e-learning tandems across cultures. The study also aimed at exploring collaborative online learning environments, specifically Moodle Learning Management System in this process. This project was supplementary to the regular face-to-face courses the future ESP practitioners received at their Universities. The two groups of students came from Maria Curie-Skłodowska University in Poland and Bogazici University in Turkey. The findings showed that projects of this kind have a very good potential for teacher development and especially the increase of intercultural awareness.

To show how important TE is for ESP practitioners, Liton (2013) described the training programme initiated by the English Language Centre of Jazan University in Saudi Arabia for the teachers of English and the research study which aimed at evaluating the specific programme. The objective of the programme was for English teachers to "meet the technical and pedagogical strategies for better understanding of the target language and better performance in the ESP classrooms" (Liton, 2013, p. 3). The programme aimed at linking effectively theory, research and practice. The results of the evaluation study reflected the effectiveness of the programme, which was determined through an examination of participants' reactions, participants' learning, organisational support, participants' exercise of new knowledge and skills, and students' attainment.

In Vietnam, Duyen (2014), described the journey of two Vietnamese GE teachers to becoming ESP practitioners. Having no opportunities for TE, they needed to find other solutions in order to be able to cope with all the challenges of ESP courses. The study revealed that the two Vietnamese ESP practitioners used self-studying, learning from colleagues and learning from students, in order to learn how to teach ESP. The researcher recommended that in-service ESP teacher training courses should be organised for all ESP practitioners across Vietnam that should involve self-reflection and networking and should encourage collaboration with subject teachers. Furthermore, adopting a view similar to Zavasnik's (2007) and Venkatraman's (2007), the researcher argued that a framework of ESP teachers' required competencies for different disciplines should be created to serve as a guide for ESP PD in the country. Furthermore, self-reflection should

be encouraged, and the institution should try to bring together ESP practitioners and content teachers for better collaboration and cooperation.

In her own context in Albania, Bracaj (2014) highlighted the importance of teacher training in ESP and presented the aspects of ESP teacher training courses as these were identified some years before by Bojović (2006). Another researcher, Latha (2014), accentuated the importance of teacher education in general, and teaching ESP in particular. The researcher argued that teachers should "acquire adequate knowledge, skills, interests and attitudes towards the teaching profession" (p.76), and expressed the view that TE has four dimensions: 1. improvement of the general educational background of the trainee teachers; 2. increase of their knowledge and understanding of the subjects they are to teach; 3. pedagogy and understanding of children and learning; and 4. development of practical skills and competences. Regarding ESP TE, Latha (2014) embraced Bojović's (2006) and Bracaj's (2014) views on the matter.

On the other hand, opting for a linguistically oriented TE approach to ESP teaching, Cabrita, Mealha and Queiroz de Barros (2014) stressed how important it is for ESP practitioners to have metalinguistic awareness. This can be ensured by inserting a linguistics component in ESP TE, through the study of discourse analysis, applied and corpus linguistics. The researchers also expressed the view that descriptive and historical linguistics are also necessary for potential ESP practitioners.

Talking about LSP TE, Basturkmen (2014) stressed that LSP TE should be based on teachers' needs and should take into consideration the context in which teachers operate. Moreover, acknowledging the weaknesses of the craft and applied science models of TE, she supported the reflective model for TE, believing that it could provide the teachers with insights into the teaching process. Nevertheless, as seen in section 2.3.4, despite its merits, the reflective model for TE is not flawless; hence even though in her article Basturkmen does not refer to it, pure application of the reflective model could have limitations.

In her PhD thesis, Abedeen (2015) explored ESP teachers' knowledge and practices in tertiary and applied institutions in Kuwait. Among other findings, the research revealed the need for more teacher training in ESP in many different levels including the use of technology, which can familiarise students with their work environment and enhance their motivation. Abedeen supported that ESP teachers need to be acquainted with specific

content knowledge, they need to develop their analytical and critical thinking skills in using authentic material, they should have the opportunity to discuss and share ideas with more experienced ESP practitioners, they should be familiar with the role of the ESP practitioner, and they should be equipped with the necessary skills to conduct needs analysis. All these can be achieved through more pre- and in-service teacher training programmes, practice informed by research, collaboration, teamwork and exchange of ideas with other professionals.

Viewing personal and PD as related to the development of teachers' consciousness, Pirsl and Popovska (2016) proposed ESP teacher training through the application of two theoretical models: The Spiral Dynamics model (Beck & Cowan, 2005) and the Transformative Learning Theory (Mezirow, 1990). The researchers analysed the two models, and they gave certain guidelines that ESP teacher training courses should follow in order to develop the communicative learning and the instrumental learning of teachers; two different macro-contexts: communication related and empirically based understanding (Pirsl & Popovska, 2016). As far as communicative learning is concerned, the researchers suggested initiating competences for personal and PD through physical, emotional, mental and spiritual exercises. Regarding instrumental learning, they suggested gaining insight in the developments in ESP towards holistic education, the particularities of the ESP classroom, the importance of students' needs analysis, applying linguistics in the course, initiating critical and creative thinking skills, and applying humanistic assessment methods. They also suggested determining the goals of the particular ESP course. Furthermore, they proposed a series of practical activities teachers can apply in their teaching in order to implement all the above.

Campion's (2016) research in the UK aimed at exploring EAP teachers' perceptions of the challenges they faced when they had to teach EAP coming from a GE training and teaching background, how they overcame the challenges, and their views regarding EAP teacher training. The study showed that the teachers overcame the challenges through formal and informal learning opportunities, previous teaching experience, different qualifications they obtained and through materials they worked with. Learning to teach EAP was achieved through various means, and it was a long process, involving "a symbiotic view of education and experience" (Campion, 2016, p. 67). The researcher also raised the issue of the responsibility of the institutions to cater for the PD of their staff.

Da Silva, Vial and Sarmento (2017) reported on their research on how EAP teachers in Brazil prepare to deliver their classes in the context of a government policy established in 63 Brazilian federal universities, the Language without Borders Programme. Despite the fact that there was collaboration amongst the teachers during the educational meetings, the teachers made suggestions regarding actions that could be taken in order to improve professionally. Some of the suggestions were the following: the creation of a mentoring scheme between novice and more experienced teachers, collaborative development of materials, study of academic language and genres for more informed creation of materials, teaching their colleagues and receiving feedback, creation of an online platform to share the activities they develop and exchange views on different matters. According to the researchers, all these ideas could apply in teacher training contexts.

Another source of valuable insights in teaching ESP, and more specifically EAP, is "critical incidents", according to Atai and Nejadghanbar (2017), who described their study with 34 EAP teachers in Iran. Brookfield (as cited in Atai & Nejadghanbar, 2017, p. 44) characterised critical incidents as "clearly remember incidents, not expected by teachers, happening inside or outside classes". The study showed that, during such incidents, teachers employed either a strategy of admitting ignorance or risk taking not admitting ignorance, because they did not wish to be judged by the students, or avoidance trying to shift students' attention to something else. The researchers emphasised the value of reflection and collaboration between EAP teachers and content teachers, and they concluded by encouraging teachers to take notice of their critical incidents, share them with colleagues and reflect on them.

In their article on identity constructions of ESP teachers in China, Tao and Gao (2018) highlighted the need for PD in ESP. Embracing the principles of critical pedagogy, they saw ESP teachers as a "transformative intellectuals" who reflect on their practice and connect their classroom practices with social issues.

In a volume titled *ESP teaching and teacher education: current theories and practices* (Papadima-Sophocleous et al., 2019), a more recent study (Kırkgöz, 2019) aimed at designing an ESP TE course in a TE programme in Turkey, based on a constructivist approach to learning. The 14-week course had two components: the first involved lecturing complemented with small group or pair-work tasks to construct knowledge of

ESP concepts, such as needs analysis, materials design, and course design; the second component involved implementing theory into practice by working on projects which involved lesson planning and micro-teaching; lastly, fieldwork was incorporated in the learning process as a group activity. Even though before attending the course trainees did not have sufficient knowledge on ESP, after the course they acquired knowledge on ESP concepts and felt confident to create their own materials. Generally, they were satisfied with the course, and this proves how important it is for ESP practitioners to be able to take part in ESP TE activities.

Kniazian and Khromchenko (2019) were in favour of a competency-based approach to professional development, supporting that ESP teachers need to build self-development competence that would allow them to acquire knowledge related to the specific disciplines they teach (e.g. medicine, law, engineering) and develop other useful competencies such as communicative, social, cultural, etc. They defined self-development competence as "the ability to evaluate one's professional achievements, choose the means of optimizing personal opportunities for self-improvement, practically embody changes in one's personality, control one's own performance, and adjust the conditions for self-change" (Kniazian & Khromchenko, 2019, p. 388). To achieve this, ESP practitioners need to become aware of what theoretical knowledge from the professional field they should develop, what applied linguistic knowledge of the English language they should focus on, what practical experiences of colleagues they should study, and what self-development tools and methods for self-diagnosis they can employ. The researchers suggested a series of research tasks that can help in the development of this competence.

Discussing the needs of a group of 19 experienced ESP practitioners in Spanish Universities, Bocanegra-Valle and Basturkmen (2019) categorise these needs under the following areas: course development, knowledge of the target discipline, knowledge of language use in the target discipline, peer collaboration and PD opportunities. The needs expressed by ESP professionals in the Spanish context seem to be similar to the needs expressed by ESP professionals in other contexts. In order to have a clearer picture of the current practices of ESP practitioners in Higher and Vocational Education in Cyprus and Greece and their needs in terms of ESP TE, a study was conducted with 67 ESP practitioners, 29 from Cyprus and 38 from Greece (Kakoulli Constantinou & Papadima-

Sophocleous, in press). The purpose of the study was to examine the profiles of Higher and Vocational ESP practitioners in Cyprus and Greece, analyse their needs in terms of ESP TE and highlight their preferences regarding what ESP TE should focus on. The results of the study showed that the participants were positively oriented towards ESP TE, and they believed that it would help them develop in many aspects of their profession. They needed TE for further professional development on issues related predominantly to teaching methodology including the use of technology and development of network with subject specialists as well as with colleagues in the field. The participants suggested different components that could be incorporated in ESP TE, supporting that TE should combine both a theoretical aspect of ESP and learning in general as well as a more practical aspect, where issues of teaching methodology and curriculum design would be central. The majority of the participants preferred short programmes, opting for quick and efficient forms of development that would not demand extensive commitment on their behalf.

The volume on ESP and its current practices, challenges and innovations edited by Kenny, Işık-Taş and Jian (2020) is yet another collection of chapters on recent research conducted in ESP, some of which were dedicated to ESP PD. One of these chapters was Gaye's (2020), which emphasised the importance of teacher training in French-speaking Africa, especially in Senegal. The researcher investigated whether Senegalese EFL instructors know how to use ESP in their teaching, and found that their knowledge on teaching ESP is very limited. The researcher defined the knowledge and ability to teach ESP as awareness of conducting needs analysis, expertise in the ESP discipline taught, collaboration with content experts, ability to develop their own materials, and ability to analyse different genres. She proposed a combination of pre-service and in-service training for PD. In the same volume, Kavanoz (2020) espoused the idea of employing AR for PD previously proposed by Daoud (1999), Chen (2000), Feng (2009) and Ali and Bano (2013). She believed that AR could prove beneficial if it involved collaboration, problem-solving, decision-making, and self-reflection, and concluded that AR "can serve as a viable and effective paradigm that can assist both prospective and in-service ESP teachers in developing skills, knowledge, and autonomy required for incorporating situation-specific instructional strategies" (Kavanoz, 2020 p. 261). Therefore, ESP TE endeavours should equip ESP practitioners with the necessary knowledge to conduct AR.

This section presented a review of research in the ESP TE field from the early 1980s to mid-2020s focusing on suggestions made by research regarding aspects that could be incorporated in ESP TE. The section which follows covers how ESP TE should be in our days, based on all the parameters examined so far.

2.4 Laying the foundations for ESP teacher education today

The purpose of this chapter so far was to set the basis for ESP TE nowadays through reviewing literature on 1) ESP and the latest developments in the field, and 2) ESP TE first, through analysing theories of learning, elaborating on TE models that stem from these learning theories and online TE, and second, through focusing on literature pertaining to ESP TE. This section gathers the most important insights from the literature review on all the aspects that were reviewed, in an effort to form some general principles on which ESP TE could potentially be based in our days.

Based on all the parameters examined, ESP TE today could be founded on the following:

- Social constructivism, which views humans as social beings constructing knowledge through the interaction of past experiences with new and through interaction with their social surroundings;
- Connectivism which emphasises the use of technology for building networks and learning communities through which ESP practitioners can construct knowledge. Any online TE endeavour should be governed by principles of efficient online TE;
- Sociocultural TE models with elements from other TE traditions, especially the reflective model of TE and critical pedagogy. A sociocultural perspective to ESP TE is rooted in social constructivism and connectivism, favouring the development of professional networks or communities of practice;
- Helping ESP practitioners learn how to teach ESP, involving in-depth engagement combining theory, practice and reflection, instead of mere development of teaching skills associated with training rather than education;
- Engaging ESP practitioners in lifelong PD; therefore, ESP TE should aim at equipping ESP practitioners with the tools needed to continue developing professionally, even after the completion of the TE programme;
- Catering for ESP practitioners' needs and being context-driven, in other words, providing for practitioners in their own educational contexts;

- Facilitating networking amongst ESP practitioners;
- Reflecting the teaching and learning experiences it wishes to convey to ESP practitioners through a 'practising-what-you-preach' approach to TE;

Furthermore, ESP TE could involve:

- Familiarisation with theoretical aspects of ESP, such as the specialised nature of ESP, the role of needs analysis, the importance of authenticity and the multifaceted role of the ESP practitioner;
- Theories of learning that will provide ESP practitioners with a better understanding of learning processes that will invigorate their teaching;
- Issues of teaching methodology, including the use of new technologies;
- Genre and discourse analysis and knowledge of the subject content;
- The latest developments in the ESP field;
- Communication, interaction and collaboration between ESP practitioners through problem-solving authentic tasks and scenarios in order to acquire knowledge;
- Critical reflection, both individual and collaborative;
- ESP practitioners' active participation in the learning process through acquiring knowledge in their professional environment;
- ESP practitioners' involvement in AR that will empower them and help them develop by providing them with the ability to improve their teaching practices and bring change in their educational contexts;
- Awareness of socio-political and economic conditions as well as educational agendas so that ESP practitioners become transformative intellectuals having a more holistic view of their profession;
- Intercultural awareness.

All of the above constitute some general elements on which ESP TE could potentially be founded nowadays, based on a literature review in the field of ESP and ESP TE. It is important to note that in every TE endeavour, the practitioners' needs and educational contexts should be taken into account. Consequently, strict guidelines that could apply in all ESP TE situations cannot be formulated, since each group has its own needs, characteristics and dynamics. Professor Kumaravadivelu (2003) from San Jose State University supported that teachers should devise their own teaching methodologies

depending on their specific educational contexts, and based on this view, McMorrow (2007) expressed the view that pre-packaged courses designed to cater for a massive number of participants cannot satisfy the needs of the contemporary ESP practitioner.

This chapter reviewed the literature in the fields of ESP and ESP TE, in order to provide a theoretical background for this study, drawing some general principles on which ESP TE can be built in our days. The chapter which follows concentrates on details concerning the research methodology.

CHAPTER 3. RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes in detail the research methodology that is used in this study, which is Technical Action Research (TAR). The chapter begins with the purpose and scope of the study. Then the RQs are presented, followed by an explanation of what Action Research (AR) involves. Furthermore, the chapter provides the reader with an overview of the different stages/ cycles of this TAR study and ways in which validity, reliability and ethics are ensured. The chapter also gives information regarding the participants in the research, and it also looks at the methods that are used for the study, describing the data collection tools and the way the data are analysed.

3.2 The purpose and scope of the study

The purpose of this research study is to address the gap that exists in the area of ESP TE which concerns the lack of flexible solutions outside the bounds of formal university education that help ESP practitioners develop their teaching practices. For this reason, the study aims at addressing the neglected need for ESP TE among a group of 24 language instructors from different parts of the world through the formulation of an online community. This community consists of ESP educators representing different ESP fields or English as a Foreign Language (EFL) teachers who expressed interest in educating themselves on issues pertaining to ESP teaching methodology or updating their knowledge on the latest developments in ESP teaching practices. Studying the literature as well as existing ESP TE courses, I propose a possible answer to the problem of insufficient ESP TE among this community of language instructors through the design of an ESP TE programme offered online. The study investigates the challenges of the solution proposed, suggests ways to address these challenges, and suggests changes that can be made to improve the intervention in the future. Furthermore, it examines whether the solution proposed addresses the needs of this group of language instructors in terms of ESP TE. Finally, the study draws certain conclusions regarding what constitutes effective ESP TE in this context.

The next section presents the RQs of the study.

3.3 Research questions

Detecting the problem of lack of sufficient ESP TE in various parts of the world through a review of the literature and also through anecdotal evidence, which stemmed from the my personal experience as an ESP practitioner in HE, I decided to act in order to provide a possible solution to this problem. The RQs that are formed concentrate on the design of an intervention that will provide opportunities for ESP TE to a group of language instructors interested in this.

The RQs of the study are the following:

1. What challenges does the implementation of the proposed course (the ReTEESP Online) confront?

2. How are these challenges addressed?

3. What changes can be made to improve the course in the future?

4. Does the online course proposed address the needs of this group of language instructors in terms of ESP TE?

5. What constitutes an effective short ESP TE course in this context?

The fourth RQ relates to the previous three, and it aims at examining whether the intervention that the researcher designed to address this need is successful or not, and why. The answers to the last two questions are given at the end of the study, after the completion of two cycles of AR.

The next section describes AR and its characteristics.

3.4 Action Research

TAR was considered to be the most appropriate research methodology to be used for this study, since I, the researcher, aimed at addressing the need of a specific group of language instructors for ESP TE. I would act as the designer of the intervention (Grundy, 1983, p. 25) which would serve as a potential solution to the problem that this group faced. The iterative nature of AR was regarded as the most suitable for this context, as it would allow the continuous improvement of the intervention and the continuous development of both the language instructors and me, the researcher, and thus the yield of better results.

At this point, it will be useful to discuss what AR involves. This section defines AR, talks about its origins, describes its characteristics and also explains the processes involved in AR. Finally, the different types of AR are explained in order to justify why TAR was considered as the most appropriate in this case.

3.4.1 Definitions and the origins of Action Research

To understand what AR is, it would be useful to see McNiff and Whitehead's (2010, p. 4) explanation; the authors described AR by focusing on the two words, "action" and "research". They stated the following:

> Action research is about two things: action (what you do) and research (how you learn about and explain what you do). The action aspect of action research is about improving practice. The research aspect is about creating knowledge about practice. The knowledge created is your knowledge of your practice. (McNiff & Whitehead, 2010, p. 4)

In AR, the researcher tries to understand the context in which they operate, locates problems and attempts to provide solutions through taking action in an effort to change things. AR, in other words, aims to improve a problematic situation through change. Cohen and Manion (1994, p. 186) defined it as "a small-scale intervention in the functioning of the real world and a close examination of the effects of such an intervention".

Despite the fact that AR could be regarded as a type of "action inquiry", which is a generic term for processes which follow cycles of improvement through inquiring into practice, Tripp (2005, p. 445) emphasised the fact that AR uses "recognised research techniques" in order to produce results. Not any kind of reflective practice or action inquiry could be regarded as AR. For this reason, Tripp (2005, p.446) formed a much narrower definition of AR, claiming that

> [a]ction research is a form of action inquiry that employs recognised research techniques to inform the action taken to improve practice, [adding that] the research techniques should meet the criteria common to other kinds of academic research (i.e. withstand peer-review of procedures, significance, originality, validity, etc.)

In her discussion of the processes and characteristics of AR in the field of ELT, Burns (2005) argued that AR developed as a reaction to earlier research approaches related to scientific, experimental and quantitative paradigms. She continued by reporting on three research paradigms that appeared in the literature; the basic or scientific research, applied research and action research. Scientific research approaches are based on empirical investigations in the natural sciences and are characterised by objectivity, reliability and generality. This approach to research emphasises the importance of concepts such as "control, operational definition, replication and hypothesis testing" (Burns, 2005, p.60). Secondly, applied research applies theory to practice. The applied research approach employs a variety of research methods depending on the research problems, the RQs and the data collection processes. On the other hand, AR is "interventionist" and "subjective" and its purpose is change for improvement purposes in the local environment (Burns, 2005, p.60). This type of research focuses on action and research integrating the two processes through the participation of the practitioner in the research process. It involves the planning of an intervention through action in response to a perceived problem, or gap between the ideal and the reality that exists in the social context which requires change (Burns, 2005).

In a similar manner, McNiff (2010) described three research traditions or paradigms that evolved through the years, namely empirical research, interpretive research and critical research. Empirical research refers to the first type of rational research, which emerged after medieval times, in the context of which researchers used experimentation to study the world, manipulating variables in order to test hypotheses. This type of research is considered to be the foundation of scientific enquiry. Interpretive research appeared in the 1800s, when focus began to turn to the behaviour of people. During this period, qualitative approaches to research evolved in an effort to explain things rather than merely quantifying them. According to McNiff (2010), this was the period when 'grand theories' on human behaviour were formed, which however, did not take into account individual differences and handled people as a rather homogeneous group. In the early 1900s, a new research tradition evolved, based on people's need to "engage critically with questions about how particular social situations come into being, and how political, economic, cultural and historical forces can shape people's lives" (McNiff, 2010, p.55). The critical

research paradigm laid the foundations of AR, since humanity started realising the need to take action in order to cope with different social challenges.

The origins of AR can be traced in the 1930s when the originator, the psychologist Kurt Lewin, proposed a mode of enquiry based on action cycles (Adelman, 1993; Burns, 1999; McNiff, n.d.). In his article on AR and minority problems, Lewin (1946, p. 35) proposed a type of research leading to social action, since "[r]esearch that produces only books will not suffice", as he stated. Despite the fact that Lewin was regarded as "the father" of AR (Burns, 2005; Herr & Anderson, 2015; Jacobs, 2018), there are authors who claim that examples of AR work can be found in other educational contexts earlier; for example, McTaggart (1994) stated that Gstettner and Altrichter discovered that J. L. Moreno, physician, social philosopher, and poet, used AR in Austria much earlier, in 1913. Furthermore, McKernan (1988) suggested that Buckingham (1926) made reference to teachers as active researchers in his book titled *Research for Teachers*. A significant contribution to AR was also the work of John Dewey in the early twentieth century, who stressed the importance of educational research and the value of educational practice (Burns, 1999; 2005; Herr & Anderson, 2015; Tripp, 2005). In addition to these claims, it would be interesting to also note that researchers such as Burns (2005) argued that the origins of AR can be traced back to ancient Greece and Aristotle; this view was also supported by Tripp (2005), who suggested that AR cycles are very similar to the techniques used by Greek empiricists.

Even though different from traditional scientific research, AR is becoming increasingly popular. Today, the political and socio-economic changes that have occurred in the world, along with ecological destruction and unsustainability, demand action at all levels. These days, more than ever, with the advent of technology, the individual can influence the world and can bring about change. Realising the magnitude of the problems that people and the society in general face nowadays, individuals are in fact resorting to taking action in order to improve their lives. Bradbury et al. (2019, p. 4), praised the value of AR calling upon "knowledge creators to direct more attention and effort to co-producing a better world for all", and they supported that "a refreshed understanding of action research is a particularly good way forward." The increased popularity of AR was also emphasised by Tripp (2005), who identified many fields where AR is applied, such as administration, community development, organisational change, teaching, political change, agriculture,

banking, health and technology generation. Despite academia's preference towards traditional research approaches, the number of doctoral students who conduct AR increases, simply because there are aspects of social issues that cannot be captured through traditional research (Herr & Anderson, 2015; Melrose, 2001). Furthermore, AR is regarded as essential in bridging the gap between theory and practice created by traditional research approaches (McNiff, 2010; Burns, 2005; Lightbown, 2000).

The next section describes the characteristics of AR and the processes involved.

3.4.2   The characteristics of Action Research and processes involved

As already mentioned, AR is a means through which practitioners aim at bringing change and improvement at the local level, in other words in a specific context, and for this reason it was regarded as the most suitable research methodology to be used in this study. Through utilising AR, the researcher aspired to provide the solution to the problem of lack of ESP TE that a group of language instructors faced.

AR evolves in cycles, a series of spirals each of which consists a series of steps (Altricher & Gstettner, 1993; Cohen, Manion, & Morrison, 2007; Denscombe, 1998; McNiff & Whitehead, 2002; Nunan, 1992; Sagor, 2005; Zuber-Skerritt, 1996). Among the most widely used descriptions of AR in the literature was the one put forward by Kemmis and McTaggart (2000), who described AR as ongoing cycles each consisting a four-step process which includes planning, action, observation and reflection. Figure 2 illustrates Kemmis and McTaggart's AR spiral process. After the practitioner/ researcher identifies a specific problem, they plan an intervention which they implement in their specific context, they observe the effects of this intervention, and they reflect on these effects with the purpose of refining the intervention and re-implementing it. The cycles of continuous improvement are ongoing, and the researcher stops whenever they consider that the situation has shown satisfactory improvement.
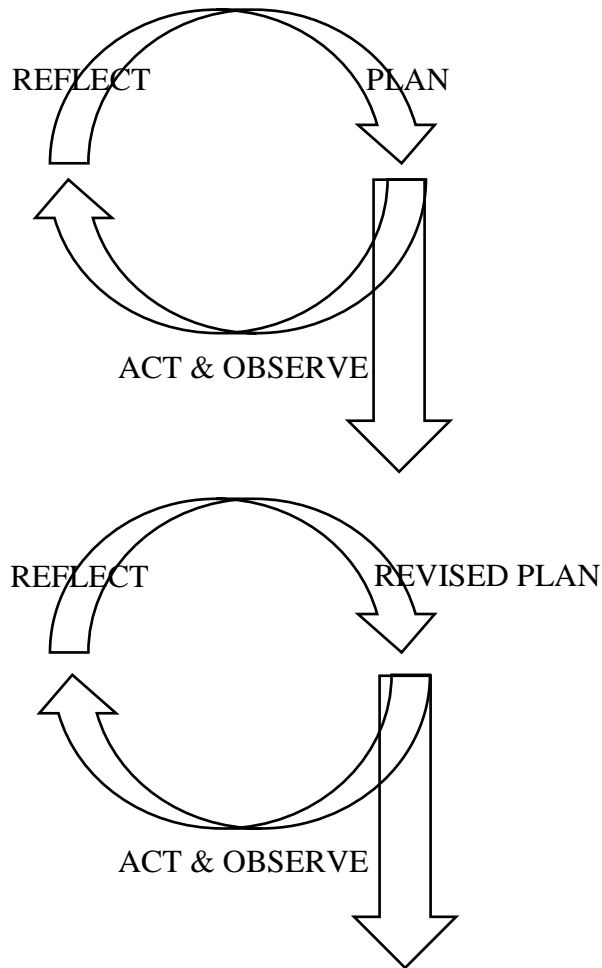
Figure 2. Kemmis and McTaggart's action research spiral (adapted from Kemmis & McTaggart, 2000, p.564)

Despite the fact that Kemmis and McTaggart's AR spiral (Figure 2) was used by many researchers, Burns (1999) supported that some concerns were expressed by Ebbutt (1985), Elliot (1991) and Hopkins (1993) regarding the danger of viewing AR as a fixed simple process which lacks flexibility. The author even continued by describing AR in the Australian context as "a series of interrelated experiences" which involve the following processes (Burns, 1999, p.35):

1. Exploring
2. Identifying
3. Planning
4. Collecting data
5. Analysing/ reflecting

6. Hypothesising/ speculating

7. Intervening

8. Observing

9. Reporting

10. Writing

11. Presenting

These phases constitute the framework of the AR processes from which practitioners may draw in order to conduct their own AR investigations.

Cohen et al. (2007, p. 304), on the other hand, explained AR as a process which develops in two stages: "a diagnostic stage in which the problems are analysed and the hypotheses developed; and a therapeutic stage in which the hypotheses are tested by a consciously directed intervention or experiment *in situ*".

It is essential to note that during the cyclical process of AR, "research feeds back directly into practice" and that it is an ongoing process informed by critical reflection (Denscombe, 1998, p. 129). Another important characteristic of AR is its participatory nature; the researcher participates in the research, either in the sense of taking part in the process aiming at improving their own practices or by being an outside professional who wishes to initiate a change. The participatory nature of AR is what makes AR unique, since power is shifted to the practitioner who is in fact the researcher, which results in "democratizing the research process" (Denscombe, 1998, p. 130). Moreover, AR entails the use of different data collection tools (questionnaires, interviews, focus groups interviews, reflective journals, observation, etc.), and like in other types of research, triangulation is applied, which involves the use of two or more different data collection tools that can strengthen the validity of the research (Cohen et al., 2007, p. 141; Baumfield, Hall, & Wall, 2008, pp. 28-32; Melrose, 2001, pp. 169).

According to McNiff (2010), action researchers are interested in taking action to improve things, and they associate with the issues they are interested in, in one way or another. They investigate the issues from a perspective which is based on their values and beliefs, and they check their findings against the critical feedback of others. For McNiff and Whitehead (2010, p. 95), AR is an eight-step process that is non-linear, since human nature is difficult to predict and cannot follow a linear path in any aspect of life. The eight step AR model they proposed includes the following steps:

- I review my current practice;
- I identify an area I wish to improve;
- I ask focused questions about how I can improve it;
- I imagine a way forward;
- I try it out, and take stock of what happens;
- I modify my plans in light of what I have found, and continue with the action;
- I evaluate the modified action;
- and reconsider the position in light of the evaluation.

Following the above processes, it could be claimed that through AR "individual people enquire into their own practices in a systematic and rigorous way", in contrast to traditional research which views everything from an outsider's perspective (McNiff & Whitehead, 2010, p. 94). For this reason, McNiff (2010) emphasised the fact that AR contributes significantly to professional development; by conducting AR one can claim that their practice is based on research, which means that they are improving on their practice. A similar point of view was expressed by Dikilitaş and Yayli (2018), who claimed that AR influences teacher's professional identity, empowering and transforming teachers. This view was also supported by Gallagher-Brett (2019), who talked about Action Research Communities for Language Teachers (ARC), a project funded by the European Centre for Modern Languages of the Council of Europe, through which AR supported PD and empowered teachers. Furthermore, despite the fact that the aim of AR is to find solutions to localised problems and not to generate theoretical knowledge (Shah, Ensminger, & Thier, 2015), according to McNiff (2010, p.24), through AR, professionals could generate a new "theory" which she defined as "an explanation"; they can offer their own personal theory of practice, their own "living theory", which is called like this "because it lives in the life of the practitioner who is taking the action" (McNiff, 2010, p. 24). This living theory reflects the importance of what practitioners do for their own lives and the lives of other people involved. Adopting a similar point of view, Postholm and Skrøvset's (2013) described their experiences and their reflections with regards to action research projects. According to the authors, these experiences are viewed through a theory lens, since their article may serve as a guide which other researchers may use in order to prepare for unexpected events during the research process or findings.

The purpose of this section was to present the characteristics of AR and describe the processes involved in AR studies. Discussion now turns to the different types of AR.

3.4.3   Types of Action Research

The literature on AR refers to three types: Technical, Practical and Emancipatory (Denscombe, 1998; Grundy, 1983; Melrose, 2001). The differences between the three modes of AR lie at the different philosophical stances each one represents.

According to Grundy (1983, p. 24), Technical AR was named after the Greek word "techne", which means skill, craft or art. It is the kind of research that aims at improving a certain situation, usually through the intervention proposed by an individual or a group of individuals who can be regarded as "experts" or "authority figures" (Grundy, 1983, p. 25) who co-opt, facilitate and manage the intervention (Melrose, 2001).

The second type of research is Practical AR, which Grundy (1983, p.26) suggests that relates to the Greek word "phronesis", which means practical judgement. According to this type of AR, participants themselves use their personal wisdom, their "phronesis" in order to improve a specific situation. In this case, the researcher usually works with a facilitator to assist the research process, and researchers themselves usually participate in this kind of research.

Finally, Emancipatory AR aims at bringing change in situations where the system needs to change as well (Grundy, 1983). This kind of research is considered to be more powerful than the other two. It involves the emancipation of participants to take action in order to bring about improvement. For this reason, the researcher treats the group as equals and may leave the group to continue the process without any expert help (Melrose, 2001).

Tripp (2005) referred to five modes of AR instead of three. These modes are: Technical AR, Practical AR and Political AR, and the two divisions of Political AR, Socially Critical AR and Emancipatory AR. Political AR refers to engaging in politics in order to bring about change. According to Tripp (2005), it serves as an umbrella mode for Socially Critical AR and Emancipatory AR. Socially Critical AR is the type of AR which aims at bringing change in order to increase social justice.

The next section provides an overview of the stages of this TAR study.

3.5   The landscape of this Technical Action Research study

This study falls under the umbrella of TAR study since its purpose was to improve on the existing problem of insufficient ESP teacher education among a specific group of 24 language practitioners through the use of an intervention which was designed based on existing theories. During this process, I, the researcher, acted as a technician, an expert or authority figure who introduced the intervention to the participants in order to improve the situation; at the same time, the researcher acted as a facilitator participating in the process. This study could be regarded as a combination of the cyclical AR processes suggested by Kemmis & McTaggart (2000) (see Figure 2) and McNiff and Whitehead's (2010, p. 95) eight-step AR process, as these were presented in section 3.4.2.

In order to explain the cyclical processes of this TAR study, a schematic representation of the study was created (Figure 3), which depicts the landscape of the research. As Figure 3 illustrates, the research study unfolded in two cycles, namely Stage 1 and Stage 2, each of which consisted of a series of processes and steps. Following is an overview of the processes which were followed for the completion of the study as they appear in the Figure.

Stage 1 – The first TAR cycle: The research commenced with the identification of an existing problem, the lack of sufficient and systematic ESP TE, by critically examining the ESP TE literature and reflecting on the my own experience as an ESP practitioner. I then assembled a group of 24 ESP practitioners and English language teachers who lacked ESP TE or who wished to update themselves on issues pertaining to ESP. As a solution to the problem of lack of ESP TE the group faced, I designed an intervention, an ESP TE programme, the ReTEESP Online, the name of which stands for Online Reflective Teacher Education course in ESP. The course was designed based on a thorough review of the literature in ESP, TE, efficient online TE and ESP TE, and an analysis of ESP practitioners needs. After an initial version of the ReTEESP Online was compiled, the course was pilot tested with six ESP HE practitioners during the period May 2 – June 29, 2017, to identify any practical and functional challenges that could arise during the actual implementation of the course (Vaccarino, Comrie, Murray & Sligo, 2007). The pilot study followed Baker's (1994) suggestion, according to which 10-20% of the main sample size is an appropriate sample size for a pilot study. Even though the pilot version of the course

was designed to last three weeks, due to the heavy workload and the participants busy schedules, it was extended to eight weeks. After the pilot testing of the course and the appropriate amendments made, which derived from the results of the pilot study, the ReTEESP Online was implemented with the group of 24 ESP and EFL practitioners during the period February 26 – April 8, 2018. Seeing that the course was heavily loaded and that three weeks were not sufficient, changes were made to "lighten" the course and make it more flexible in terms of duration (three weeks minimum to six weeks maximum, two weeks less than its pilot version). Stage 1 concluded with a reflection on the programme by both myself (the course facilitator and researcher) and the participants, the purpose of which was the improvement of the programme. Feedback on the course was elicited through the participants' reflections noted in reflective journals, my field notes, comments on the course platform and on Messenger and focus groups/ interviews. Qualitative data gathered was analysed using NVivo software for qualitative data analysis. The findings provided a basis for the refinement of the proposed course in Stage 2.

Stage 2 – The second TAR cycle: In Stage 2 the appropriate changes were made, based on the results of Stage 1, to improve the course. The findings indicated the action that needed to be taken to improve the programme. The syllabus, organisation of materials, presentation of materials, tools, course duration, and assignment of deadlines were refined. The changes that were made in the course were introduced to the same group of participants through the implementation of a sequel course, ReTEESP Online: The Sequel, in May 20 – May 31 2019, as after the results of Stage 1 it was decided that the sequel course would last for two weeks. As in Stage 1, the participants were asked to reflect on the programme through reflective journals, comments made on the platform and on an online forum, and through interviews. I also contributed to the evaluation of the programme through my field notes, as the facilitator. The data obtained were analysed again using NVivo, and the last conclusions for the refinement of the programme were drawn.

This section provided an overview of this TAR. The two cycles of this TAR are analysed in detail in Chapters 4 and 5. The next sections discuss how the validity of the research was enhanced and how different ethical considerations were handled.

STEPS:
1. Recording researcher's personal experience as an ESP practitioner
2. Reviewing the relevant literature
3. Conducting a language instructors' needs analysis in terms of ESP TE

STEPS:
1. Creating the ReTEESP Online (based on a lit review in ESP, TE, ESP TE, curriculum development and an analysis of language instructors' needs)
2. Pilot testing with six ESP Higher Education practitioners (May 2 – June 29, 2017)/ Collecting data
3. Making the necessary adjustments after the pilot implementation / Finalising the ReTEESP Online curriculum

Reflection
(Results and discussion)

Problem identification:
Lack of ESP TE

Stage 1

Implementation of the ReTEESP Online and Observation

Design of an ESP TE programme (the ReTEESP Online)

STEPS:
Implementing the ReTEESP Online with the 24 ESP and EFL practitioners (February 26 – April 8, 2018)/ Collecting data

Reflection
(Results and discussion)

Refinement of the ReTEESP Online

Stage 2

Implementation of the ReTEESP Online: The Sequel and Observation

STEPS:
Refining the:
- Syllabus
- Organisation of materials
- Presentation of materials
- Tools
- Course duration
- Assignment deadlines

STEPS:
Implementing the ReTEESP Online: The Sequel with the same group of the 24 language educators (May 20 – May 31 2019)/ Collecting data

Figure 3. The landscape of this TAR study

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3.6 Enhancing validity and reliability

This section presents the processes followed in order to enhance the validity and reliability of this TAR. The fact that AR is mostly based on qualitative data, and the fact that the researcher participates in the research introduces subjectivity in the process. Therefore, I needed to find ways in order to reduce subjectivity and strengthen the validity and reliability of this research. Validity is the term used to describe "a measure that accurately reflects the concept it is intended to measure" (Babbie, 2013, p. 191), whereas reliability refers to the "quality of measurement method that suggests that the same data would have been collected each time in repeated observations of the same phenomenon" (Babbie, 2013, p. 188). According to Tripp (2005), in order to avoid being merely an action inquiry, AR should employ recognised research techniques that apply in all types of academic research, and as Burns (2005) indicated, the methodological processes followed in an AR study should be explained in detail.

As far as validity is concerned, according to Cohen et al., (2007), there are different types of validity, such as internal validity, which aims at proving that the explanation of a set data can be supported by the data itself, external validity, which refers to the degree results can be generalised, and content validity, which shows that the instrument used covers the elements it was meant to cover. Moreover, there is also construct validity, which concerns the degree to which a measure relates to other variables. Another type of validity is ecological validity, which involves situations in the research occurring naturally instead of the researcher deliberately manipulating variables. There are many other types of validity such as cultural validity, catalytic validity, criterion-related validity, and consequential validity, to name but a few.

The techniques that this TAR utlised in order to ensure the validity of the study were the following: First of all, the study employed more than two research tools for data collection for triangulation purposes, which is important in any research process (Cohen et al., 2007, Baumfield et al., 2008; Meijer, Verloop, & Beijaard, 2002;) and according to Melrose (2001), it increases methodological rigor. As explained in section 3.9.1, all the tools used were created following academically legitimate processes, and the procedures that were followed to administer these tools and facilitate the process of data collection were the legitimised procedures that are usually followed in other types of research in the academia

(McNiff and Whitehead, 2010). Moreover, apart from following careful planning processes to design the research tools, a pilot study was also conducted in order to pilot the course and the data collection processes before these were implemented with the 24 participants. This gave me an idea regarding the elements of the course and aspects of the data collection processes that were problematic and needed improvement before the actual implementation of the course.

Apart from achieving academic validity through triangulation and through following legitimate academic processes, the content validity of the research was enhanced through the use of "a critical friend", a colleague with whom I had the opportunity to discuss the research processes as the research proceeded (McNiff, 2010). Moreover, this critical friend was kindly requested to recode the data obtained in all the phases of the research (pilot study, Stage 1 and Stage 2) after my coding, and Cohen's kappa test (1960) was run in all three cases (pilot study, Stage 1 and Stage 2) to determine inter-rater reliability. This is what McNiff and Whitehead (2010, p. 196) call "peer validation".

McNiff and Whitehead (2010, p.196-197) also referred to another kind of validation, "public validation". Public validation concerns the opportunity that the researcher gives to the public to read their work and be informed about the knowledge that their work has generated. This is done mostly through the publication of the research. During the process of preparing, designing and implementing this TAR, there were opportunities for me to publish parts of this research in peer reviewed journals and books, and also to participate in various conferences related to the ELT/ ESP field presenting the work that was completed and disseminating results. A list of publications and conference presentations can be found in Appendix E.

Additionally, the iterative nature of this TAR and the fact that it developed in repetitive cycles enhanced research validity (Melrose, 2001), as the research process was implemented more than one time.

As far as reliability is concerned, it is not the same in qualitative as it is in quantitative research. Cohen et al. (2007) argue that in quantitative methods a control of phenomena and external variables is required, which minimises the ecological validity of the research. On the other hand, qualitative methods value "the uniqueness and idiosyncrasy of situations, such that the study cannot be replicated" and consider this as "their strength rather than their weakness" (Cohen et al., 2007, p. 148). Despite the fact that being a TAR

the research bore certain unique characteristics, reliability issues in this research were addressed through the role of the critical friend who discussed the research processes with the researcher and also recoded the data determining inter-rater reliability. Furthermore, reliability was also enhanced through the cyclical and repetitive AR processes as well as the use of multiple tools for obtainment of data.

This section presented the different techniques that were employed in order to enhance the validity and reliability of the research. The next session will discuss ethical concerns that may arise, and how these were handled.

3.7 Research ethics

In every type of research there are certain ethical considerations that should be taken into account in order to protect the interests and well-being of the participants. In AR these ethical concerns mainly concentrate around issues of physical and mental health and safety, obtainment of permissions, confidentiality, and protection of identities (Burns, 1999; Denscombe, 1998; Efron & Ravid, 2013; McNiff, 2010). In order to ensure that this research was conducted adhering to ethical guidelines, a series of processes were followed.

First of all, regarding the obtainment of the necessary institutional authorisation to conduct the research, I successfully presented my research proposal to a committee comprised of three members of the academic staff of the Cyprus University of Technology, as this was assigned by the Postgraduate Programmes Committee of the Department of Multimedia and Graphic Arts. The research proposal, which described all the processes involved in this research study, was unanimously approved by the members of this committee. Moreover, I completed the necessary Research Ethics Application Form of the Cyprus University of Technology and obtained the approval of the University Research Ethics Committee. A screen shot of the CUT Research Ethics Application form and the approval letter can be found in Appendix A.

Furthermore, all the participants in the study were informed about the purposes of this TAR study from the beginning, and their consent was obtained in all phases of the study, including the pilot phase, when the participants completed their registration for the course; this was done electronically, using Google Forms. A screen shot of the consent form the participants completed before the course can be found in Appendix B. Moreover,

the participants' permission was obtained in cases where there was video or audio recording. Additionally, the anonymity of the participants was ensured in all cases where results of this TAR were reported, e.g., publications, conference presentations, etc. More specifically, instead of using the participants' names, numbers were used to refer to the participants, and in most cases, data were presented in aggregated form in order to protect the identity of the participants. Confidentiality was also preserved by maintaining the platform that was used for the delivery of the course (a Google Classroom class), the Facebook and the Messenger groups closed/ private. Furthermore, all the material that was produced throughout the course was also kept private and was not publicised in any case, and participants had access to it and could delete it any time they wished.

Regarding the issue of safety, I did not put the health of the participants at any risk given the area of the research. It was made explicit to the participants that participation in the course in both Stages 1 and 2 was voluntary and that participants could withdraw from the course any time they wished.

Another issue worth mentioning stems from the fact that, apart from the researcher, I was also the course facilitator, and this meant that conflicts were sometimes created between my two identities, that of the PhD researcher and practitioner-researcher. For example, in my effort to keep the participants engaged in the course and avoid drop outs, many times I went beyond myself to respond to questions that teachers might have or provide solutions to issues that they faced, since these teachers were not only trainees but also the participants in the study. However, this also had a positive side, because, as the results of the study show, this extra effort and the attention to the trainees eventually made all the difference. In general, I tried to keep my two identities separate, and the fact that a critical friend guided me and helped in the data analysis by recoding the data was a way to miminise any bias that could be generated due to my double identity.

These were the processes followed in order to ensure that the research complied with the research ethics guidelines which are usually followed in most research studies. The next section describes the profiles of the participants.

3.8 Participants

This section presents how the group of participants in the study was formed, and it sketches the profiles of the participants discussing the demographic information obtained through the study.

A total of 24 English language educators from different countries participated in the study. Their common characteristic was their wish to receive education on issues related to ESP teaching; these teachers had either received no training in ESP or/ and were not satisfied with the training they received or/ and wished to develop their ESP practices/ update themselves on the latest developments in ESP. However, as elaborated in section 3.5, which described the landscape of this TAR, in Stage 1, during its design phase, the course was piloted with a small group of language educators (six ESP HE practitioners). These people were not from the group of the 24 language educators. As aforementioned, this was considered necessary especially since the course would be offered online, and it was done in order to test the technology tools and identify any practical and functional challenges that could arise during the actual implementation of the course. This pilot study was also regarded as an opportunity to trial the research tools used in the study, before their actual administration to the 24 language instructors. For this reason, and since the participants in the pilot study were different than those in the actual study, this phase of the study was not conceived as the first cycle of this TAR, but rather a step in the course design process.

The group of the 24 participants in the study was formed after I had placed a call on social media for participation in an international group/ community comprised of ESP practitioners or English language educators in general who wished to receive TE on issues pertaining to ESP teaching. In the call I explained that I identified the need for ESP TE through my own personal experience as an ESP practitioner and also through the literature that I studied, and that this effort was part of my PhD research. To address the different needs in terms of EPS TE of this group, I would design an online reflective TE course in ESP created according to their needs. The idea behind this was to provide this group of language educators the opportunity to develop professionally and improve their teaching practices in ESP through introducing this intervention.

The following two sections give details about the participants in the two phases of this TAR, Stages 1 and 2.

3.8.1 Participants in Stage 1

Stage 1 of this TAR commenced with all of the 24 English language educators registering for the course. Table 3 presents demographic information related to each of the participants individually, in order to provide a more detailed picture of the participants' profiles. Even though ESP practitioners are not referred to as teachers in the literature, due to the complexity of their duties, for the purposes of the study the word "Teachers" will be used to refer to the participants. To ensure anonymity, they are referred to as Teachers 1-24 throughout the thesis, as shown in the first column of the Table.

Table 3. The participants in the study in Stage 1

English language instructors N=24	Place of work	Sex	Age	Years of ESP teaching experience	Current position
Teacher 1	Sudan	Male	40-49	0	VE[2]
Teacher 2	Saudi Arabia	Male	20-29	0	SE[3]
Teacher 3	Saudi Arabia	Female	30-39	1-5	HE[4]
Teacher 4	Saudi Arabia	Female	30-39	0	HE
Teacher 5	Greece	Female	NR[1]	0	VE
Teacher 6	Spain	Female	50-59	1-5	HE
Teacher 7	United Kingdom	Female	40-49	11-15	HE
Teacher 8	Cyprus	Female	30-39	11-15	HE
Teacher 9	Spain	Female	50-59	Over 20	HE
Teacher 10	Greece	Female	NR	1-5	HE
Teacher 11	Greece	Female	40-49	16-20	HE
Teacher 12	Greece	Female	50-59	Over 20	HE
Teacher 13	Cyprus	Female	30-39	11-15	HE

Teacher 14	Egypt	Male	40-49	6-10	VE
Teacher 15	Greece	Female	40-49	1-5	PE[5]
Teacher 16	Cyprus	Female	30-39	6-10	HE
Teacher 17	Greece	Female	40-49	0	PE, SE, VE
Teacher 18	Greece	Female	40-49	16-20	HE
Teacher 19	Cyprus	Female	30-39	0	PE, SE, VE
Teacher 20	Greece	Female	30-39	1-5	HE
Teacher 21	Saudi Arabia	Female	20-29	0	HE
Teacher 22	Cyprus	Female	20-29	1-5	VE
Teacher 23	Greece	Female	40-49	11-15	HE
Teacher 24	Kosovo	Female	30-39	1-5	HE

[1] No response
[2] Vocational Education
[3] Secondary Education
[4] Higher Education
[5] Primary Education

As the Table shows, the vast majority of the participants were female (n=21, 87.5%) of 30-39 years of age (33.33%, n=8) and 40-49 years of age (33.33%, n=8). Moreover, seven participants (29.16%) had no experience in teaching ESP, while others had 1-5 years of experience (29.16%, n=7), 6-10 years (8.33%, n=2), 11-15 years (16.66%, n=4), 16-20 years (8.33%, n=2) and over 20 years of experience (8.33%, n=2). This meant that 14 out of 24 participants were new in the ESP field. Most of the participants worked in Greece (37.5%, n=9), Cyprus (20.83%, n=5), Saudi Arabia (16.66%, n=4) and Spain (8.33%, n=2), and 66.66% of them (n=16) taught in HE. The majority (75%, n=18) had multiple duties to perform, such as course design, teaching, materials selection, materials development, course evaluation and research.

As far as the teaching profiles of the participants are concerned, these ranged from teaching ESP to GE and EMI, as illustrated in Figure 4. More specifically, the majority of the participants taught ESP including EAP and ESAP (45.83%, n=11), 33.33% (n=8) taught GE, 12.5% (n=3) taught both ESP and GE, one participant (4.16%) taught GE and EMI and finally another participant was a teacher of Greek (4.16%) who used to teach ESP in the past.

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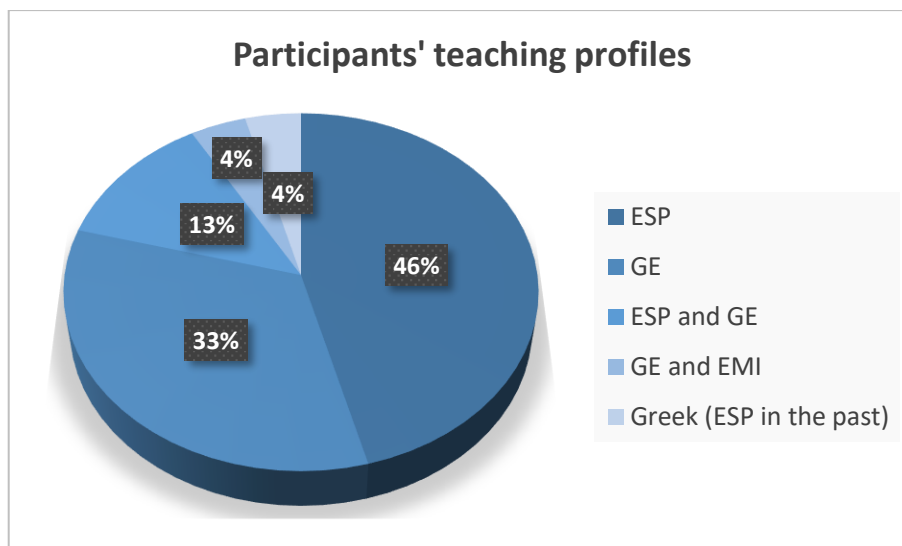
Figure 4. The participants' teaching profiles

Regarding the ESP courses that these educators taught, these varied including EAP and ESAP. The different ESP disciplines/ fields that the participants taught are listed in Table 4. Participants' responses were obtained through a multiple-choice question with multiple answers in the questionnaire that they were requested to respond to at the beginning of the course. Therefore, the fourth column, which presents the percentage of cases, refers to the numbers of ticks each discipline/ field got by the participants in the study, in other words, how many times this response was selected by the participants. According to Table 4, the most common ESP course among the ESP practitioners who participated in the study was English for Business, followed by English for Mechanical Engineering and Computer Science. Among the most common courses were also English for Hotel and Tourism Management, English for Electrical Engineering, and English for Communication. Another element which is worth mentioning is the variety of courses which were reported by the participants; 35 different courses were noted by the participants in the study, which is an indication of how popular ESP is nowadays.

Table 4: ESP courses taught by participants in the research

Fields	N	Percent	Percent of Cases
Business	15	14.7%	75.0%
Mechanical Engineering	8	7.8%	40.0%

Computer Science	8	7.8%	40.0%
Hotel and Tourism Management	7	6.9%	35.0%
Electrical Engineering	7	6.9%	35.0%
Communication	7	6.9%	35.0%
Nursing	4	3.9%	20.0%
Civil Engineering	4	3.9%	20.0%
Shipping	3	2.9%	15.0%
Agricultural Sciences	3	2.9%	15.0%
Accounting	3	2.9%	15.0%
Biochemistry-Biotechnology	3	2.9%	15.0%
Fine Arts	2	2.0%	10.0%
Environmental Science	2	2.0%	10.0%
Finance	2	2.0%	10.0%
Multimedia Studies	2	2.0%	10.0%
Law	2	2.0%	10.0%
Architecture	2	2.0%	10.0%
Medicine	2	2.0%	10.0%
Management and Finance	1	1.0%	5.0%
Information Technology	1	1.0%	5.0%
Informatics	1	1.0%	5.0%
Home Economics and Ecology	1	1.0%	5.0%
Dietetics & Nutritional Science	1	1.0%	5.0%
Academic Writing	1	1.0%	5.0%
Psychology	1	1.0%	5.0%
Physiotherapy	1	1.0%	5.0%

Fashion	1	1.0%	5.0%
Banking	1	1.0%	5.0%
Philology	1	1.0%	5.0%
Chemistry	1	1.0%	5.0%
Physics	1	1.0%	5.0%
Materials Science	1	1.0%	5.0%
Furniture Design	1	1.0%	5.0%
English for University Staff	1	1.0%	5.0%
	102	100.0%	510.0%

Concerning the ESP training they had received in the past, according to their responses to the questionnaire, 58.33% of the participants (n=14) had received some form of ESP training, while 41.66% (n=10) had received no ESP training at all. The participants that had received training in ESP had done so as part of their BA or MA studies (n=5, 20.83%), through a combination of BA/ MA/ PhD studies and seminars, conferences and lectures on ESP (n=5, 20.83%), seminars, conferences and lectures on ESP solely (n=3, 12.5%) or in-service training (n=1, 4.16%).

These are the 24 language educators who participated in Stage 1, the first TAR cycle, who, as aforementioned, all shared the need to receive TE on ESP. However, despite their wish to attend the course, only 17 out of 24 language educators (70.83%) managed to successfully complete the course in Stage 1. The rest did not complete it, due to their heavy workload (n=3, Teachers 6, 7 and 24), poor internet connection (n=1, Teacher 4) and reasons which were not made known to the course facilitator (n=3, Teachers 2, 3 and 21). Dropouts constitute a common trend in online courses according to Willging and Johnson (2009), who referred to studies which roughly estimate that students enrolled in online courses are twice as likely to drop out than on-campus students. Even though their research was small in scale, and thus caution should be taken when generalising its results, the study did give indications why students usually fail to complete online courses. Their study showed that the reasons for dropping out of online programmes were similar to the reasons for dropouts from traditional face-to-face programmes. Nevertheless, there were

some specific reasons, such as technology issues, lack of human interaction, and communication problems which apply mainly in the case of online programmes.

3.8.2 Participants in Stage 2

The participants in Stage 2 of this TAR, were language teachers from the same community of 24 language teachers who participated in the first cycle of this research. More specifically, 14 teachers from the community of 24 language educators registered for the second version of the course, as seen in Table 5. The decrease in the number of the participants in Stage 2 was due to the heavy workload most of the participants had at the time (May 2019); that was the period when most teachers prepared their students for final exams, and the academic year was heading to a closure. Therefore, it was difficult for many teachers to participate in the programme. In addition, personal issues were another reason that prevented them from participating in the second version of the course. Furthermore, the fact that all the participants were given access to the course material was another factor that led these teachers not to participate in the second phase; they knew that they could have access to this material any time they wished, and they preferred to study the material at another time, when they would be more relaxed. Finally, the teachers who faced problems with technology and for this reason did not manage to complete the course in Stage 1, chose not to proceed to Stage 2.

Table 5. The participants in Stage 2

English language instructors N=14	Place of work	Sex	Age	ReTEESP Online completion
Teacher 1	Sudan	Male	40-49	Yes
Teacher 7	United Kingdom	Female	40-49	No
Teacher 8	Cyprus	Female	30-39	Yes
Teacher 10	Greece	Female	NR[1]	Yes
Teacher 11	Greece	Female	40-49	Yes
Teacher 13	Cyprus	Female	30-39	Yes

Teacher 14	Egypt	Male	40-49	Yes	
Teacher 15	Greece	Female	40-49	Yes	
Teacher 17	Greece	Female	40-49	Yes	
Teacher 18	Greece	Female	40-49	Yes	
Teacher 19	Cyprus	Female	30-39	Yes	
Teacher 22	Cyprus	Female	20-29	Yes	
Teacher 23	Greece	Female	40-49	Yes	
Teacher 24	Kosovo	Female	30-39	No	

[1] No response

In Stage 2 of the study the group of participants was comprised of mostly female teachers (85.7%, n=12). The majority of participants worked in Greece (42.8%, n=6), four participants were employed in Cyprus (28.5%), one teacher worked in Sudan (7.14%), another in Egypt (7.14%), while there was also another one from the UK (7.14%), and one from Kosovo (7.14%). More than half of them were of 40-49 years of age (57.1%, n=8), while 28.5% were of 30-39 years of age (n=4), one was of 20-29 years (7.14%), and another participant did not refer to her age. Twelve of these teachers (85.7%) had successfully completed ReTEESP Online in Stage 1; the other two teachers had attended the course but did not manage to complete it.

Out of these 14 English language educators only nine managed to complete the course in Stage 2. These nine participants were the most active during the course and they systematically informed their reflective journals as well. The five participants who did not eventually complete the course claimed that they could not do it because of their busy work schedule; however, two of them (Teachers 17 and 19) argued that they would study the material as soon as they found the time because the topics were interesting.

This section aimed at presenting information concerning the language educators who participated in Stages 1 and 2 of the study. Discussion now turns to the methods that were utilised for the completion of this research.

3.9 Methods

This section discusses the tools that were used for data collection in both Stages of the research, and it also describes the way the data were analysed.

3.9.1   Data Collection Tools

The study employed mainly a qualitative methodology of data collection and analysis. Due to the nature of the study, I came to the conclusion that qualitative data would result in much deeper understanding of the situation rather than quantitative data. According to Miles and Huberman (1994, p. 10), with qualitative data "[t]he possibility for understanding latent, underlying, or nonobvious issues is strong". This is not achieved through quantitative data which place emphasis more on quantifying things rather than explaining them. That was the reason why the study embraced a qualitative approach to eliciting data, despite the fact that some quantitative data were also obtained at the beginning of Stage 1. Figure 5 illustrates the types of data collection tools that were utilised in this TAR and also indicates at which point in the research study the data were obtained.

As shown in Figure 5, a variety of data collection tools were used during the study. This was done for triangulation purposes, as explained in section 3.6 on enhancing validity and reliability (Meijer et al., 2002). According to Oliver-Hoyo and Allen (2006, p.43), each method measures the same construct carrying "a different error type inherent in that method". These errors "average out" when more than one data collection methods are used, and this leads to more valid and accurate results. In this study, triangulation was conceived as a process of blending and amalgamating data collected using different instruments, each which had different foci. In both Stages 1 and 2 similar tools were used to elicit data, except for the participants' questionnaire, which was administered only at the beginning of Stage 1. In the pilot study, which was conducted at the beginning of Stage 1, the same data collection tools as in the actual study were employed.

Stage 1
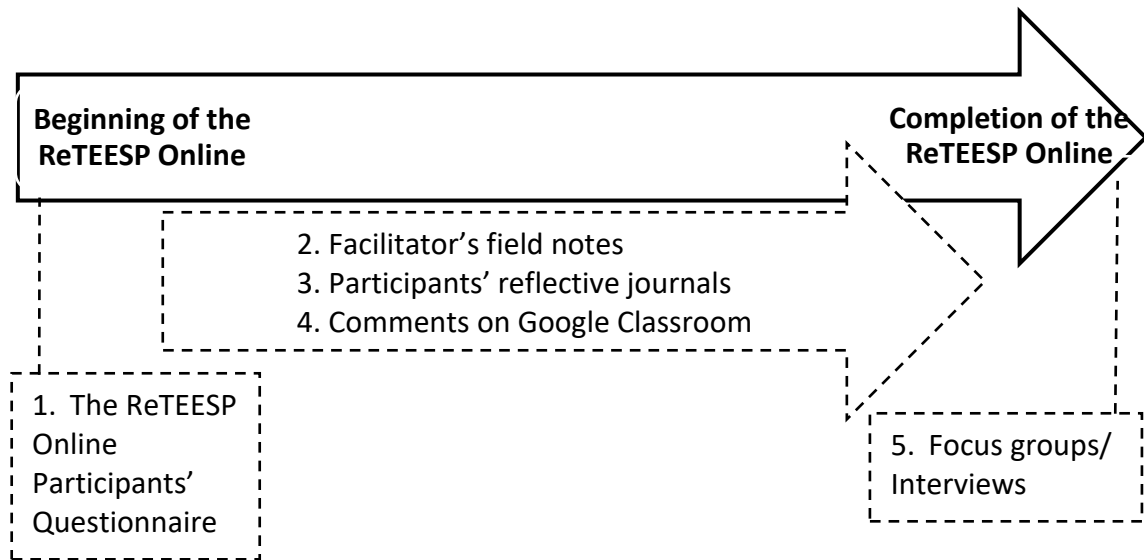
Stage 2
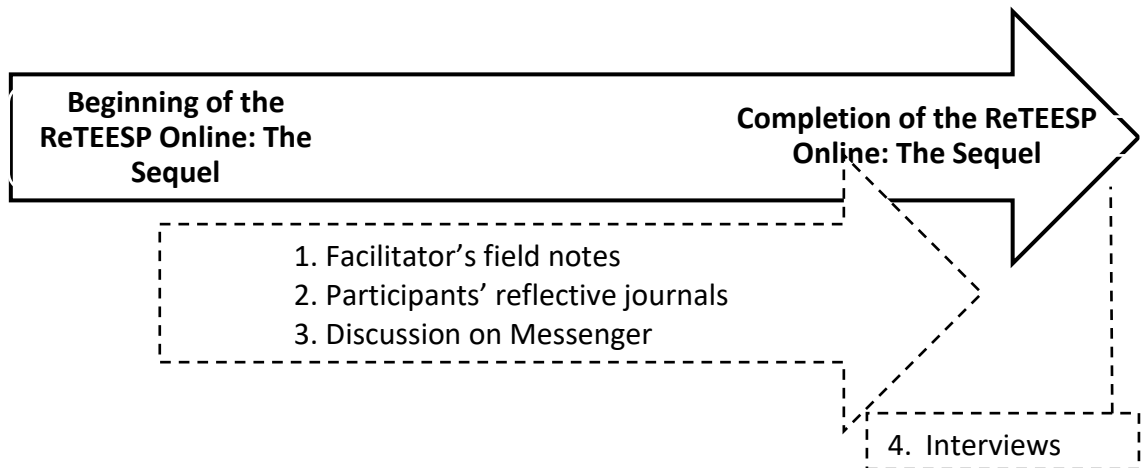
Figure 5. Data Collection Tools

As Figure 5 illustrates, at the beginning of Stage 1, an online questionnaire was administered to the participants in order to obtain information regarding their profiles as language educators, their qualifications, previous teaching experience and their needs in terms of ESP TE. Throughout Stage 1, data was also obtained from the facilitator's field notes, the reflective journals which participants kept, and also the comments that were posted on Google Classroom, the platform that was used for the delivery of the course. Finally, upon completion of the course in Stage 1, the participants had the opportunity to

reflect and express their views on the course through focus groups or interviews. Due to practical constraints, such as lack of free time on behalf of the participants and because of the time difference between countries, in some cases focus groups were used while in others the participants' views were elicited via interviews.

In Stage 2, similar data collection tools were used. Again, data were elicited from the facilitator's field notes, the participants' reflective journals and discussions in a closed Messenger group that was introduced in this second phase of the study. These tools were used from the beginning of the revised version of the course to the completion of the course. Finally, as soon as the course was completed, the participants expressed their views and reflected on the course through interviews. Due to practical difficulties as in Stage 1, the opinion of participants on the course was obtained only through interviews in this stage.

The following sections describe the data collection tools that were employed to elicit data in both stages of the research.

3.9.1.1   The ReTEESP Online Participants' Questionnaire

In Stage 1, at the beginning of the course, an online questionnaire was administered to the participants, which served as a tool for sketching the participant's profiles and analysing their needs in terms of ESP TE. The questionnaire was created based on previous research in the field of ESP TE and language TE in general (Chostelidou et al. 2009; Crocker, 1981; Dudley-Evans & St John, 1998; Harmer, 2001; Thaine, 2010; Ur, 1996).

The questionnaire aimed at eliciting data regarding the following: a) the participants' qualifications and the ESP TE they received in the past, b) their ELT and ESP teaching experience, c) the courses that they taught as ESP practitioners, d) their duties as ESP practitioners, e) aspects of their ESP teaching practices the participants wished to improve, f) the reasons why they wished to attend the course, and g) participants' competence in using technology and their familiarity with the different tools that would be used during the course. By obtaining this information, I would have a clear picture of the profiles of the participants in the study, their practices, their characteristics, their needs and expectations. All these would facilitate the course design process, and would inform

me (the researcher/ course facilitator) about different aspects that I would have to pay attention to during the implementation of the course.

The questionnaire consisted of 19 items in the form of closed-ended questions (Multiple response and Likert Scale) and open-ended questions. Therefore, it yielded both quantitative and qualitative data. The questionnaire was divided into four sections which focused on eliciting data related to the issues mentioned above. The four sections were the following:

Section A - ESP Training

Section B - Teaching Experience

Section C - ESP Teacher Education needs

Section D - Personal details

The questionnaire was administered to the participants electronically using Google Forms, as soon as they were given access to the Google Classroom platform. The questionnaire was pilot-tested by six ESP HE participants during the pilot implementation of the ReTEESP Online, and the appropriate changes were made before its actual administration. The ReTEESP Online participants' questionnaire can be found in Appendix B.

The following section describes another data collection tool, the facilitator's field notes.

3.9.1.2 Facilitator's Field Notes

Another tool that was used for the collection of data, was the facilitator's field notes which I kept throughout the two Stages of this TAR.

According to Phillippi and Lauderdale (2018), detailed qualitative field notes are essential in rigorous qualitative research. The two researchers suggest that field notes may serve the following functions in qualitative research in general (Phillippi & Lauderdale, 2018, p. 382):

- Prompt researcher(s) to closely observe environment and interactions
- Supplement language-focused data
- Document sights, smells, sounds of physical environment, and researcher impressions shortly after they occur

- Encourage researcher reflection and identification of bias
- Facilitate preliminary coding and iterative study design
- Increase rigor and trustworthiness
- Provide essential context to inform data analysis

My field notes in this research study were regarded as essential due to the nature of the research. Since TAR is about improvement initiated through an intervention designed and facilitated by the researcher, who acts as a supervisory figure, it was important that all my actions and thoughts were recorded. My field notes were kept in the form of a text, they were organised chronologically and saved electronically. The document was rather a journal (of 43 pages in Stage 1 and 28 pages in Stage 2) in which I noted the processes followed during the design and the implementation of the course in both stages of the study including the pilot phase, the behaviour and reactions of the participants in the study, my thoughts and reflections on different aspects of the course, the elements of the course that worked out well and other aspects of the course that needed to change. My field notes served as a very thorough and detailed record of all the processes followed during the course, and this helped the transition from one stage to the other, and the drawing of the final conclusions.

Some extracts from the facilitator's field notes can be found in Appendix B. In order to secure the anonymity of the participants, parts of these extracts which identified the participants have been removed.

3.9.1.3 Participants' reflective journals

Apart from the facilitator's field notes, which were kept throughout the study, the participants were asked to compile reflective journals. The purpose was to provide the participants with the opportunity to reflect on the processes they were involved in during the course, on what they learnt during the course and how they felt about the course.

Nunan (1992, p. 118) supported that such journals or diaries are "important introspective tools in language research", and based on Porter, Goldstein, Leatherman, and Conrad (1990), he identified many benefits that come from using diaries or journals in TE and in research. According to Nunan (1992), first of all, students can talk about problems they face related to the course content. Secondly, diaries promote autonomous learning, and they also initiate productive class discussion. Furthermore, participants are encouraged to

make connections between what they experience in the course and their teaching context. Reflective journals also promote interaction between the teachers participating in the study and the course facilitator.

The files on which the participants would write their reflective journals were created by me at the beginning of the course in Stage 1 using Google docs, and they were stored in folders in Google Drive which were shared only between each participant and myself. This was done so that the participants would feel more comfortable to express their thoughts on the course and on the collaboration they had with each other. After each session, I added some questions or points that participants could consider while compiling their reflections. These points to consider related to the processes that were involved in a specific session, things that the participants found interesting, things that they found challenging, elements from the course that they could integrate in their ESP classes, things that could have been done differently and finally any other comment they wished to make regarding the course. These points were inspired by Wallace (1991) and Richards and Lockhart (1996). A total of four reflective journal entries were written by each teacher in Stage 1 (one for Sessions 1 and 2, one for Session 3, one for Session 4 and one for Session 5) and four entries in Stage 2 (one for each Webinar). Table 6 shows the volume of data gathered by the participants' reflective journals in both Stages 1 and 2.

Table 6. Volume of data gathered by reflective journals in Stages 1 and 2

STAGE 1			STAGE 2	
Participants N=24	**Reflective Journal** (4 entries in total)	**Length** (in pages)	**Reflective Journal** (4 entries in total)	**Length** (in pages)
Teacher 1	3 entries	2 pp	-	-
Teacher 2	-	-	NP*	
Teacher 3	-	-	NP	
Teacher 4	-	-	NP	
Teacher 5	2 entries	4 pp	NP	
Teacher 6	3 entries	4 pp	NP	
Teacher 7	-	-	-	-

Teacher 8	3 entries	3 pp	4 entries	5 pp
Teacher 9	4 entries	8 pp	NP	
Teacher 10	4 entries	6 pp	4 entries	7 pp
Teacher 11	4 entries	5 pp	-	-
Teacher 12	4 entries	9 pp	NP	
Teacher 13	4 entries	3 pp	4 entries	3 pp
Teacher 14	4 entries	4 pp	2 entries	3 pp
Teacher 15	4 entries	4 pp	4 entries	4 pp
Teacher 16	4 entries	3.5 pp	NP	
Teacher 17	4 entries	3.5 pp	-	-
Teacher 18	4 entries	7 pp	4 entries	5 pp
Teacher 19	4 entries	5 pp	-	-
Teacher 20	-	-	NP	
Teacher 21	-	-	NP	
Teacher 22	4 entries	4 pp	4 entries	4 pp
Teacher 23	3 entries	3 pp	3 entries	3 pp
Teacher 24	-	-	-	-

*NP = Did not participate

At the beginning of Stage 1, the teachers were informed about the purpose of the reflective journal via email and also through the course platform, and they were also informed about the importance of reflection in PD. This was done through the first Webinar that the participants attended, it was also explicitly stated on the Google Classroom platform and explained on the first page of the reflective journal. More specifically, I informed the participants that reflection is the process that provides insight to 'knowledge-in-action' and thus facilitates self-development and improvement. This reflection on practice implied that teachers should observe, summarise and contemplate on their learning (and teaching of course) in order to understand the benefits gained from this experience and also locate the problems that might potentially arise so that they are able to address them later on. This was a practice that could be integrated in their teaching process.

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An extract from a participants' reflective journal can be found in Appendix B.

3.9.1.4 Comments on Google Classroom

Another tool that was used for collecting data was also the 'Comment' feature under the posts in the class that was created for the course in Google Classroom. Comments made by the participants in Google Classroom were considered as essential. They enclosed useful information regarding the participants' background and beliefs, and they yielded important implications concerning the course and how it should be like. For example, in their introductory comments the participants introduced themselves to the class, talked about their qualifications, their teaching experiences, their teaching contexts and the reasons why they decided to join the group and to attend the course. For this reason, I decided to include these comments in the analysis along with the data obtained from the online questionnaire.

Some of these comments that the participants made in Google Classroom can be found in Appendix B. However, much of the information that appears in the comments has been omitted to avoid revealing the identity of the participants.

3.9.1.5 Discussions on Messenger

From the beginning of the course, a closed Facebook group was created for the participants and me. This also gave everyone the opportunity to communicate with each other using Messenger. Communication through Messenger was often done on a private basis, especially when this concerned technical problems that the participants faced with the course. In Stage 2 I created a Messenger group in which she added all of the participants in the study. This group was named "ReTEESP Online: The Sequel Chat Room", and its purpose was to encourage more interaction among the participants, enacting discussions, solving problems that might arise during the course, and sharing relevant announcements.

While the course was taking place, the information that was shared in this private group was regarded as important for the development of the study and the refinement of the course in the future. According to Dede, Ketelhut, Whitehouse, Breit, and McCloskey (2009), qualitative research on TE should make use of the data streams collected in technology-mediated interactions, so that a record of the interaction, collaboration and

communication between all of the participants in the course can be created. This plays a major role in understanding how the participants and the facilitator behaved during the programme and to discover the reasons behind their behaviour.

Based on all the above, I decided to include the conversation stream on Messenger in the data. A small part of this conversation stream is included in Appendix B.

3.9.1.6 *Focus Groups/ Interviews*

After the completion of the course, in both Stages 1 and 2, the participants were asked to take part in focus groups, the purpose of which was basically to reflect on their experience in participating in the course and to share their views on the course suggesting improvements. In many cases it was not possible for the participants to find a common date and time during which they would be available to participate in focus groups. Therefore, in some cases participants were interviewed instead of taking part in the focus groups. Participation in these focus groups or interviews was voluntary.

According to Babbie (2013, p. 349) a focus group is "[a] group of subjects interviewed together, prompting discussion". This method of gathering data has many benefits; real life data is recorded in a social environment, there is flexibility and high face validity, the results are quick, and the cost is minimal. Similarly, interviews have been characterised as "verbal questionnaires" (Fraenkel, Wallen, & Hyun, 2012). Even though, as Babbie (2013) claims, interviews may lack the dynamics which are created in focus groups, they are easier to control. Both of these instruments are used extensively in qualitative research.

The focus groups and the interviews which took place after the completion of Stage 1 were conducted via Skype and a screen recorder software was used to record them, after participants' permission was obtained. They were all semi-structured; in other words, I had prepared some points/ questions in order to enact discussion. These points formed "a general plan of inquiry" (Babbie, 2013, p.346). These questions/ points revolved around the RQs that were posed from the beginning of the study. Nevertheless, in most cases the discussion expanded revealing many other interesting points.

A total of four focus groups and eight interviews were conducted in Stage 1 of the study, and a total of 17 participants took part in them, in other words all of the teachers who managed to complete the course. Four out of eight interviewees sent their responses to

via email due to practical constraints (lack of time and poor internet connection). A total of 425 minutes (seven hours and eight minutes) of conversation were recorded. The recordings were made using an audio recording device, after I obtained the permission of the teachers. The questions that were prepared for the focus groups and interviews in Stage 1 can be found in Appendix B. The questions were not always posed using this wording or in this order. They rather served as points that the facilitator wished to be covered in the discussion.

In Stage 2, after the completion of the programme, data were collected via interviews, which were conducted using Zoom, the tool that was used for the delivery of Webinars in this stage. A total of eight teachers participated in the interviews in this stage of the study. Two of the teachers that were interviewed preferred to send their responses in writing via email, saying again that it was difficult for them to connect online, mainly because they lacked free time. A total of 183 minutes (three hours and five minutes) were recorded using an audio recording device again as well as Zoom's integrated recording feature. The interviews were again semi-structured, in the sense that a set of questions/ points that I wished to be covered was prepared beforehand; these questions/ points were related to the RQs of the study. However, as in Stage 1, during the interviews the discussion broadened thus covering other aspects as well. The questions that were prepared for the focus groups/ interviews in Stages 1 and 2 of the study can be found in Appendix B.

This section described the different instruments that were used in the two stages of the study to collect data. Next follows a description of the methods for the analysis of the data obtained.

3.9.2   Data Analysis

As mentioned in the previous section, the data obtained from this study were mainly qualitative. Only the questionnaire administered at the beginning of Stage 1 yielded some quantitative data. These quantitative data were analysed using IBM's SPSS 22 software, and descriptive statistics were used to talk about the results which were presented in tables and figures.

As far as the qualitative data is concerned, the focus group and interview recordings were transcribed using Microsoft Office Word. All the documents containing the qualitative

data obtained by all the instruments listed in the previous section were uploaded on NVivo 12 software for qualitative data analysis, and thematic analysis was conducted. The steps involved in the thematic analysis were the following: first of all, anticipated themes were created that were based on the research questions of the study followed by careful reading of the data and coding of parts of the data varying in size, e.g., words, phrases, sentences or paragraphs. The coding of data led to the identification of other themes and subthemes. The anticipated themes as well as the themes that emerged from the data were organised and re-organised many times, in order to find and cross out any overlapping or similar themes. When the code/ theme framework that was created reached its final form, each theme was allocated its own colour. For each theme and subtheme notes were kept using memos created on NVivo, which proved to be helpful in the data interpretation process. . The same procedure was followed in all the phases of the research, Stage 1 (pilot and actual study) and Stage 2.

In Stage 1 of the study three major themes emerged from the thematic analysis conducted, each of which included a number of subthemes. A total of 68 themes evolved from the data, which were represented using different colours. Data analysis in this stage informed the changes that occurred in Stage 2. More specifically, all the positive aspects of the course were identified and effort was made in Stage 2 to follow similar practices that would lead to positive results again. Furthermore, a series of challenges that were encountered during this stage as well as suggestions for improvement of the course were taken into consideration when designing the next phase of the study, and effort was made to provide a better course that would meet the needs of the participants to a greater extent.

In Stage 2, two main themes emerged from the data, each consisting of various subthemes. A total of 27 themes evolved from the data in this stage. As in Stage 1, different colours were used to represent the themes.

In order to secure validity and enhance credibility, the coding process was repeated by an external researcher. Cohen's kappa test (1960) was run to determine inter-rater reliability, and the results showed that there was substantial agreement between the two coders in both stages: k = 0.67 in Stage 1 and k = 0.62 in Stage 2, according to Landis and Koch's, (1977, p. 165) agreement measures.

This chapter described the research methodology utilised in this TAR, providing information on the participants in the study as well as the methods that were used. The next chapter will present Stage 1 of the study, the first TAR cycle.

CHAPTER 4.   IMPLEMENTATION: STAGE 1 – THE FIRST TECHNICAL ACTION RESEARCH CYCLE

4.1   Stage 1 Overview

This chapter explains in detail all the procedures and steps followed in Stage 1 of this TAR study as they are presented in Figure 6. Following the structure of the first cycle, the chapter discusses the following: the identification of the problem, the design of the ReTEESP Online, its implementation and observation and reflection on the implementation of the programme.
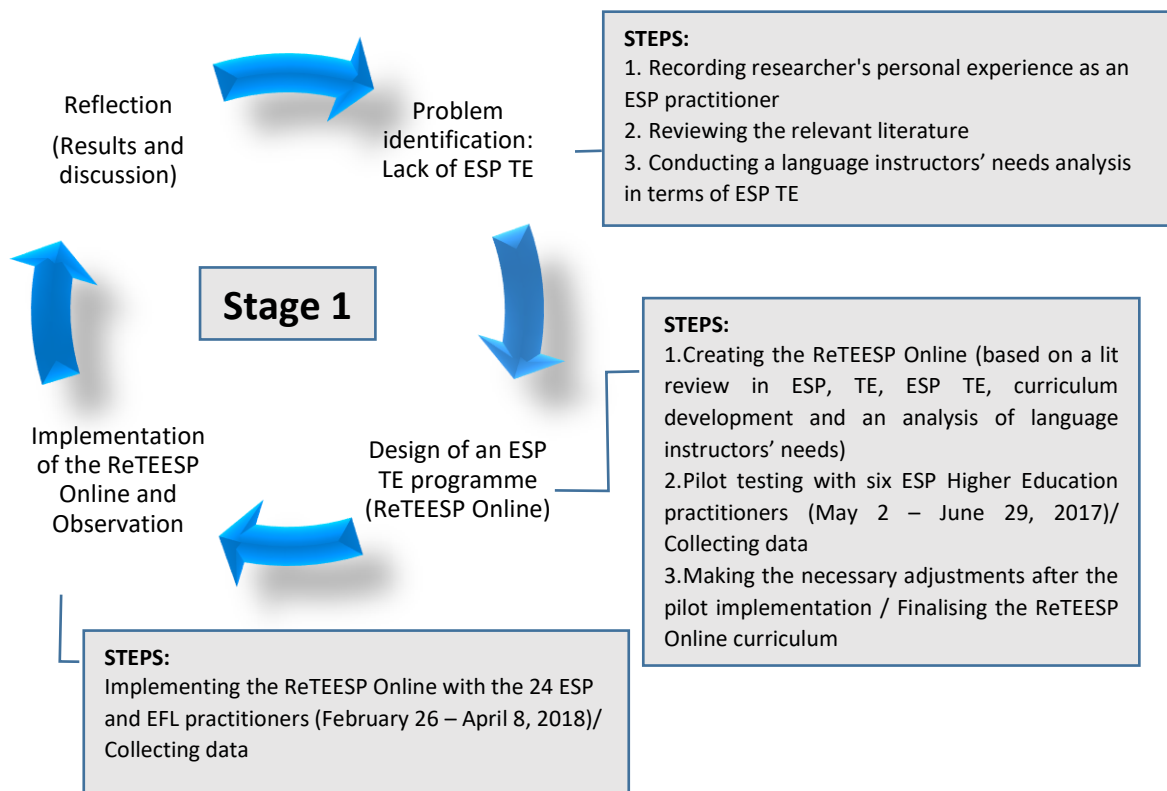
Figure 6. Stage 1 - The first TAR cycle

The chapter commences with the first step of the first TAR cycle, the identification of an existing problem, that is the lack of sufficient ESP TE.

4.2 Problem identification

The problem identified concerned the perception that ESP TE opportunities were scanty and insufficient, which resulted in ESP practitioners facing challenges in teaching ESP. The problem was not solely faced by this group of 24 language instructors, but it was rather a general issue in the ESP field confronted by the wider community of ESP practitioners. This was identified, first of all, through anecdotal evidence based on my personal experience as an ESP practitioner in HE, and secondly, through a review of the literature in ESP TE.

As far as my personal experience is concerned, after five years of teaching GE, in 2007 I was employed in HE in Cyprus to teach EAP and ESAP courses to students of different disciplines. Coming from a background with BA studies in English Language and Literature and MA studies in Applied Linguistics, I had received limited education in ESP; this was common amongst the vast majority of my colleagues in Cyprus. Teaching ESP for different disciplines meant many hours of research and studying to prepare for the multiple duties of the ESP practitioner, often with no ESP materials available. Fortunately, the LC director, who was in charge of the curricula for languages and the training of the language instructors, offered us the support that we needed to cope with our duties, especially at the beginning of our careers as ESP practitioners. Generally, however, the opportunities for PD in the field were limited, with very few ESP Conferences being organised, and limited ESP TE events that were not sufficient or systematic. My interaction with colleagues with similar teaching positions abroad led to the realisation that the same challenges were faced by other colleagues in other parts of the world.

Apart from my personal experience, the lack of ESP TE is a gap acknowledged by many researchers in the field, as this is revealed in the review of the literature in ESP TE in section 2.3.6. ESP practitioners are GE teachers who receive no specialised knowledge on teaching ESP and are requested to teach ESP at some point in their careers facing numerous challenges. The ESP practitioners who do receive some form of education in teaching ESP, usually experience this only once through an MA degree or through a course as part of a related MA degree. Generally, there is lack of efficient and systematic ESP TE, a fact recognised in the literature worldwide.

The 24 language instructors that participated in the research faced the same challenges as the majority of their colleagues around the world. The needs analysis conducted at the beginning revealed that, even though some of them had received pre-service or in-service ESP TE in the past, and even though some of them were experienced ESP practitioners, they all wished to receive more education on issues related to ESP teaching and update themselves on the latest developments in ESP. The lack of sufficient, practical, flexible, on-going ESP TE that would engage ESP practitioners in continuous PD addressing their needs in their own educational contexts was the problem identified amongst this group of language instructors participating in the research.

The section which follows elaborates on the design of an intervention, the ReTEESP Online, as a solution to the problem of lack of sufficient ESP TE amongst this group of language instructors.

4.3 The design of the ReTEESP Online

As a solution to the lack of sufficient ESP TE the group of the 24 language instructors faced, this study proposes an intervention in the form of an online ESP TE programme, named ReTEESP Online, the name of which stands for Online Reflective Teacher Education course in English for Specific Purposes. The course was online first of all, because the participants were scattered in different parts of the world. I believed that receiving ESP TE as part of an international group and having the opportunity to exchange views on practices with colleagues from other educational backgrounds would be more beneficial for the participants than being limited to local context. However, another reason that led to the design of a course that would be offered online was "the need for PD that is tailored to teachers' busy schedules, that draws on valuable resources not available locally, and that provides work-embedded support" (Dede, 2006). Quality PD needs to be custom-made, catering for specific needs of professionals. The design of the course was based on the following:

1. A literature review in the fields of ESP and ESP TE, including learning theories and TE models and principles of efficient online TE;
2. The needs of the language instructors participating in the research in terms of ESP TE;
3. Recent developments in the field of curriculum design;

4. The pilot implementation of the course.

The ReTEESP Online curriculum was designed following a backward approach, as this was described by Wiggins and McTighe (2005). According to Richards (2013), three curriculum design approaches developed through the years: The forward design, the central design and the backward design to curriculum development. Richards (2013, p. 5) stated that "[f]orward design starts with syllabus planning, moves to methodology, and is followed by assessment of learning outcomes". This kind of design focuses on syllabus content and sequencing. Central design on the other hand, addresses issues of syllabus planning while the curriculum is being implemented. In other words, it begins with the selection of teaching activities, techniques and methods rather than syllabus design or learning outcomes. The most prominent approach to curriculum development in recent years is the backward design or 'understanding by design' framework initiated by Wiggins and McTighe (2005), according to which, course designers should first decide on the desired results and then specify the content and methods of the curriculum; in other words, the curriculum design process starts with setting the learning outcomes. The learning outcomes or the desired results should be decided after an analysis of the learners' needs, and the content, materials and assessment procedures will be determined by the learning outcomes and expected student performance which need to be set beforehand. The researchers support that this kind of design provides learners with a better understanding of the learning outcomes and performance goals, and makes them more aware of whether these goals have been achieved or not, and also how they can be better achieved.

Wiggins and McTighe (2005, p. 22) identified three stages in the curriculum development process and they came up with the following template/ framework to use in the design of units:

1. Identifying desired results: This stage involves designers setting established goals and considering what they want students/ trainees to understand and frame those understandings in terms of questions. Finally, designers are requested to consider how these understandings fit the larger context of the curriculum.

2. Determining acceptable evidence: This stage involves designers considering a variety of assessment methods that constitute evidence for students'/ trainees' understandings. When they refer to evidence of desired results, they mean evidence gathered through

formal and informal assessment during the course which could include quizzes and tests, performance tasks, projects, observations and dialogues and students'/ trainees' self-assessment.

3. Planning learning experiences and instruction: The final stage involves planning learning experiences and activities. At this stage of the curriculum design process the designer needs to bear in mind the 'WHERETO' elements, and code each entry with the appropriate initials of these statements:

W = Help the students know **W**here the unit is going and **W**hat is expected. Help the teacher know **W**here the students are coming from (prior knowledge, interests).

H = **H**ook all students and **H**old their interest.

E = **E**quip students, help them **E**xperience the key ideas and **E**xplore the issues.

R = Provide opportunities to **R**ethink and **R**evise their understandings and work.

E = Allow students to **E**valuate their work and its implications.

T = Be **T**ailored (personalised) to the different needs, interests, and abilities of learners.

O = Be **O**rganised to maximise initial and sustained engagement as well as effective learning. (Wiggins & McTighe, 2005, p. 22)

The ReTEESP Online was designed following the three stages of the backward design, as described above. In other words, first of all, drawing on the results of the literature review (Chapter 2) and based on the analysis of the language instructors' needs (section 4.3.2), the learning outcomes or desired results were identified. Then, acceptable evidence for learning was determined, and finally, learning experiences were planned having in mind the WHERETO statements.

The ReTEESP Online curriculum is presented in Appendix C. The Appendix presents the ReTEESP Online curriculum, as it was finalised in Stage 1 of the study, and also the sequel course that followed in Stage 2, the ReTEESP Online: The Sequel. In both stages the curriculum is described through i) a general course outline at the beginning and ii) through a detailed description of each of the Units described based on Wiggins and McTighe's (2005, p.22) template for backward design. More specifically, Appendix C includes the following:

Stage 1: The ReTEESP Online curriculum

General Course Outline and description of Sessions 1-6

Stage 2: The ReTEESP Online: The Sequel curriculum

General Course Outline and description of Sessions/ Webinars 1-4

The sections that follow (4.3.1 – 4.3.4) describe all the processes which led to the design of the ReTEESP Online in Stage 1.

4.3.1 Review of the literature

The foundations for the ReTEESP Online were laid through a review of the literature, presented in Chapter 2. The literature review concentrated on 1) ESP and the latest developments in the field, and 2) ESP TE first through analysing theories of learning and elaborating on TE models that stem from these learning theories, online TE and also through focusing on literature pertaining to ESP TE. The literature review led to the extraction of some general principles on which ESP TE could be based nowadays. These principles are presented in section 2.4, and they constitute the basis of the ReTEESP Online.

4.3.2 Needs analysis

An analysis of the needs of the language instructors in terms of ESP TE was conducted before the course commenced, in order to identify aspects of their ESP practices that needed improvement and also to determine their Information Technology literacy, in order to provide them with the appropriate help in handling the technologies used during the course. The needs analysis was conducted through the administration of an online questionnaire and through the participants' comments on Google Classroom, the platform used for the delivery of the course. Details regarding these data collection tools are provided in section 3.9.1.

The results of the data analysis revealed the following:

Firstly, as seen in the participants' section (section 3.8), 10 out of 24 participants had not received any ESP training at all, while the rest had done so as part of their studies, seminars, conferences and lectures or in-service training. Furthermore, 14 participants were new in the ESP field, with seven of them having no experience in teaching ESP. Consequently, the language educators participating in the research would need to receive

knowledge on basic ESP principles, including an understanding of what ESP involves and what the role of the ESP practitioner is, before moving on to the latest trends in the field.

Participants were also requested to state the reason for which they decided to attend an ESP TE course. Their responses to the questionnaire are summarised in Table 7.

Table 7. Reasons for attending an ESP TE course

Reasons	N	Percent	Percent of Cases
Improvement of teaching methodology	22	22.7%	91.7%
Professional development	21	21.6%	87.5%
Improvement of syllabus design skills	16	16.5%	66.7%
Sharing ideas with other ESP educators	14	14.4%	58.3%
Networking	13	13.4%	54.2%
Self-esteem increase	6	6.2%	25.0%
Employer satisfaction	2	2.1%	8.3%
Promotion	2	2.1%	8.3%
Salary increase	1	1.0%	4.2%
	97	100.0%	404.2%

Participants' responses were obtained through a multiple-choice question with multiple answers. The fourth column, which presents the percentage of cases, refers to the numbers of ticks each reason got by the participants in the study, in other words, how many times this response was selected by the participants. As the table illustrates, language instructors wished to attend an ESP TE course mainly to improve their teaching methodology, develop professionally, improve their syllabus design skills and share ideas with colleagues in the field. In their comments on the Google Classroom platform, participants stated that they wished to become members of a network of ESP practitioners that would provide them with the opportunity to exchange ideas on issues pertaining to ESP (n=8, 33.33%), and that they also wished to upgrade their knowledge on ESP (n=7, 29.16%). Other reasons mentioned were PD (n=1, 4.16%), my acquaintance with one of the

participants and her appreciation towards the institution I worked for (the CUT LC) and the training programmes they provided (n=1, 4.16%), and also the fact that the course appeared different and more interesting than other courses (n=1, 4.16%).

This need expressed by the participants to receive education on ESP teaching methodology was in agreement with Basturkmen's (2012), Watson Todd's (2003) and Wu and Badger's (2009) view that ESP teaching methodology was a parameter neglected by research and ESP TE. In addition, the emphasis on the importance of networking and sharing ideas with colleagues showed that the participants appreciated collaboration and embraced new ideas for PD based on interaction.

As far as the knowledge they wished to gain during the course is concerned, the language instructors stated that they wanted to learn about issues of ESP teaching methodology including the integration of new technologies (n=8, 33.33%), the latest developments in ESP (n=5, 20.83%), and how to improve as ESP professionals (n=3, 12.5%). They also wanted to learn about ESP course planning and syllabus design (n=3, 12.5%), assessment methods (n=1, 4.16%), new ESP material (n=1, 4.16%), and resources for continuous PD (n=1, 4.16%). Four participants (16%) also repeated that they wished to participate in a professional network dealing with ESP issues, where they could learn from each other's experiences. These findings are very similar to the findings of Bocanegra-Valle and Basturkmen (2019). This proves that the needs of ESP practitioners are similar in different areas of the world.

The participants were also requested to provide information on their Information Technology literacy, as the course would be offered online, since the participants resided in different countries. Initially, the participants were asked to rate themselves in terms of using technologies in their teaching. Their responses are illustrated in Figure 7.
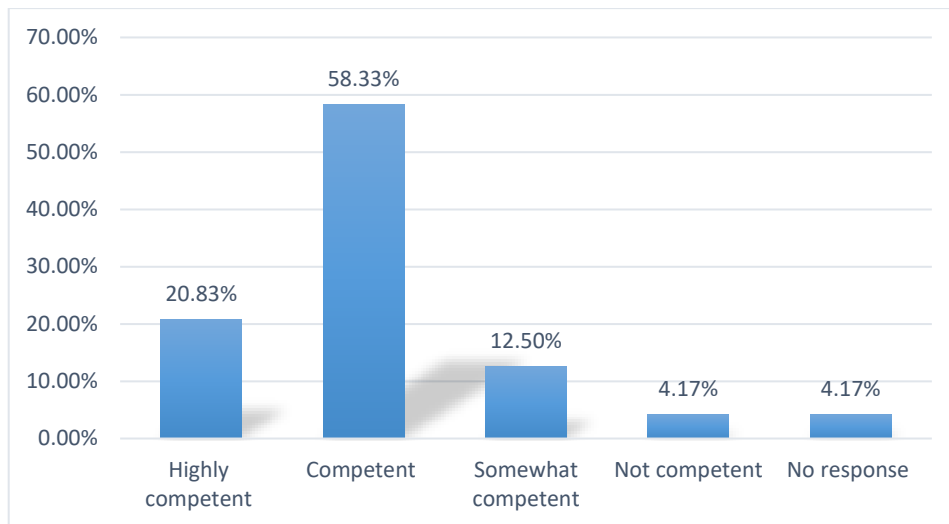
Figure 7. Participants' competency in using technologies in their teaching

According to Figure 7, the majority of the participants appeared to be competent in using technology in their teaching practices, as 20.83% of them stated that they were highly competent (n=5) and 58.33% (n=14) of them competent, and only one of them said that he/she was not competent at all.

Moreover, the participants were asked to state whether they had attended an online course in the past and also whether they were familiar with the different technology tools that would be used for the delivery of the ReTEESP Online (Figure 8). As explained in the sections that follow, the G Suite for Education, Skype and Facebook were regarded as the best set of tools for the delivery of the course. Therefore, information on whether the participants knew how to use these tools would help the researcher decide how much support the participants would need.

As illustrated in Figure 8.25% of the participants (n=6) had no experience of attending an online course. Furthermore, even though 17 of them (70.83%) were extremely familiar with the use of Gmail, some participants had not been acquainted with Google Drive or Google Classroom in the past. Regarding Skype and Facebook, the majority of the participants were extremely and moderately familiar with the tools, possibly because they used them in their personal lives; a similar finding was noted by Petrov (2019). These results indicated that the participants would need guidance regarding the use of the G Suite for Education tools, such as Google Classroom and the Google Drive, through the course.
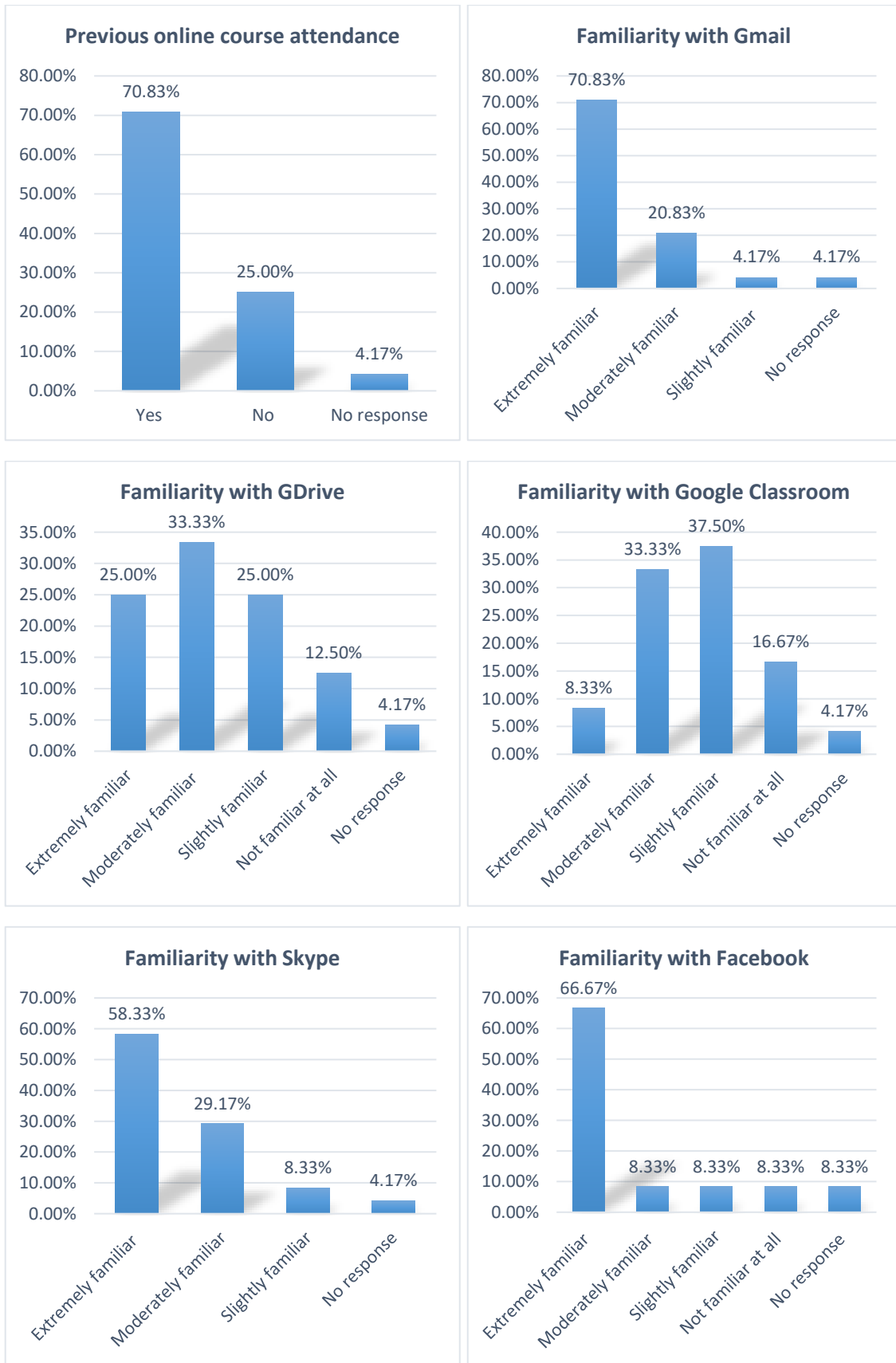
Figure 8. Participants' familiarity with technologies used in the ReTEESP Online

The issue of guidance is often discussed in online instruction literature, where research suggests that, because of the fact that the facilitator and the learners/ trainees are separate, the latter should be provided with the appropriate support that would enable them to benefit from the instruction process to the maximum (Ally, 2008). Support could be provided through short guiding videos, documents with instructions and detailed instructions sent via email or uploaded on Google Classroom before the beginning of the course, and regular communication with the instructor and colleagues during the course.

This section discussed the needs analysis process that occurred before the course in order to determine participants' expectations, wishes and needs in terms of ESP TE and in terms of their ability to use the technology tools that would be used for the delivery of the course. This process along with the literature review would determine the nature of the intervention. The section which follows focuses on the pilot testing of the course.

4.3.3 The ReTEESP Online pilot testing

This section describes the pilot testing of the ReTEESP Online. Parts of this pilot study have been published in Papadima-Sophocleous, Kakoulli Constantinou and Giannikas' (2019) edited volume *ESP teaching and teacher education: current theories and practices* (Kakoulli Constantinou, Papadima-Sophocleous & Souleles, 2019). The purpose of the pilot study was basically to trial the programme before its actual implementation in order for the researcher to identify any flaws or practical and functional weaknesses related to different aspects of the course, such as the tools that would be used for the delivery of the course, the course content, duration, deadlines set, etc. and also to trial the data collection tools. The pilot implementation was considered necessary, especially since the course would be offered online, following Vaccarino et al. (2007, pp. 14-27), who describe the pilot stage of an action research study in the context of The Wanganui Adult Literacy and Employment project.

The sections which follow give a brief description of the pilot version of the course, describe the participants and the data collection tools and also talk about the results of the pilot study.

4.3.3.1 The ReTEESP Online pilot version

The pilot version of the ReTEESP Online was designed in accordance with the general principles on which ESP TE could be based, as these were formed after an extensive literature review (section 2.4) and an analysis of the participating teachers' needs. A backward design model for curriculum development was followed (Wiggins & McTighe, 2005); firstly, the learning outcomes or the desired results of the course were set and then acceptable evidence and learning experiences and instruction were determined.

In its pilot version, the name of the course was slightly different: it was called ReTTESP Online, which stood for Reflective Teacher Training course in ESP instead of ReTEESP Online, where the word "training" was substituted by the term "education". This was decided, as it was believed that the term "education" denoted deeper engagement with knowledge and reflection, as seen in the literature review section, which described better the purposes of the course. It was designed to be a three-week (minimum five hours per week) course intended for ESP educators representing different ESP fields who would like to receive training on ESP teaching methodology or would like to update their knowledge on the latest developments in ESP teaching practices. The duration of the course was decided based on recent needs analysis studies, in which the majority of the participants expressed their preference towards short courses (Chostelidou, Griva & Tsakiridou, 2009; Kakoulli Constantinou & Papadima-Sophocleous, in press). Nevertheless, the course was designed to promote lifelong learning in the following ways: a) the Facebook group was kept active after the completion of the pilot course and the new participants were added in the same group; b) during the course, the participants were informed about different ESP professional organisations they could become members of and other online communities they could join in order to continue their PD. Based on the latest theories of learning, the course adopted a social constructivist perspective taking into account the social and educational context in which the ESP practitioners operated and being based on constant exchange of ideas and collaboration; it also embraced principles of connectivism promoting networking among the participants, and "a practising what you preach" approach (Wallace, 1991), since the methods of instruction could be used by the teachers in their own classrooms.

The course developed in three weeks; each week was dedicated to a different topic, and it was built on the previous one. It was delivered through interactive online lectures,

online discussions, independent reading/ writing/ listening tasks, independent research, individual and collaborative online work. The practices/ delivery techniques were determined by the theoretical foundations on which the course was built, and they were also suggested in the ESP TE literature, which was reviewed in section 2.3.6. The tools that were used for the delivery of the course were the G Suite for Education (Google sites, Google Classroom, Ggoogle Drive, Google docs, Google Slides), Skype, Facebook groups, Facebook Messenger, YouTube, MindMeister, email and Doodle. The purpose behind the delivery mode and the use of these technologies is explained in section 4.3.4, which is dedicated to the final form of the course curriculum. For every unit the learning outcomes were made known to the participants (posted on the platform), so that they understood the purpose behind the unit and see the relation to their needs, as these were noted through the administration of the online questionnaire before the course. As far as assessment was concerned, this was formative and ongoing, as the principles of appropriate online instruction denote (Henry & Meadows, 2008; Maggioli, 2012), and it was mostly based on constructive feedback.

Following is a brief description of what was covered in this pilot version of the course in weeks and units within each week, along with the reasons behind the selection of topics and tasks:

Week 1: Setting the Scene

Unit 1: Introduction to ReTTESP Online

This unit aimed at familiarising the participants with the online environment, the technologies and each other's backgrounds, experiences and professional environments. In this first Unit the participants were invited to participate in a 30-minute Webinar during which the facilitator would guide them through the course outline and the tools used for the course delivery. The participants received an email before the Webinar with extensive information on now to access the platform and how to join the Webinar on Skype in order to be properly prepared. They would also read the facilitator's personal story as an ESP practitioner and share their own stories on Google Classroom. Getting to know each other and the instructor from the beginning was regarded as significant, since among the objectives of the course was to form a network which would allow them to collaborate and discuss different issues pertaining to their profession. Moreover, another objective was for the participants to understand that I (the facilitator) was "one of them" in the sense

that I had a similar story to share. During this unit teachers were asked to start a reflective journal in which they would note their thoughts on each unit. The benefits from this practice, as described in section 2.3.4, were regarded as essential for the development of the participants. Reflection was also listed as one of the tasks proposed by the BALEAP TEAP Scheme (BALEAP, 2014) in relation to EAP practitioners' PD described in section 2.3.2.

Unit 2: Theories of Learning and the Philosophy Behind the Course

This unit aimed at familiarising participants with the philosophy and the principles underlying this course and the different theories of learning, which they were asked to associate with their own teaching practices. The tasks for this Unit involved independent reading on learning theories followed by an online quiz on the main characteristics of each theory. After this, they were invited to read the facilitator's thoughts on the philosophy and the teaching methods behind this course, because as stated earlier, the course was based on a "practising what you preach" approach (Boswood & Marriott, 1994; Wallace, 1991). It was significant for the participants to understand the objectives and the reasons underlying the course practices, before they embraced them and decide to adopt them in their own teaching contexts. Then an online discussion followed in which teachers talked about the learning theories on which they based their teaching practices and exchanged views on how these could be improved adopting more up-to-date theories and practices. Finally, the unit ended with an entry in their Reflective Journal.

Unit 3: ESP and its Nature/ The role of the ESP Practitioner

The purpose of this unit was to familiarise the participants with ESP and what it involves, deepen their understanding on the role and the responsibilities of the ESP practitioner and develop their knowledge on some important implications for ESP teaching. Moreover, it aimed at developing an overall idea of what different ESP contextualised situations and related genre of written and spoken discourse can be. A combination of theory on ESP and practice was suggested in the ESP TE literature examined in section 2.3.6 (see Table 2). After accessing the platform and being informed on the objectives of this unit, teachers were invited to take part in a discussion on Google Classroom on what ESP is and what it involves. Then they watched a presentation titled *ESP and its nature,* and they were asked to read some useful material on the topic. After this, they were organised in couples (three couples in total) and they worked collaboratively brainstorming on the specific ESP

areas they taught, contextualized situations, scenarios, roles, and related text types for practising the four language skills. The purpose of this activity was to exchange ideas and create a collaborative/ shared group database with activities and ideas they could implement in their courses. From this point on, they were asked to work with their partner for the completion of tasks. As mentioned repeatedly, collaboration was one of the basic techniques used in the course, as the course was built on the ideas of social constructivism and connectivism, and since networking was considered important in other research studies on ESP TE as well (Abedeen, 2015; Atai & Nejadghanbar, 2017; Bocanegra-Valle & Basturkmen, 2019; Da Silva, Vial & Sarmento, 2017; Sharpling, 2002). The unit ended with the participants adding an entry in their reflective journals.

Unit 4: Introduction to ESP Lesson Planning

This unit aimed at familiarising practitioners with the concept of ESP lesson planning and its importance, the factors that influence decisions on how to construct an ESP lesson plan, and how to compile an ESP lesson plan. The participants were asked to work with their partners to share their thoughts on the value of lesson planning and brainstorm on what elements an ESP lesson plan should consist of. For this task they were requested to use MindMeister, an online mind mapping tool that lets you capture, develop and share ideas virtually. This activity was regarded as a good warm-up activity that would prepare the participants for the next week dedicated to ESP lesson planning. Finally, the unit was completed with the participants adding an entry in their reflective journals.

Week 2: ESP Lesson Planning

Units 5 & 6: Building an ESP Lesson Plan Parts 1 & 2

These units focused on participants becoming familiar with the ESP lesson planning process and its importance. More specifically, they concentrated on the importance of factors that influence decisions on how to construct a lesson plan, such as background information on the class, paying in other words attention to their own educational context (Chen, 2000; Mahapatra, 2011); they also focused on analysing ESP students' needs and deciding on the aims and objectives of the ESP lesson. The ESP lesson plan was regarded as a miniature of an ESP syllabus, covering all aspects of the teaching and learning processes. For this reason, lesson planning was considered to be an effective way of engaging teachers in processes involved in ESP syllabus design (e.g., situation analysis,

needs analysis, setting of aims, etc.) in a more condensed manner. Lesson planning and syllabus design in general are processes extensively used in TE, being used in many MA courses, and being suggested by the BALEAP TEAP Scheme (BALEAP, 2014). Teachers were invited to watch a presentation titled *Building an ESP Lesson Plan Parts 1 & 2* and study a document with a sample ESP lesson designed by the facilitator for an ESAP course for first year students of Agricultural Sciences, Biotechnology and Food Science. Then they had to build Parts 1 and 2 of their own ESP lesson plans collaboratively (i.e., Part 1: Class description and background information, Part 2: Establishing the general aim and specific objectives of the lesson). Due to the amount of workload, the lesson plan was divided into three parts, and in Units 5 & 6 the participants were asked to work only on the first two parts. In the end, they noted their reflections on this experience in their reflective journals.

Unit 7: Building an ESP Lesson Plan Part 3

This unit was a continuation of Units 5 and 6, and it aimed at familiarising participants with how to select material, tools and tasks for their ESP classes. It also focused on making them aware of the different professional organisations and ESP social media communities they could join to develop professionally. The participants read the material on Part 3 of the lesson planning process concentrating on the resources, tools, modes of classroom organisation, procedure, time devoted to each task, and assessment, and continued working collaboratively on the compilation of their ESP lesson plans. The teachers were advised to use ideas from the bank of activities they had constructed in unit 3. The unit ended with the participants' reflections.

Unit 8: Building an ESP Lesson Plan: Sharing Thoughts

This unit was based on the previous three and aimed at helping the participants gain a deeper understanding of the processes involved in ESP lesson planning. The teachers were requested to visit the folders of the other groups/ couples, read their lesson plans and provide them with constructive feedback on all the aspects of the lesson plan, and any other aspect they wished. Finally, they reflected on the unit.

Week 3: Lesson Implementation and Reflection

Unit 9: Implementing the ESP Lesson Plan, Reflecting Collaboratively and Drawing Final Conclusions

The last week of the course, and basically the last unit, was dedicated to the implementation of the ESP lesson plan. The purpose of this unit was to help participants understand the advantages of working with a lesson plan, see in practice their students' perceptions on any new types of activities they integrated into their lessons, learn how to reflect on their ESP teaching experience, recall the most important information acquired during the course and share their views on the challenges faced and knowledge gained during the course. Initially, teachers were requested to implement their lesson plan with their students and reflect on the experience; however, this plan changed, as the pilot course was extended and by the time teachers reached this point in the course, the academic year had been completed. Therefore, teachers were involved in micro-teaching instead, and their peers had the opportunity to give them feedback. This was done through a 120-minute Webinar, during which each couple was given 10-15 minutes time to deliver a part of their lesson. The Webinar finished with the participants' reflections on the micro-teaching process and on the course experience as a whole. Implementing the ESP lesson plan or micro-teaching were regarded as a significant part of the TE process, not only because this is an activity very widely used in TE (many of the MA courses on ESP seen in section 2.3.2 as well as the BALEAP TEAP Scheme include these practices in their syllabus), but also because many studies on ESP TE emphasise practice rather than just theory (Ghanbari & Rasekh, 2012; Kırkgöz, 2019; Maclean, 1997; Northcott, 1997); this is also evident in Table 2, which summarises the suggestions for ESP TE for the last 40 years.

This was the course in the pilot phase. Generally, all the aspects of the course (delivery mode, duration, learning objectives, topics, tasks, etc.) were based on the principles that were drawn from the literature review and the study of existing ESP TE opportunities and suggestions for ESP TE, as these were presented in Chapter 2. They were also based on the needs analysis conducted before the course.

The sections that follow describe the implementation of the pilot version of the programme with six HE ESP practitioners. The results of this pilot study contributed to the finalisation of the curriculum before its implementation with the 24 language instructors.

4.3.3.2 The participants

The pilot implementation of the ReTEESP Online ran from May 2 to June 29, 2017 with six ESP practitioners from HE, who represented a convenience sample, a sample which the researcher had easy access to (Cohen et al., 2007). Despite the low number of participants, the large amount of data gathered and the use of four different research tools for triangulation purposes allowed the extraction of in-depth results. To ensure the anonymity of the participants, they are referred to as Pilot Study (PS)Teachers 1-6. Table 8 presents demographic information related to the participants.

Table 8. The participants in the pilot study

Participants: HE ESP instructors n=6	Country of origin	Age	Years of experience as ESP practitioners
PSTeacher 1	Spain	30-39	1-5
PSTeacher 2	Cyprus	30-39	6-10
PSTeacher 3	Cyprus	40-49	16-20
PSTeacher 4	Greece	30-39	6-10
PSTeacher 5	Cyprus	40-49	6-10
PSTeacher 6	Cyprus	40-49	6-10

The participants in the pilot study had BAs and MAs in English Language, Applied Linguistics, ELT or TEFL, three of them had a PhD, and two were pursuing a PhD related to ESP at the time. All participants had previous experience in teaching ESP ranging from one to 20 years and appeared to be very active in the ESP field, both in terms of teaching ESP and in terms of conducting research in the field. All of them had the opportunity to teach ESP courses for various disciplines (i.e. Business, Aerospace Engineering, General Technical English for Engineering Students, Communication, Nursing, Rehabilitation Sciences, Hotel and Tourism Management, Agricultural Sciences, Mechanical Engineering, Multimedia Studies, Kindergarten Education, Shipping, Civil Engineering, Electrical Engineering, and Computer Science).

4.3.3.3 Data collection tools

The tools used to elicit data were the same as the ones used in the actual implementation of the study in Stage 1, as they are described in Figure 5 and discussed in section 3.9.1. The questionnaire used in the pilot study was the same as the one used in Stage 1, and the facilitator's field notes were kept in the form of an electronic journal of 14 pages organised chronologically. As concerns the participants' reflective journals, in the pilot phase the entries that the participants were asked to write were more than in Stage 1 (eight entries instead of four). Table 9 shows the volume of data gathered by the participants' reflective journals in the pilot study. The rest of the tools were the same as the tools used in Stage 1.

Table 9. Volume of data gathered by reflective journals in the pilot study

Participants N=6	Reflective Journal (8 entries in total)	Length (in pages)
PSTeacher 1	7 entries	4.5 pp
PSTeacher 2	6 entries	3 pp
PSTeacher 3	8 entries	4.5 pp
PSTeacher 4	5 entries	2.5 pp
PSTeacher 5	4 entries	2 pp
PSTeacher 6	5 entries	2.5 pp

The quantitative data gathered from the online questionnaire were analysed using IBM's SPSS 22 software, while all the qualitative data received were analysed using NVivo software for qualitative data analysis. The data analysis process is explained in greater detail in section 3.9.2.

As far as qualitative data is concerned, the coding process was repeated by the external researcher who acted as a critical friend (McNiff & Whitehead, 2002), in order to enhance credibility and validity, to avoid research bias and rule out any misinterpretation of the data. Cohen's kappa test (1960) was run to determine inter-rater reliability, in other words if there was agreement between the researcher's and the second rater's thematic analysis

of the data. The results showed that there was almost perfect agreement between the two coders' judgements, k = 0.866, according to Landis and Koch's (1977, p. 165) agreement measures.

4.3.3.4 Results and discussion

The findings from this trial implementation of the ReTEESP Online generated important implications for the design of the course and its future refinement and improvement. This section presents and discusses these results, and it also refers to the implications that these results have on the actual implementation of the course.

The online questionnaire to which participants were requested to respond at the beginning of the programme in the pilot study, apart from providing demographic information, also served as a tool to analyse the participants' needs. According to the results of the questionnaire, despite the fact that all ESP practitioners worked in HE and all had ESP teaching experience, two out of six participants had received no training in ESP, whereas out of the other four, only one participant had received training as part of her BA. The other three had been trained to teach ESP only through conferences, seminars or in-service training. Therefore, it could be claimed that their ability to teach ESP was acquired mainly through experience and through all the training opportunities they had as practising ESP practitioners.

Moreover, in agreement with Dudley-Evans and St John's (1998) view of the ESP practitioner, all of the participants in the study had multiple roles to play, i.e. course designers, teachers, materials providers, course evaluators and researchers, having multiple duties to respond to.

As far as their familiarity with technology was concerned, participants were asked to rate their competence in using new technologies in their teaching (Figure 9), state whether they had attended an online course before, and also how familiar they were with using a Google account and tools such as Gmail, Google Drive, Google Classroom, Skype and Facebook (Figure 10), the tools that would be used for the delivery of the course.
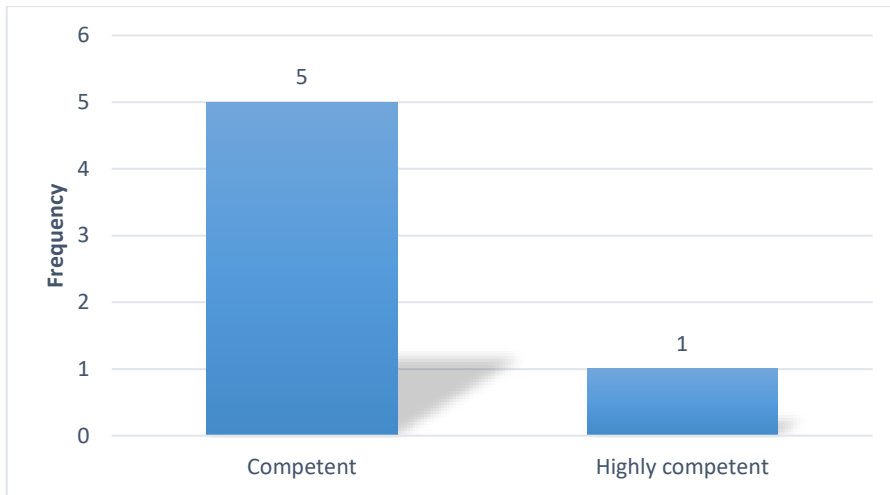
Figure 9. PSTeachers' competency in using new technologies in their teaching

Regarding their competency in using new technologies in their teaching, all PSTeachers considered themselves as competent. Concerning their previous experience with online courses, two out of six PSTeachers had previously attended online courses, which meant that for four PSTeachers attending an online course would be a new experience and that they might need step-by-step guidance throughout the course, especially at the beginning.

Participants were also asked to state their familiarity with the Google tools that would be used for the delivery of the course (Figure 10). All six participants were very familiar with using a Google account and Gmail in particular. Even though all six of them were also familiar with Google Drive, the situation was not the same with Google Classroom. This was probably because Google accounts are being widely used for personal purposes, while the situation is different with tools with more specific use, like Google Classroom. Regarding Skype and Facebook, only one participant was not familiar with their use.
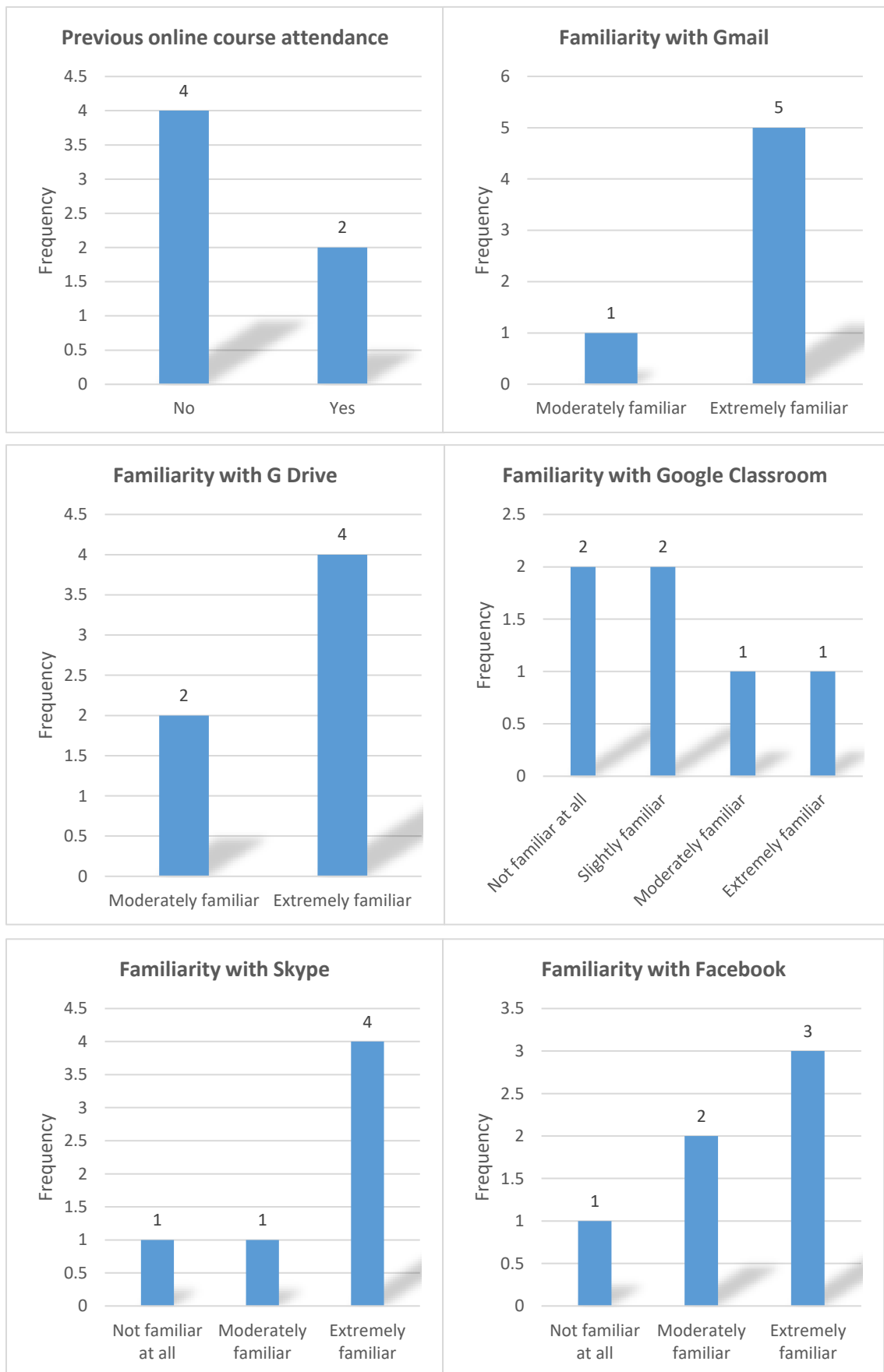
Figure 10. PSTeachers' familiarity with technologies used in the ReTEESP Online

With regard to the qualitative data that was received from ESP practitioners' reflective journals, their comments on Google Classroom, facilitator's field notes and the focus groups conducted at the end of the programme, thematic analysis yielded three general thematic categories. These categories were: A) Participants' professional experiences, B) The course experience, and C) Suggestions for improvement of the course. Each of these general categories consisted of a series of subcategories. The themes that derived from the thematic analysis of the data obtained from the pilot study are illustrated in Figure 11. Each of the categories is represented by a different colour.

The following sub-sections describe the three thematic categories deriving from the thematic analysis. The subsections are organised based on the themes appearing in Figure 11.
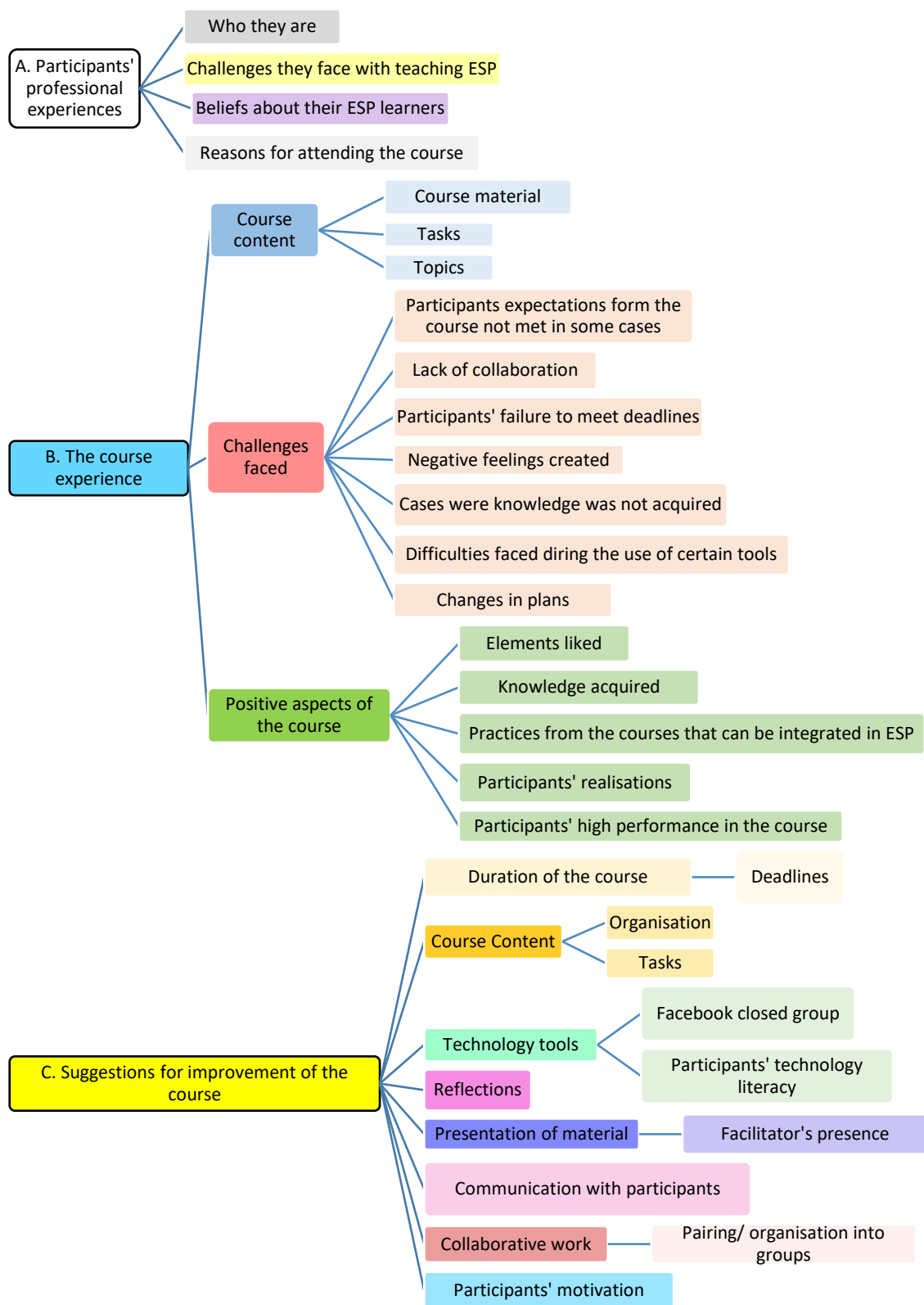
Figure 11. The thematic categories that derived from the pilot study

4.3.3.4.1 Thematic category A. Participants' professional experiences

The first thematic category involved participants' biographical information, the challenges they faced with teaching ESP, beliefs that they carried about their ESP learners, and finally their reasons for attending the ReTEESP Online.

<u>Who they are</u>

First of all, thematic analysis confirmed the questionnaire finding that, even though all of the participants were HE ESP practitioners with experience in teaching ESP, only one of the participants had received formal training in ESP as part of their pre-service education, while the rest had either received no training in ESP at all or as part of in-service training and in the context of conferences and seminars. This is in accordance with the findings of other studies conducted in the past and the literature (Bell, 2002; Bojović, 2006; Basturkmen, 2010; Bracaj, 2014).

<u>Challenges they face with teaching ESP</u>

As concerns the challenges they faced in their ESP teaching, these concentrated mainly around ESP practitioners' difficulties in finding authentic material or designing appropriate material both content-wise and level-wise that served the purpose of their courses (n=3). PSTeacher 2 admitted that finding or adapting material was difficult since she did not possess the knowledge to do so, while PSTeacher 3 expressed the view that once the material is adapted to meet their students' needs, it ceases to be authentic anymore. Furthermore, the process of adapting authentic material is a time-consuming process, which however is worth the effort.

The issue of finding or designing appropriate material is an issue that has been long discussed in the ESP literature, and in most cases, research embraces the view that such material should be found in real world instead of being created for pedagogical purposes (Benavent & Peñamaría, 2011). Nevertheless, Benavent and Peñamaría (2011) argue that very often, especially when learners are at beginners' stage, these materials need to be edited in order to meet learners' needs, which is very difficult and time-consuming. The findings of this pilot study agree with these views.

Moreover, PSTeachers 1, 5 and 6 stated that another major difficulty they faced was the need to acquire substantial discipline-related knowledge. Access to such knowledge

might prove difficult, and many times they had to consult their students since they could not have constant cooperation with experts in the field.

The two major challenges reported by the participants, i.e. difficulty in finding and designing appropriate material (n=3) and lack of subject-specific knowledge (n=3), were indications regarding the syllabus of the ReTEESP Online. The programme should have concentrated on these two issues, since its purpose was to help ESP practitioners overcome the difficulties they faced with their ESP teaching.

Beliefs about their ESP learners

Regarding certain beliefs that the participants carried about their ESP learners, PSTeacher 1 expressed the view that students need to get out of the classroom, out of their comfort zone and come up with innovative ideas to help the community by working on improving society form different perspectives: gender equality, environment preservation, immigration, sustainability, etc. The idea of urging the students to become involved with the outside world is dominant nowadays, when Universities attempt to equip future graduates with the necessary competencies to become active 21st century citizens (Álvarez-Mayo et al., 2017). In this respect, such practices should also be initiated by ESP practitioners, and this had to be emphasised in the ReTEESP Online as well as in any ESP TE programme.

Furthermore, the focus groups revealed that the ESP practitioners who participated in the study (n=3) thought that their students were not always engaged in collaborative work, even if teachers requested so. Instead, students looked for different ways to escape such tasks and work individually, so teachers needed to be alert all the time and find ways to make students work collaboratively. Therefore, teachers' careful control of the class is essential in ensuring that students benefited from the different tasks and activities to the maximum. The ReTEESP Online should have included a component that emphasised the importance of collaboration in learning, which teachers would be encouraged to share with their learners.

Reasons for attending the course

The last piece to complete the participants' professional experiences puzzle concerned the main reasons for which they decided to participate in the ReTEESP Online, which revolved around their positive attitude towards the idea of continuous PD (n=6). All

PSTeachers were very actively involved in conference participation and seminar attendance, and they all tried to keep abreast of the latest developments in the field. They wished to exchange and share ideas with other colleagues (n=4), reflect on them (n=1), expand their knowledge about ESP teaching (n=2) and developing teaching materials (n=1) and also to discuss different challenges faced in their everyday teaching in a collective effort to provide solutions (n=1). PSTeachers 1 and 3 stated that this was an opportunity for them to receive some form of formalised ESP training in developing, designing or delivering ESP courses. Finally, all PSTeachers sought to update themselves on the latest developments in the ESP field. All these were indicative of their needs in terms of ESP TE and the elements the ReTEESP Online should have included.

In her introductory comments on Google Classroom PSTeacher 4 wrote:

> *I am very interested in taking this course because, first of all, I think that training courses and professional development are essential. I enjoy attending conferences, workshop days, and I take online professional development courses regularly. The present course offers an immediate advantage and will give me ideas in my teaching. I am interested in sharing ideas with my peers and learning from the course and everyone involved. I believe that by the end I will have gained a whole lot and I am very much looking forward to it all!*

This section dealt with the findings from the pilot study which concerned the participants' professional experiences. Discussion will now turn to the findings from the study which relate to the experience the facilitator and the participants had with the ReTEESP Online.

4.3.3.4.2 Thematic category B. The course experience

The second thematic category that emerged from the data (see Figure 11) involved a description of the ESP practitioners' experience and my experience, as the facilitator, from the implementation of the course. More specifically, it concerned descriptions of the content of the course, positive aspects of the course and challenges faced during the course, as these were perceived by both the participants and myself.

Course Content

In their weekly reflections both the participants and I provided information on the course content, and more specifically what each session, the materials and the tasks involved.

This kind of information was mainly descriptive and it was written at the beginning of their reflections. For example, PSTeacher 3 wrote the following about Unit 1:

Unit 1 was about the topics and materials of the course, the learning outcomes, and the platform that will be used for the training course.

This Unit was an Introduction to the course, the tools to be used, its content and the tasks that the participants would be involved in.

Positive aspects of the course

As far as the positive aspects of the course are concerned, these were many; more specifically, 212 references to the positive aspects of the course were recorded in the reflective journals, field notes and during the focus group discussions. Participants generally expressed the view that the course was well-structured and well-organised, and it guided them step-by-step through all the tasks (n=3). Moreover, PSTeacher 1 stated that my idea of organising them into pairs worked very well. Collaboration among the participants was reported as enjoyable by both the participants (n=5) and myself, despite some concerns expressed by some PSTeachers, as these are described further below in the discussion about the challenges faced during the course.

PSTeachers 1 and 4 expressed the opinion that the collaboration element was one of the highlights of the course.

During the focus group discussion PSTeacher 1 said:

So for me it was a great opportunity and most of my colleagues are more experienced, probably all of them are more experienced than me, they probably had more training, so for me it was a great opportunity to hear the views, the reflections and also to learn within the course but I think the interactive part was something that I really appreciated in the course and also the reflective side of things. It was a very fulfilling and enriching experience for me.

In the same focus group discussion, PSTeacher 4 also commented:

The element I enjoyed was working with others and brainstorming on different aspects of creating a lesson and how you would teach it and what the objectives would be and sharing ideas of what other people have done in their class, and

then you share your idea and you get feedback. I thought that give and take, that interaction was very useful…"

The fact that the participants viewed sharing of ideas positively was also confirmed by my field notes:

I think that they enjoyed collaborating with colleagues. I believe they liked the fact that they worked on their lesson plans with other people. I have the impression that they gained from this interaction and exchange of ideas.

The positive perceptions that the participants had about collaboration, interaction and sharing of ideas, despite the concerns that were expressed by a couple of them, confirmed my choice to base the programme on learning theories which favour collaboration (i.e. social constructivism, connectivism). Such practices could be used in the actual implementation of the ReTEESP Online.

Regarding the ESP lesson plan, which participants were asked to produce and implement in their classes in the context of the course, three PSTeachers referred to it positively, stating that it was an opportunity to remember how a comprehensive and well-structured lesson plan was compiled. Moreover, PSTeacher 1 liked the fact that I had separated the process into different steps, giving time to the participants to work on the process and reflect on it thoroughly. Finally, PSTeachers 1 and 6 particularly liked the fact that I had provided the teachers with a sample lesson plan from my own teaching practice. It helped the participants to construct their own lesson plans, and provided them with ideas on tasks they could use in their ESP classes. During the focus group discussion PSTeacher 6 said:

I like the fact that you used examples from your own work. I liked this, because I felt that for someone who never worked with ESP, it is useful to see a ready-made lesson plan. Saying what a lesson plan is and how you build it is different than actually showing it. It was important.

The findings from my field notes, the participants' reflective journals, and the focus group discussions revealed that the participants in the course liked the instructional technology tools that were used, that is Google Classroom, Google Drive, MindMeister, the closed Facebook group and Skype. These were considered as effective, in the sense that they served the purposes which I used them for. Simultaneously, I thought that these tools were flexible, easy to use and well-accepted by the participants. One of the major

advantages of using the G Suite for Education, in my point of view, was the fact that I could easily create and manage the participants' G Suite for Education accounts without the assistance of any Information Technology (IT) staff; this implied that everything could be done more quickly and directly.

The use of Google Classroom was very positively perceived by PSTeachers (n=4) who made special reference to it both in their reflective journals and during the focus groups. Furthermore, they considered the use of GDrive as an efficient way of organising the course material (n=6).

All six PSTeachers also enjoyed the use of MindMeister, which they were not familiar with, and expressed the wish to integrate it in their teaching practice, especially in brainstorming sessions. Regarding Facebook, all ESP practitioners, except for one who did not have a Facebook account, appeared to be very much in favour of having a closed Facebook group, where they could share and find useful information on ESP in general (e.g. useful links, articles, Conference announcements, etc.). What they even liked more was the possibility of continuing to be members of this group even after the completion of the course; thus, they would have the opportunity to expand their network and keep in touch with other colleagues in the field and be, in a sense, members of an expanded community of practice after the course.

In addition, Skype was regarded as the best option for delivering webinars as long as there were no internet connection problems (n=6). Skype was also utilised in their weekly communication with each other (n=4), along with email (n=4), the phone (n=2), and Messenger (n=2), which indicated that they regarded it as a useful tool. Generally, participants appeared to like the fact that they learnt how to use these tools which they might use with their students. They expressed the view that the tools used in the course can be adaptable to any contexts, and they are suitable for building a sense of community. Taking all these into consideration, it can be assumed that the tools that were used for the pilot delivery of the ReTEESP Online could be appropriate for the actual implementation of the course as well.

PSTeachers also welcomed the addition of a progress report that I compiled somewhere in the middle of the course, in order, on the one hand, to inform participants about their progress, and, on the other hand, to urge those who were behind to complete their unfinished work. Despite the fact that, according to PSTeacher 5, it generated some

anxiety, the progress report was also a point of reference for the participants that created feelings of satisfaction once they completed their goals. The quizzes were also regarded as short and straightforward (n=3), and the Power Point Presentations were enlightening and helped the participants remember various things regarding ESP (n=3). PSTeachers appreciated the use of video and reading materials too (n=3).

As far as other positive aspects of the course were concerned, findings showed that participants also gained new knowledge. Some of the participants in the course (n=2) admitted that they gained a lot from the interaction, exchange of ideas, and that they integrated new things in their courses that they were not aware of previously. Moreover, the course provided them with material and specific tasks they could apply in their ESP classes (e.g. useful readings on which they could base their teaching, sample lesson plans, links where they could find material, etc.) in the new academic year, and also a new understanding of several things. Participants also mentioned that the course was an opportunity to remember many things on learning theories and also learn about new learning theories such as connectivism (n=2).

During one of the focus group discussions, PSTeacher 1 said the following:

> *…this connectivism theory the one that you are very interested in or very into in Cyprus, that's a new theory that I wasn't so familiar with, so this perspective of integrating CALL I think it's very interesting. The artefacts and how you view them and their importance, that's something I wasn't familiar with. ESP and its nature, again, many new things, ESP is such a broad field and it's hard to be familiar with all its branches…*

In her reflective journal PSTeacher 6 wrote the following:

> *I found the last part of the course interesting and useful although I thought it wouldn't offer anything more at first. Although we all had a chance to see each other's lesson plans and comment on them in writing, talking about them brought new ideas to the table and allowed us to expand on our thoughts with further details and examples. There were also some useful suggestions that rose from the discussions.*

PSTeacher 4 stated the following in one of the focus groups discussions after the completion of the course:

Well, for me I feel I benefited from the course because I learnt new things I can apply in my teaching coming September (she laughs). It's like, I got information I can immediately use and it wasn't random, it wasn't general, it was very specific things that I could apply in my teaching when I'm teaching any Department really, so that was the biggest benefit for me… that I had actual material that I can put forward and I also have a new understanding in several things that I hadn't thought of before… and I can plan it, I can plan my lesson accordingly now and also integrate new things that I hadn't been using before.

Furthermore, almost all of the participants (n=5) agreed that the course and the closed Facebook group that I had created was an excellent opportunity to learn about various ESP conferences and events that they were not aware of in the past. Additionally, according to PSTeacher 3, the participants benefited from the reflective processes of the course, since reflection made them think about their careers as ESP practitioners, their teaching contexts, their teaching practices, the different roles they assume as ESP practitioners and the training they had received in developing and delivering ESP courses to a wide range of HE students from different disciplines. Last but not least, participants mentioned that through the course they familiarised themselves with Google Classroom and MindMeister, the mind-mapping tool which they thought of using in their classes for collaborative brainstorming (n=6).

At the same time, my field notes revealed that McNiff & Whitehead's (2002, p.15) strong belief that "[a]ction researchers enquire into their own lives" and that through AR the researcher reaches a better understanding of themselves and develops both personally and professionally proved to be true. Even from this initial stage of the TAR cycle, in which the programme was still in its design phase, observation and self-reflection was very beneficial for me, not only as far as the design of the course was concerned, but also in terms of how I personally could become more efficient as a course facilitator and researcher. Moreover, the constant interaction and exchange of ideas and also the whole process of checking the participants' work and providing feedback to them were very enlightening; after the completion of the course, I too felt that I had gained new knowledge and ideas I could implement in my own ESP teaching. Generally, the programme was an opportunity for me to indulge myself into a journey of new experiences, since this was the first time I delivered an online ESP TE course, and gain

new knowledge both as a teacher trainer and as an ESP practitioner. Last but not least, this pilot implementation of the ReTEESP Online gave me insight regarding changes that had to take place in order for the course to improve.

Apart from the knowledge and the skills the participants and I gained from the course, another positive aspect of the course, was the fact that the participants were really cooperative and they presented very good and innovative ideas in their lesson plans and everyone recognised that in the end of the course. The thought of having to present their work in front of other others made them excel in their performance, and the fact that most of them were experienced ESP practitioners led to the exchange of high-quality ideas on material and tasks that could be used in the ESP class.

Lastly, among the positive aspects of the course was the fact that, through their participation in the course and through reflection, the ESP practitioners reached certain realisations. They realised the following: how difficult the job of the ESP practitioner is, because of the fact that apart from the language, they need to have knowledge of the learners' discipline and also because it is most of the times hard to find appropriate teaching material (n=6); how important cooperation, collaboration and exchange of ideas is for PD (n=6); that they had a lot in common, especially as regards any prior ESP training and the challenges involved in ESP delivery (n=1).

Challenges faced

Despite the numerous positive aspects of the course, the participants also faced challenges during the course. More specifically, a total of 160 references were made to challenges faced during the course by both the participants and the facilitator. Some of the PSTeachers expressed the view that their expectations were not completely met (n=3). More specifically, PSTeacher 5 expressed the need for deeper investigation of the issue of needs analysis in terms of both theory and practice. She also felt that the lesson plan was a reminder of what they knew already, and that she needed more emphasis on ESP.

This is an extract of what she stated during the focus group discussion:

> *Er I expected that it would have been… how can I say… I was thirsty for needs analysis, a little more specific stuff, needs analysis… how to start with it, more theories on this part… How to go about it. Yes. Starting with a theoretical*

framework on needs analysis and practical… let's say maybe a session or something let's say to follow a better process of this kind to build a course.

PSTeacher 3 added that she expected to learn some things on how to build an ESP syllabus she taught for the first time. In other words, more help on resources, topics, themes, tasks and who to come in contact with. Moreover, PSTeacher 2 expressed the view that, even though she understood the value of lesson planning, which could be beneficial for both novice and experienced teachers, lesson planning was not something that teachers could easily integrate in their daily routine. She pointed out that time constraints restricted her from engaging in such a detailed lesson planning procedure every time before her classes. This is an idea also expressed by Jensen (2001, p.401), who claims that for experienced teachers' lesson plans could be as simple as a "mental checklist".

Finally, PSTeacher 6 concluded that she wanted to learn more about recent developments in ESP. The teachers who expressed these views also added that they felt that they had not earned much in terms of knowledge, since they were already familiar with most of the content that was presented to them. What is interesting to note is that the teachers who conveyed these ideas were the ESP practitioners that had a similar background as mine. On the contrary, the two ESP practitioners who came from different backgrounds and different teaching contexts did not appear to have any other expectations from the course. Therefore, one could assume that the ESP practitioners who came from the same educational context as the facilitator's, were already familiar with the things included in the course, and they expected to be exposed to new ideas.

Another challenge that participants faced was related to working together to complete the collaborative tasks. As aforementioned, collaboration was one of the aspects of the course that participants enjoyed; nevertheless, three PSTeachers expressed the view that future participants in the course might not be so positive with regards to collaborating and sharing material, and they might feel hesitant to do so, either because of low self-esteem or refusal to share their work with others.

Following is an extract from their discussion on the issue during the focus group:

PSTeacher 3: This sharing issue, I don't know if the people who will participate will like this. Because we are in the sharing phase here, you know … (laughter)

PSTeacher 5: Yes. It's a philosophy…

PSTeacher 3: I don't have an objection, but someone else may have. To share to see…

PSTeacher 6: Especially if it concerns material. Course material, lesson plans… You know, there are people who do not give their material…

PSTeacher 3: They don't give it, and they don't want to show it either, but they also feel a little…

Facilitator: What?

PSTeacher 3: …low confidence maybe

PSTeacher 5: …suspicious…

PSTeacher 3: …for instance about the stuff that they will write… someone might… I don't know, you need to see how you will handle it if one doesn't want to share their material with the whole class, er…

Furthermore, two pairs of participants (PSTeachers 1 and 3 and PSTeachers 2 and 4) admitted that instead of collaborating to complete the tasks, they rather co-operated and shared the work. In the case of the third pair (PSTeachers 5 and 6), the two teachers collaborated by getting together physically to complete the tasks instead of communicating virtually. The reason why the first pair of participants decided to follow this process was because of the time difference that existed between Cyprus and Canada, where PSTeacher 1 was living at the time. PSTeacher 1 expressed the view that if you have a good partner then any challenge can be overcome. These findings could imply that collaboration is more easily achieved when teachers are physically together rather than working online. According to Kreijns, Kirschner and Jochems (2002, p.9), the "seemingly effortless social interaction" that takes place in face-to-face learning environments is crucial in the learning process. This social interaction cannot be taken for granted in online learning environments, and in order for social interaction to occur, social and psychological dimensions need to be taken into account. Taking into consideration how beneficial and valuable collaboration is regarded in learning in general, and that recent theories of learning, like social constructivism and connectivism, are founded on it, it was essential for the participants in the ReTEESP Online to be engaged in collaborative activities. Therefore, measures needed to be taken in order to ensure this in the actual implementation of the course.

Another challenge that the participants faced was failure to meet deadlines. This was reflected in both my field notes and the focus group discussions, and it resulted in the extension of the course from three weeks, as it was initially planned, to eight weeks.

All PSTeachers agreed on the fact that the reason behind this was their workload as well as their other commitments in combination with lack of free time. This might imply that the course was overloaded with material and tasks, and that participants could not cope with them. In one of the focus groups discussions, PSTeacher 2 stated:

> *...but it was a matter of workload. Maybe if I didn't have so much workload, if I didn't have so much pressure, maybe I could focus more on the things you assigned to us.*

Another reason which explained this constant extension of deadlines might also be culture, according to PSTeacher 1. The teacher characterised the extension of deadlines as a "Mediterranean thing", supporting that such practices were characteristic of learners in this part of the world, admitting that the same thing also happened with her students.

Additionally, in one of the focus group discussions, PSTeachers 3, 4 and 5 also admitted that they did not study carefully some of the material the facilitator had uploaded for them on the platform, again due to lack of time. They just scanned through them, missing points that the facilitator considered to be important for the educational process, paying attention to presentations or material which were more concise instead of reading useful articles and large word documents. This fact too yielded important implications concerning changes that perhaps needed to be made.

As the course proceeded, my field notes revealed that few of them started feeling overwhelmed by the course, because of the workload and also because of the level of difficulty of some of the tasks. This was also displayed in the focus group discussions, where two of them (PSTeachers 2 and 5) admitted that they felt extremely stressed when they had to describe their teaching practices on the basis of theories of learning. They found this a difficult task to do, and "complained" that the level of performance of a couple of participants in the course was too high, and this created feelings of stress and fear of inferiority. The dialogue between two teachers during a focus group discussion which follows is an indication of the feelings created among some participants:

> *PSTeacher 2: At the point where you asked us to write about our own*

teaching practices. Apart from the fact that it was difficult for me to think about my teaching practices, and imagine that I am a person who teaches ESP and I'm also involved in research. Imagine how difficult it would be for a beginner to share this with others… In other words, you need to think about the… the psychology and how comfortable they (future participants in the course) *would feel with others.*

…and today I felt, after looking at the lesson plans of the others, I felt like "Oh Holy Mary, I'm totally useless!"

I thought that my colleagues will say that…

PSTeacher 6: We are on group therapy now… You should accompany the course with group therapy sessions… (they laugh)

PSTeacher 2: Maybe this was it… was it Teacher 6, was it Teacher 3 that started writing all these theories…

PSTeacher 3: I did not write any theories.

PSTeacher 2: …er… with references.

PSTeacher 6: No… Did I add references?

PSTeacher 2: Yes! With references, and I read it and said to myself "Oh Holy Mary!"

PSTeacher 5: That was the point where I got stressed, I think…. Er somewhere there.

PSTeacher 2: Yes, but this made me feel stressed… this stressed me.

PSTeacher 5: When the nature of the course… you know the sharing, generally somehow you feel that what you write might be a little be more inferior, less…

This sort of competitive spirit that had developed among the participants was perhaps a factor that urged the participants to excel in their performance in the course, as noted earlier in the analysis, when the positive aspects of the course were listed. From this point of view, it could be claimed that this anxiety that some participants felt eventually led to positive outcomes. Nevertheless, according to Johnson and Johnson (2017, p. 8) "individuals care more about each other and are more committed to each other's success

and well-being when they work together to get the job done than when they compete to see who is best or work independently from each other." Therefore, in the future implementation of the course, it was essential to minimise feelings of competitiveness through focusing attention on the common goal which was the acquisition of more knowledge on the field of ESP and becoming more competent and more empowered ESP practitioners.

Another challenge that was noted mostly by me was the fact that I had to make different changes in the course while it was taking place, due to different practical constraints. This of course was not something unexpected, since change of plans is a practice that occurs in all sorts of teaching contexts, especially in online learning environments, where according to Ally (2008), choosing, adapting and perfecting are tasks of the course designer/ facilitator. Firstly, I adapted some of the tasks as the course proceeded; specifically, even though initially participants were requested to teach the ESP lesson plans that they produced in their classes, that time of the year was the exam period for the participants, thus they did not have classes to apply their lesson plans. Therefore, it was decided that the best option was for participants to be involved in micro-teaching (via Skype). Moreover, despite the fact that, according to the course syllabus, participants were requested to provide feedback on each other's lesson plans before the implementation stage (micro-teaching in this case), the fact that participants failed to meet the deadlines did not allow this. All three pairs of participants submitted their lesson plans one day before the micro-teaching session; as a result, all the reflection and feedback occurred after the micro-teaching session. Moreover, because of the time difference between Canada and Cyprus, PSTeacher 1 could not participate in the micro-teaching session, and the rest of the group could not meet on another day or time. Therefore, PSTeacher 1 was informed through the material that others shared, the reflections of other people and her partner's and the facilitator's comments about what had happened on that day. Finally, I decided to merge some of the Units into one (i.e. Units 5, 6 and 7), understanding that the course was becoming hectic for the participants. The following extract from my field notes demonstrates this:

> *Participants continue to move very slowly with the activities. I decided to combine Units 5 and 6, even though initially I was planning to do them separately. I do not want to drag the course any longer, because I'm afraid that it will tire the*

participants. The fact that they do not submit their tasks on time makes it difficult for me to provide any feedback on the things that they work on. Moreover, I don't post any new material, because I do not want to intimidate them. I have made a Worksheet showing the participants' progress so far. I believe this is a way to remind them that they have left things behind and they need to catch up asap.

The fact that such challenges occurred and that quick decisions needed to be made concerning changes that needed to be made, showed that the facilitator should always be ready for unexpected developments. The facilitator should always be alert, flexible, and ready to adapt to any difficult or unexpected circumstances that may arise.

To conclude with the challenges faced during the course, some practical difficulties regarding the use of certain technology tools were mentioned in my field notes, the participants' reflective journals and the focus group discussions:

1. Skype: PSTeacher 5 did not have a Skype account and this was discovered on the day of the first Webinar. In addition, during the first Webinar via Skype, sound and connection issues were also faced. To prevent such problems in the actual implementation of the course, I had to explain to the participants that they needed to have active Skype accounts and check their Skype connection before the course started.

2. Google Drive: PSTeachers 5 and 6 stated that at some point they felt lost and that they could not find the folders and documents they had created. For this reason, they contacted me for help. Moreover, they felt that sharing things created some confusion; as a result, some participants did not share their work or they forgot things. To avoid this, I should have created the participants' folders from the beginning and share all documents that had to be shared, instead of asking the participants to do so. Even though this might mean more work for me, confusion would have been avoided this way.

3. Google Classroom: What I considered a weakness of Google Classroom, was the fact that the layout of the platform was not flexible and that links could only be added only underneath each post. This meant that the participants and I were forced to build the course under these restrictions. Furthermore, PSTeacher 2 said that the 'Topics', which appeared in the left site menu on Google Classroom, were a bit confusing because they were not in the same order as the Units on the right;

thus, I had to make the necessary adjustments, adding the number of the Unit next to each Topic title to make things clearer; participants said that the platform looked much more organised this way.

Additionally, at the beginning of the course participants could not write on the document uploaded for them. Further investigation of the matter later revealed that the necessary amendments had to be made in the settings. Moreover, none of the participants chose to download Google Classroom on their smartphones, claiming that they did not have any more space on their smartphones, and that they did not want to get the notifications on their mobile phones. Thus, all of the participants were notified through email and through the closed Facebook group that was maintained, of which the 5 PSTeachers were members; PSTeacher 5 did not have a Facebook account at the time. If the Google Classroom application was downloaded on the participants' smart phones communication would be quicker and more direct.

4. Email: Even though the G Suite for Education offers email services along with other services, PSTeacher 3 found difficult the fact that she had to check her G Suite for Education email account along with the other personal email accounts. She would have preferred receiving all her email through her personal email account instead, since that was the account she checked most regularly. Thus, despite the fact that email accounts are automatically created with the use of the G Suite for Education, perhaps I should consider using the teachers' personal email accounts for correspondence.

5. Microsoft Office Power Point: In some cases, my Power Point presentations were accompanied with sound, which PSTeacher 2 could not hear, probably because she was not familiar with using the specific tool. This should be taken into serious account in the actual implementation of the course. To avoid this I could either give detailed instructions to the participants regarding the use of Power Point or finding other ways to deliver presentations e.g., a live Webinar or a video recording.

6. Documents: PSTeacher 2 reported that in some documents that were scanned, some words were missing, and she also added that it was not user friendly to switch from one document to another. Moreover, in some cases, e.g. Reflective

Journals, the document was in Pdf form and the participants could not edit it, and thus they could not respond to the Reflective Journal questions. This implied that documents needed to be double checked before being posted on the platform or added in G Drive.

7. Facebook: PSTeacher 5 stated that she did not wish to be part of the closed Facebook group due to the fact that she did not want to maintain a Facebook account. For this reason, the Facebook group was not used as a core tool for the delivery of the course, but rather as an extra tool.

8. MindMeister: According to PSTeacher 2, in the instructions given on how to use MindMeister the screenshots did not appear on her screen. Moreover, she could not understand what she had to do. To avoid this, instructions had to be made clearer and the documents with screenshots had to be posted in PDF form.

After discussing the findings related to the participants' professional experiences and the course experience and their implications for the future implementation of the course, discussion will now turn to the suggestions that were expressed for improvement of the course.

4.3.3.4.3 Thematic category C. Suggestions for improvement of the course

The third major thematic category that derived from the data related to suggestions for the improvement of the course. As illustrated in Figure 11, the suggestions expressed by the participants and myself revolved around these major themes: the content of the course, the presentation of material, the duration of the course, the technology tools used for the delivery of the course, collaborative work, reflective procedures, communication with participants, and participants' motivation.

<u>Course content</u>

As far as the content of the course is concerned, data from the participants' reflective journals and focus groups indicated that the course was found overwhelming and hectic in terms of content by 4 PSTeachers. The tasks were too many and too demanding; according to the PSTeachers, they should have been lighter. Moreover, some of the units could have been combined and made simpler, e.g. Units 5 and 6, could be merged so that the course became shorter. As PSTeacher 6 suggested, "the content should be as easily accessible as possible and as fast as possible".

PSTeacher 6 added that she would have liked to see recent developments in ESP or research conducted in the area of ESP in one of the Power Point presentations. Furthermore, as the material provided referred to lesson planning in general, she suggested that it would have been more useful to have some theory on how an ESP lesson plan may differ from a general lesson plan.

Moreover, PSTeacher 3 suggested that it would have been a lot better if they were provided with different practical ideas on where to find material for their classes and how to conduct needs analysis, and perhaps even with ready-made questionnaires. She claimed that they needed more ready-made material by the facilitator instead of gaining ideas only from their peers, and that the course should focus more on practical aspects rather than theoretical.

On the other hand, in my field notes I expressed my concern about the role that I needed to have in the course, believing that I should not provide ready-made solutions to the participants, but instead encourage them to be engaged in a journey where knowledge would be constructed through collaboration and interaction, as social constructivist approaches denote. A sort of balance needed to be found between the two ends; the best solution would probably be to leave the participants on their own, providing them with the necessary tools and guidelines to find the answers on their own, however. Following is an extract from my field notes after a discussion I had with PSTeacher 3:

> *My concern is not to exceed the line between traditional and modern, more learner-centred approaches, where the instructor is just a facilitator, a guide and not a teacher that knows everything.*

In addition, I also thought that it would have been useful for the participants to be introduced to different ESP organisations/ networks/ social media groups that they could be members of as well as Conferences on ESP, in order to expand their network and develop further. Moreover, ideas on resources and material could have been added earlier in the course, before participants had started working on their ESP lesson plans so that they would have an idea on where and how to look for their scenarios, tasks, etc. These could be taken into consideration for the actual implementation of the ReTEESP Online.

I also believed that their lesson plans would have been more efficient if they were given feedback before they implemented them in the classroom; their lesson plans would have

been better processed if they had worked this way. More feedback could follow after the micro-teaching or the delivery of the lesson in an actual class when participants share their thoughts.

Additionally, PSTeacher 6 expressed the view that the course needed to be more flexible and adaptable in order to meet the participants' needs and expectations, exactly as an ESP course. I also felt the same way. Consequently, the content would be determined by the audience every time. Even though PSTeachers benefitted a lot from the course content and from the way the course was delivered, as discussed earlier, and even though many of the tasks were adapted to meet the needs of the teachers, not all teachers' needs were adequately met. The implication was that, as the facilitator, I should ensure that effort would be made to meet the needs of the learners in the actual implementation of the course.

As far as organisation was concerned, participants suggested that things would have been a lot easier if from the beginning there were separate folders for separate groups, if each folder had another separate folder for each activity, and they were already shared with everyone. These should have been created by the facilitator and not by learners themselves, and should have contained the ESP practitioners' reflective journals, so that they would not need to copy and paste the questions from the platform every time they need to reflect on something. This would have made the course more structured.

Presentation of material

Suggestions were also expressed regarding the presentation of the material. In the one of the focus group discussions, PSTeachers 3 and 5 supported that material should be easily accessible, comprehensive but concise. Furthermore, they suggested that the facilitator should present the material in video tutorials, as this would give the course a more personal nature and would make it more interesting and attractive.

Duration of the course

Regarding the duration of the course, in the focus group discussions, both the participants (n=6) and I shared the view that increasing the duration in order to allow more time for the participants to complete the tasks would not be wise, because there might be participants who would not be willing to continue the course for too long. PSTeachers suggested having participants engaged in shorter and more concise tasks that can be

completed in a short period of time, combining some of the units so that the course shrinks, and sending kind reminders to the participants that have missed deadlines. Another idea suggested by PSTeacher 2 was having a set day for submissions. Finally, PSTeacher 6 expressed the view that having a minimum and a maximum time of duration and allowing for flexibility within that period of time could be another solution to the problem. It should always depend on the audience, their commitments and needs.

Technology tools

Regarding the technology tools used for the delivery of the course, the suggestions expressed by the participants were the following: First of all, in the focus group discussions, to eliminate the problem of having two Google accounts (one personal and one for the course), PSTeacher 2 suggested synchronising the Google accounts provided by the facilitator with the participants' personal Google accounts; that would make it easier for them to see all the notifications posted by the facilitator. Secondly, PSTeacher 6 expressed the opinion that the GDrive Folder should have been more structured, with all the folders needed created by the facilitator from the beginning of the course. In addition, a tutorial or a video clip might be needed to guide participants on how to use the tools that would be needed for the course. Furthermore, participants' presence in the closed Facebook group after the completion of the course was regarded as a good idea, since the community would continue to exist this way.

Collaborative work

Regarding collaboration, PSTeachers 3, 5 and 6 suggested that some of the tasks could be delivered individually instead of collaboratively, and that sharing should not be applied to all the stages of the course. This stemmed from the participants' concern regarding sharing their personal work and ideas, and also from the practical difficulties they faced during collaboration. On the contrary, to enhance collaboration PSTeacher 3 suggested that I could assign pieces of the work that can be finished only when other participants step in. Additionally, it was suggested that pairing or grouping should be based on some criteria since participants in such a course are usually people who do not know each other. My idea to pair the participants based on the ESP disciplines they taught was therefore considered logical.

Reflection

On the issue of reflection, it was suggested that a folder for their reflections should be created from the beginning of the course so that the participants are not lost in the cloud; this was suggested by PSTeacher 6 in the focus group discussions. Moreover, in the same focus group, another participant (PSTeacher 3) stated that the questions posed to enact reflection were repetitive, and they needed to be more specific every time. Finally, PSTeacher 6 suggested that constant reflection following every single unit might be unnecessary and might cause repetition. For this reason, only one of the six teachers completed all the reflective journal entries, they were asked to write (PSTeacher 3), as Table 9 shows; most of the participants thought that constant recording of reflections in their journals could have been avoided.

Communication with participants

As far as issues related to communication with participants are concerned, my field notes revealed details that could minimise certain practical constraints, e.g. participants being notified long before the course commences about the tools that will be used for communication so that they create Skype accounts on time, in case it was needed. Furthermore, Google Calendar could be used for the deadlines of tasks, and it could be made known to the participants at the beginning of the course. The same applied for the worksheet illustrating the participants' progress which I would renew weekly.

Participants' motivation

Last but not least, regarding motivation enhancement, all participants in the course suggested having some kind of reward at the end of the course, something the participants could look forward to, such as a membership in an ESP organisation, a book or a voucher. This could motivate the participants and reduce potential withdrawals from the course. Selection of the winner could be done by draw, and all participants should be provided with certificates of attendance. As one of the participants suggested, such a certificate could be even more valid, if the course was offered through a platform of international reputation, e.g. Coursera.

All these suggestions along with the implications stemming from the whole analysis of the data obtained from the pilot study and the results of the participants' needs analysis contributed to the finalisation of the ReTEESP Online curriculum in Stage 1.

4.3.3.5   Conclusion

The pilot implementation of the ReTEESP Online yielded important results regarding the actual implementation of the course indicating positive aspects of the course, challenges faced and numerous issues that needed to be addressed before the actual implementation of the course. The key findings of the ReTEESP Online pilot testing are summarised in Table 10.

The next section describes how the ReTEESP Online curriculum was finalised after the completion of the pilot phase.

Table 10. ReTEESP Online pilot testing: Key findings

Positive aspects of the course	Challenges faced	Ways challenges were addressed	Suggestions for improvements
✓ Very well-organised/ Step-by-step guidance ✓ Teachers enjoyed collaboration ✓ Teachers liked the samples of work given by the facilitator ✓ The instructional technology tools used were regarded as effective, flexible and easy to use ✓ Teachers liked the idea of creating lesson plans ✓ Teachers liked the progress report, quizzes, Power Point presentations, videos and reading materials ✓ Teachers gained new knowledge, new understandings of certain things, remembered already acquired	• Some participants' expectations not completely met • Lack of collaboration in some cases. Participants cooperated rather than collaborated • Teachers often failed to meet deadlines because of other obligations • The course was regarded as overwhelming and demanding in some cases • Teachers felt stressed. Competitive spirit developed • Practical challenges were encountered, mostly related to the use of technology and the fact that	☼ The facilitator adapted the course ☼ The course was extended from three to eight weeks ☼ Units were merged ☼ Micro-teaching was initiated instead of actual teaching in class ☼ Constant guidance was offered to the teachers	➢ The course needed to become lighter in terms of content. More concise and to-the-point version needed ➢ Some Units had to be merged (e.g. Units 1 and 2, Units 3 and 4 Unit 1 Units 5 and 6) and made simpler ➢ Questions to enact reflection needed to be revised to avoid repetition ➢ The content needed to be easily accessible. Better organisation in G Drive folders was needed ➢ Teachers' personal email accounts could be used for communication instead of the G Suite for education

knowledge and were informed about different ESP events	the duration of the course was extended	email accounts to avoid trouble of having many accounts to manage
✓ Teachers exchanged ideas on practices that could integrate in their ESP classes		➢ Clear and stricter deadlines had to be set
✓ Teachers performed well		➢ Emphasis needed to be placed on the construction and delivery of ESP lessons instead of the concept of lesson planning as such
✓ The researcher developed as a researcher, teacher trainer and ESP practitioner. She also gained insights on how to improve ReTEESP Online		➢ Inclusion of more information on ESP professional organisations/ networks/ social media groups/ conferences was necessary
		➢ More collaboration and sharing of ideas had to be encouraged
		➢ Feelings of competitiveness and anxiety had to be minimised. No need for summative assessment; only formative assessment via constructive feedback from facilitator and peers

and individual and collaborative reflection

➢ Enhancement of extrinsic motivation through a prize for one of the participants upon completion of the course

4.3.4 Finalising the ReTEESP Online curriculum

The ReTEESP Online curriculum was based on a review of the literature, an analysis of the 24 language instructors needs in terms of ESP TE and the pilot testing of the programme. After the technical and practical weaknesses of the course were identified in the pilot study, the ReTEESP Online underwent refinement, and it became a 3-Week (maximum 6-Week) free course of five hours per week. The duration of the course became flexible, as the pilot implementation revealed that the participants could not cope with the course workload in three weeks. The course was intended for ESP educators representing different ESP fields or EFL educators who would like to educate themselves on issues pertaining to ESP teaching methodology or update their knowledge on the latest developments in ESP teaching practices. It was designed to be offered online and be flexible, depending on the participants' profiles and needs.

A detailed description of the finalised curriculum can be found in Appendix C, Stage 1: The ReTEESP Online Curriculum, where a general course outline can be found along with details on each of the six sessions comprising the course. The sessions were designed using the template for backward design (Wiggins & McTighe, 2005, p.22), as presented in section 4.3

4.3.4.1 *Theoretical foundations and methods of instruction*

The ReTEESP Online, as its pilot version, was founded on the principles that derived from the literature review presented in section 2.4. It adopted a social constructivist and connnectivist perspective to TE, taking into account the social context in which the ESP practitioners operated and being based on discussion and a constant exchange of ideas, collaboration and networking. The course was based on sociocultural TE models with elements from other TE traditions, especially the reflective model of TE and critical pedagogy. It also adopted a "practising what you preach" approach, since the techniques and methods of instruction used in the course could be used by trainees in their language classrooms.

The course was delivered online, as it aimed at bringing together language instructors who resided and worked in different parts of the world (see section 3.8.1), and effort was made to conform to principles underlying efficient online TE, as these were presented in

section 2.3.5. Following the view that online TE can be successful if it is built on sound pedagogical foundations (Dede, 2006; Duffy et al., 2006; Ketelhut et al., 2006; Maggioli, 2012; Powell & Bodur, 2019), the following methods of instruction were used, which were in line with the learning theories and TE models embraced in this course: interactive online lectures, online discussions, independent reading/ writing/ listening, independent research, individual and collaborative online work and continuous individual and collaborative reflection. New information was presented through online interactive lectures or presentations which the facilitator shared on the course platform, and teachers were provided with useful material which they were encouraged to study on their own and collaboratively. The same methods of instruction were used in the pilot study, and they were positively perceived by the participants and myself.

I, as the course facilitator, served as a guide, sharing good teaching practices and enacting discussions and assigning tasks to stimulate interaction between teachers. Furthermore, following Henry and Meadows' (2008) suggestions on successful online courses, and after experiencing some technical difficulties in the pilot implementation of the course (as seen in section 4.3.3.4), special adjustments were made to the course content (e.g. provision of video recordings and audio support for Power Point Presentations); constant guidance was provided to the teachers, e.g. through video recordings and documents with guidelines uploaded on the course platform, and there was constant communication with me via Messenger and email. I made sure that technology would not be an obstacle to teachers' learning; on the contrary, technology was regarded as a means for bringing everyone together and creating the appropriate conditions for learning.

4.3.4.2 *Aim of the course*

The general aim of the course, as its pilot version, was to help ESP practitioners or future ESP practitioners gain a better understanding of the notion of ESP and its principles and how ESP can be taught. This would be achieved through a careful and structured planning of their ESP teaching taking into account all of the factors involved in the decision-making process. The course aimed at engaging educators in hands-on activities that would enable them to develop in areas associated with ESP teaching and give them the opportunity to implement their new knowledge in their ESP practice. In line with Esteban and Martos (2002), the course also aimed at preparing the teachers how to handle the different ESP disciplines through connecting them with other ESP practitioners and

generally equipping them with the tools needed to get out of the ESP maze. A list with the learning outcomes can be found in Appendix C.

4.3.4.3 Topics and tasks

The ReTEESP Online evolved around topics such as ESP and its characteristics, the ESP lesson planning process, ESP students' needs analysis, resources, tools and tasks for the ESP classroom, the ESP lesson in practice and collaborative reflection on the teaching process. The topics were the same as in the pilot version of the course, since they were regarded as appropriate, on the basis of needs analysis; many participants in the actual study had very little experience in teaching ESP (14 out of 24 had 0-5 years of experience), as the two participants in the pilot study who found these topics enlightening. In other words, these topics touched upon the basic ESP principles and characteristics and, even though ESP is complicated with numerous subfields and parameters to take into account, these topics were appropriate for beginners in the field of ESP. The more experienced participants, could contemplate further, exchange views and go deeper into the same topics. This way, the beginners would benefit from their collaboration with the more advanced participants, and the more experienced ones could benefit as well through their interaction with other experienced participants.

Instead of units the course was organised in sessions; the pilot implementation showed that relating a unit with a session was more manageable and less confusing for the participants. Moreover, as shown in Table 10, some units needed to merge and be made simpler. The course was therefore delivered in six sessions, two sessions per week. The way the topics were reorganised in Stage 1 can be seen in Appendix C.

As far as the types of tasks are concerned, these remained the same, since they were positively perceived by the participants in the pilot study, and they were based on the literature review and the needs of the participants, as seen in section 4.3.3.1. They were only reorganised and reallocated in the six sessions that the course consisted (see Appendix C).

4.3.4.4 Technology tools

The tools that were regarded as the most appropriate for the delivery of the course were the G Suite for Education (Google Sites, Google Classroom, Google Drive, Google Docs,

Google Slides, Google Forms), YouTube, email, Skype, Facebook, Messenger and Doodle. MindMeister, the mind mapping tool used in the pilot study, was removed from the curriculum, as needs analysis showed that some of the teachers were not very familiar with the use of technology; thus, having more technology tools could make it overwhelming for the teachers. Following is the purpose for which each tool was used.

4.3.4.4.1 G Suite for Education

This is the suite of cloud-based tools launched by Google. According to Mell and Grance (2011, p. 2) "[C]loud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction." The G Suite for Education was considered to be appropriate for the delivery of the course, since it was cost effective, convenient, practical, flexible with high scalability (González-Martínez, Bote-Lorenzo, Gómez-Sánchez, & Cano-Parra, 2015). One of the major benefits of cloud technologies is the fact that minimal infrastructure is required; only an electronic device with access to the internet and reliable internet connection. Therefore, it could be easily utilised by teachers who could not have access to specific software or Learning Management Systems (LMSs) that required specialised equipment.

Despite the popularity that the G Suite for Education has gained in the last years (Herrick, 2009; Railean, 2012), the studies which report on the use of the G Suite for Education in TE are limited. Heggart and Yoo's (2018) study is among the few. Its purpose was to examine the effectiveness of using Google Classroom with a group of 33 final year pre-service primary TE students, and the results showed that Google Classroom was very positively perceived by both the students and the instructors and that the platform was regarded as easy to access, and encouraged collaboration and the student voice. Furthermore, it provided students with the opportunity to learn autonomously and enabled the instructors to move on with a quicker pace in the class.

Apart from the evidence obtained from Heggart and Yoo's (2018) study, I had the opportunity to trial the G Suite for Education in my ESP courses at the Cyprus University of Technology (Kakoulli Constantinou, 2018; Kakoulli Constantinou, 2019). Even though the nature of the courses was different, since they were ESAP courses following a blended learning approach rather than being delivered purely online, I had the

opportunity to test the tools, learn how to use them, identify their merits and flaws; thus, I could apply them efficiently to online ESP TE.

The suite was user-friendly, free of charge and there was support at no cost 24 hours, seven days a week. Through our G Suite for Education account the trainees and I had limitless storage space, and we had ownership of our data. The tools that the suite offered allowed for organisation of the course material, easy collaboration, administration of students' work, easy grading and feedback, and also self and group reflection (Google, 2020). Therefore, approaches such as social constructivism and connectivism could be fostered through the use of the suite. Lastly, no advertisements appeared while using the suite. Another advantage was the fact that through the G Suite for Education institutional account that the Cyprus University of Technology Language Centre owned, I could act as an administrator and create as many usernames and passwords were needed and easily manage all these accounts.

The G Suite for Education tools that were used for the delivery of the course were the following:

 - Google Classroom: The platform used for classroom management purposes, where all the instructions and material for the course were uploaded and tasks were submitted and discussed. The platform at the time consisted of the "Stream", the "Students" and the "About" pages. The "Stream" operated as a streamline where I, as the facilitator, posted a new post for every session with all the instructions, materials and tasks for the session. In Appendix D the material for Session 5 is provided as an example of what was posted on Google. The "Students" page was the page where all the participants' names where listed. From this page I could email or mute the teachers/ students, and the teachers could see their classmates' names and contact them via email. Finally, the "About" page was the space where I described the course, the learning outcomes set and the weekly outline and provided a link to her personal website for my biographical information. Figure 12 is a capture of the Google Classroom Stream environment.
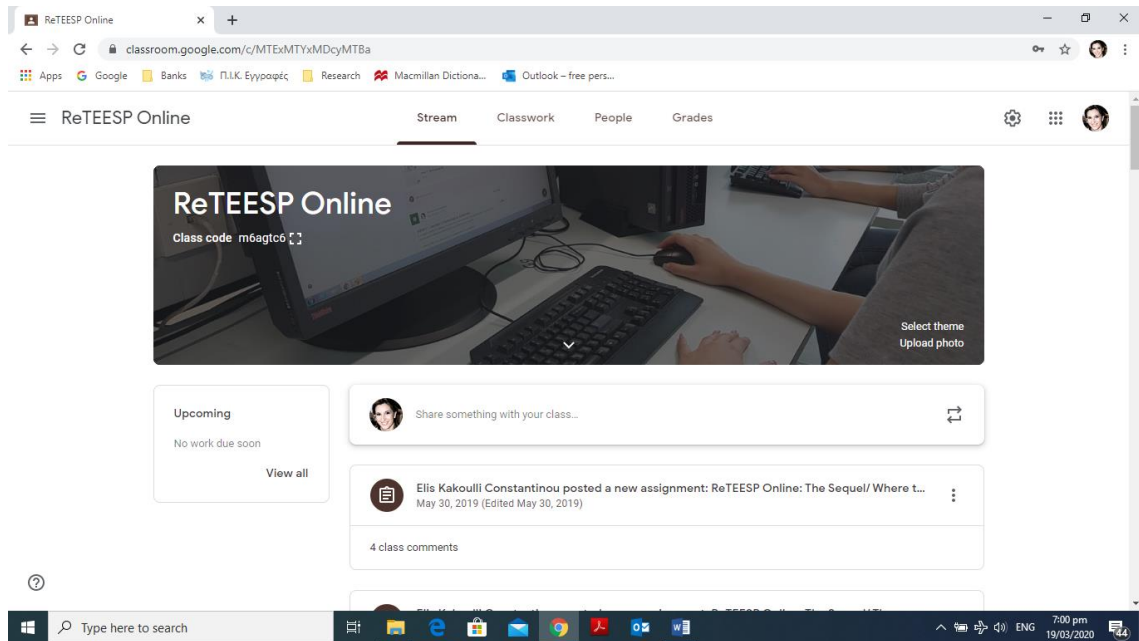
Figure 12. The Google Classroom environment

- Google Drive: The space where the teachers and I saved and shared the material for the course and collaborated. The fact that the teachers could share documents and work both synchronously and asynchronously on them using features such as the "Chat" or "Comments" on the documents fostered communication and interaction and therefore allowed for social constructivist and connectivist learning to occur. Figure 13 shows the ReTEESP Online G Drive environment.

- Google Docs: A tool used for the creation of documents and collaboration and cooperation

- Google Slides: A tool used for the creation of presentations

- Google Forms: The tool used for registering the participants in the course and for the creation of questionnaires and quizzes

- Google Sites: The Web page-creation tool used to create a website for the course (https://sites.google.com/site/reteesponline/home-1). Figure 14 shows a screenshot from the ReTEESP Online homepage.
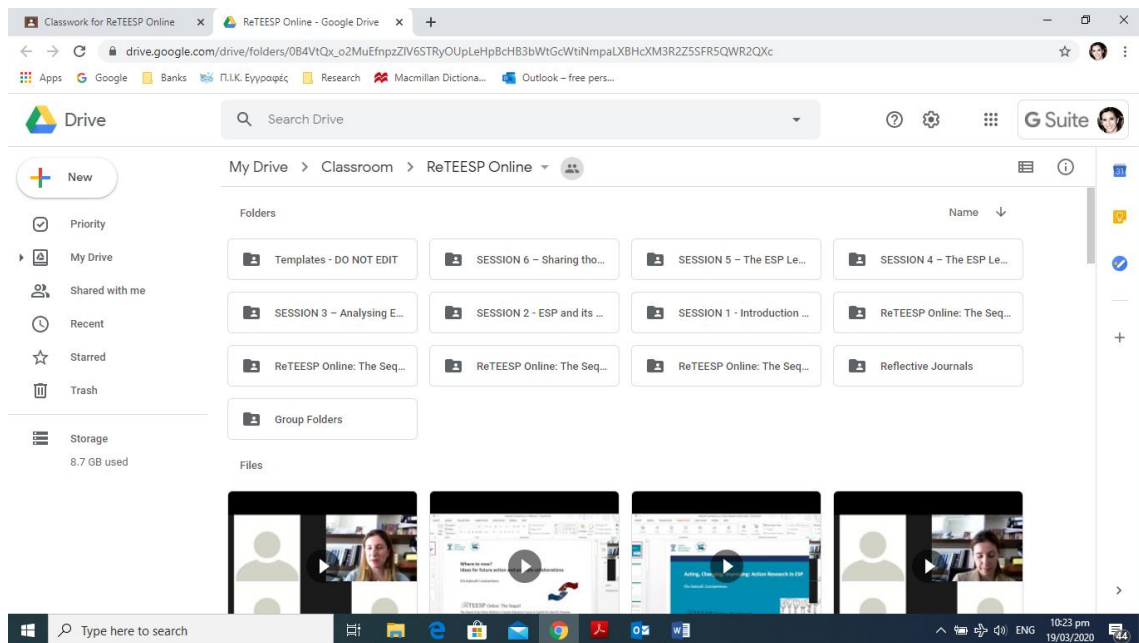
Figure 13. The ReTEESP Online G Drive environment
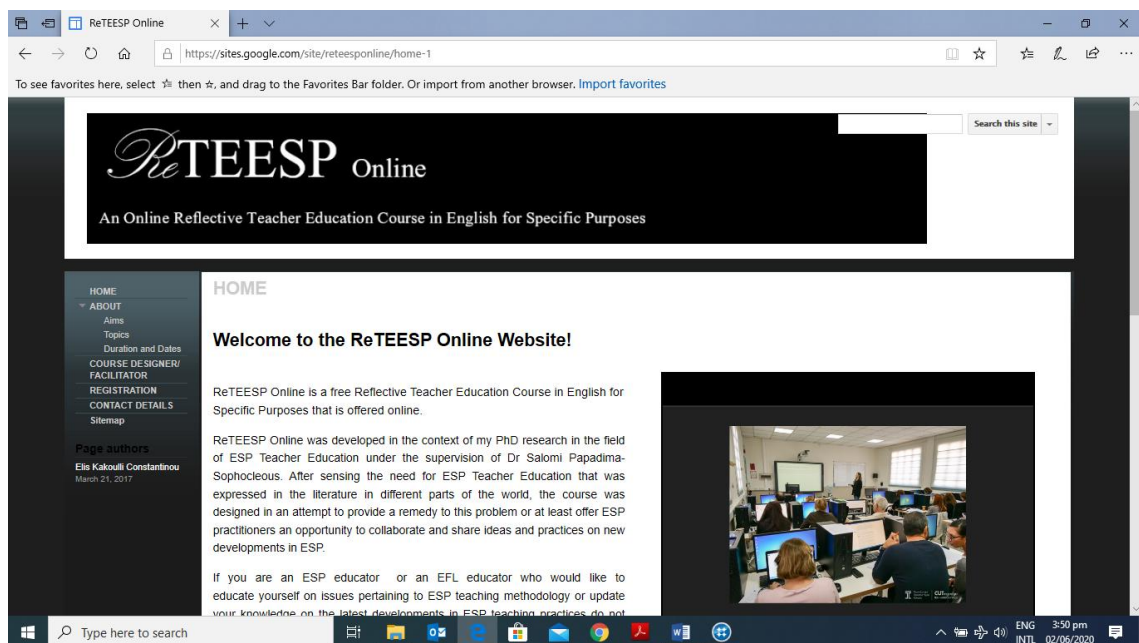
Figure 14. The ReTEESP Online Website

4.3.4.4.2   YouTube

YouTube was used for sharing videos with interesting material during the course. According to Szeto and Cheng (2014), YouTube is one of the most common Information and Communication Technology (ICT) tools used in education with many affordances.

Because of the fact that it has become extremely popular among users, it covers a wide range of topics including teaching methodology issues. Moreover, YouTube videos can be embedded in various platforms. Google Classroom is one of the platforms that allows the addition of YouTube videos under posts; therefore, the tool could be easily used for the purposes of the course.

4.3.4.4.3 Email

The teachers' personal email accounts were used for communication purposes. After the pilot study, which showed that it might be difficult for teachers to manage a new email account (G Suite for Education email) for the course, I decided to use the teachers' personal email addresses to communicate with the them.

4.3.4.4.4 Skype

Skype is a tool used for audio and video calling easily accessible from all electronic devices with internet access, which is used for free and which has many capabilities for education, as Hashemi and Azizinezhad (2011) argue. In the case of the ReTEESP Online, Skype was used for teleconferencing, mainly to deliver webinars/ tutorials, and also at the end of the course for the focus groups/ interviews. Because of the fact that it was difficult to find a common time among all the teachers for synchronous communication, webinars and tutorials took place with teachers being divided in small groups.

4.3.4.4.5 Facebook and Facebook Messenger

Facebook is a social networking site that helps you connect with different people around the world. Based on research which focused on the numerous benefits from the use of Facebook in the educational process in general and TE in particular (Dogoriti, Pange, & Anderson, 2014; Muñoz & Towner, 2009; Yildirim, 2019), a private group named "ReTEESP Online: An Online Reflective Teacher Education Course in ESP" was created for sharing ideas, news, events, articles and good practices, communicating and establishing a team spirit. The group aimed at providing more interesting learning experiences to the participants (Balcikanli, 2015) and also support and strengthen the network, the learning community that was created (Dogoriti et al., 2014; Yildirim, 2019). Figure 15 is a screenshot of the private Facebook group that was created for the purposes

of the course. All the names of the participants have been covered to avoid revealing their identities.

Facebook Messenger was used for communication purposes, in case the teachers faced difficulties and wished to contact me more directly. Communication via Messenger was easier and quicker, since the majority of teachers had Facebook accounts, and they used Messenger in their everyday life.

Figure 15. The ReTEESP Online Facebook group

4.3.4.4.6 Doodle

Doodle is a scheduling software for booking meetings. I used this tool as used often to invite participants to choose among the proposed times for Webinars.

4.3.4.5 Assessment methods

Assessment was formative and ongoing, which is essential in online instruction according to Henry and Meadows (2008) and Maggioli (2012), as in the pilot study. Teachers' performance was evaluated through a variety of assessment methods (Wiggins & McTighe, 2005), such as quizzes and different performance tasks (e.g. designing a lesson plan) followed by constructive feedback by both the facilitator and peers and self-assessment through reflection. The feedback was sometimes individual and other times collaborative. Grading was generally avoided. These assessment methods stimulated

higher-order thinking skills, which is a prerequisite of successful online instruction (Maggioli, 2012) and improves learning (Li, Liu & Steckelberg, 2010).

This section presented the finalised version of the ReTEESP Online curriculum as it was designed in Stage 1 of the study. The section which follows talks about the implementation of the ReTEESP Online in Stage 1 and the findings deriving from this process.

4.4 Implementation of the ReTEESP Online

The ReTEESP Online was implemented with the 24 language instructors in Stage 1 of the study during the period between the 26th of February to the 8th of April 2018. Details regarding the participants in Stage 1 were provided in section 3.8.1. The registrations for the course were made through a Google Form which was published on the course website. As soon as the registrations were completed, all of the registered teachers were provided with credentials (username and password), sent to them via email, to access their G Suite for Education accounts created and administered by me, the researcher and course facilitator.

The course commenced with an introductory Webinar, in which the teachers were introduced to the aims and the technologies of the course. For each new session, a new post was uploaded on Google Classroom with the topics, materials and learning outcomes for the session and detailed instructions on how teachers should work, as in the pilot study. Useful material in the form of videos, presentations, articles and links was uploaded under each new post, and teachers had the chance to engage in individual and collaborative tasks (sample of materials in Appendix D). Group work was shared with everyone in Google Drive, and all participants were urged to provide feedback on each other's work in groups. Simultaneously, a closed Facebook group was run, where teachers could pose questions or share useful information regarding teaching techniques, new publications released, ESP events organised around the world, etc. To communicate with each other and the facilitator, participants used emails and private messages via Google Classroom and Facebook Messenger. Teachers were asked to reflect on their experiences, after the completion of each session. The course closed with a Webinar in which participants had the opportunity to give feedback on each other's work, and reflect on their experiences during the course.

The next section describes reflection on the implementation of the ReTEESP Online, which is the last step in Stage 1 of the study. The data gathered were obtained with the tools that were described in Figure 5, in section 3.9.1.

4.5 Reflection (Results and discussion)

The analysis of the data obtained during the course and after the completion of the course produced useful insights. Thematic analysis yielded three major thematic categories, each of which consisted of various subcategories: A) Participants' characteristics and professional experiences, B) The course experience, and C) Suggestions for improvement of the course. All the thematic categories that resulted from the qualitative data analysis are illustrated in Figure 16. Each category is represented by a different colour. The sections that follow describe the three thematic categories deriving from the thematic analysis. They are organised based on the themes deriving from the analysis (Figure 16).

4.5.1 Thematic category A. Participants' characteristics and professional experiences

The first thematic category that derived from the analysis involved information related to the profiles of the participants, and more specifically details about their educational and teaching backgrounds, the reasons for which they attended the course and their expectations. Details regarding teachers' education and research interests are not to be discussed for purposes of maintaining the teachers' anonymity.
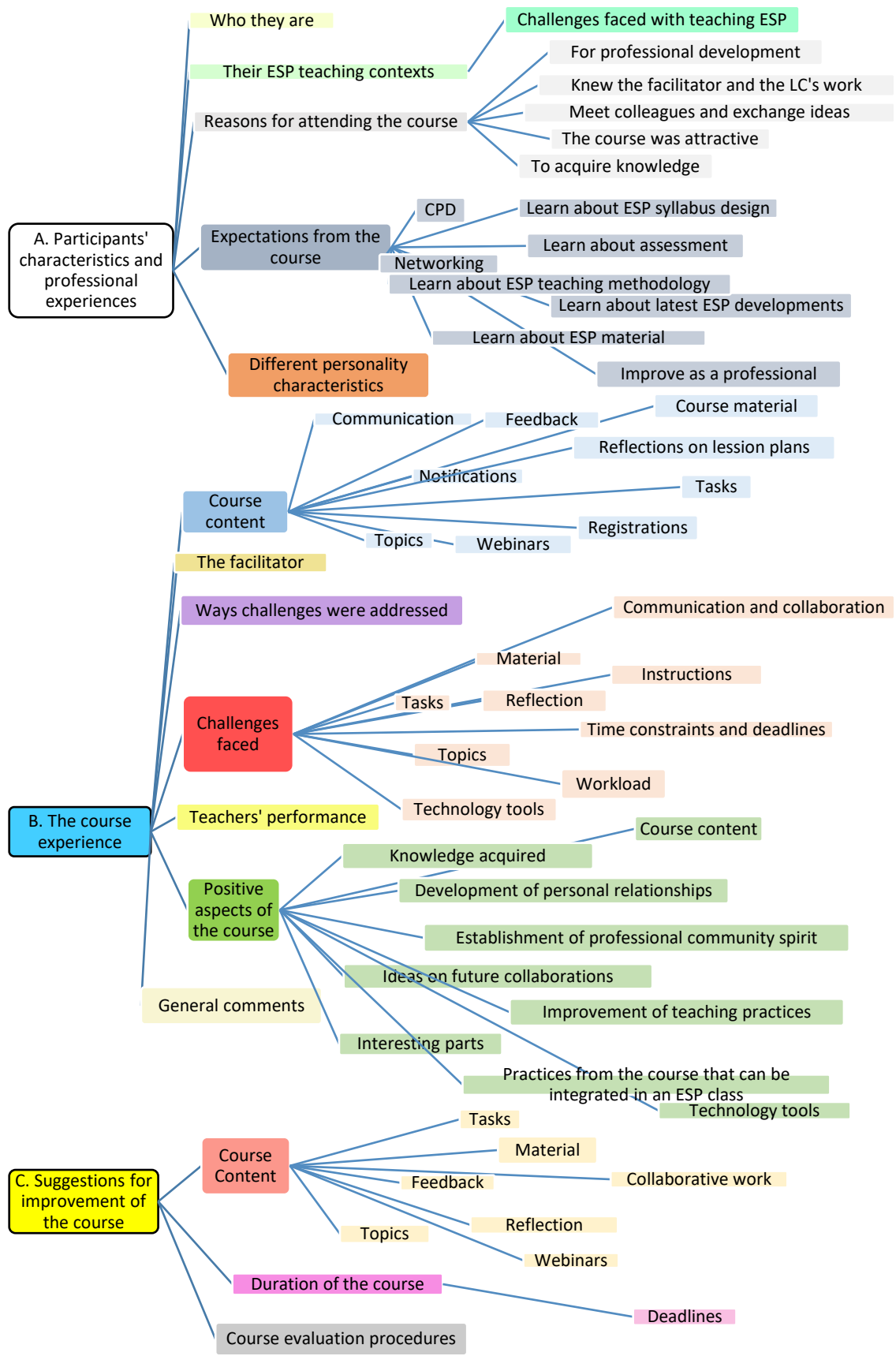
Figure 16. The thematic categories that derived from the study in Stage 1

4.5.1.1 *Teachers' ESP teaching contexts*

Regarding aspects of the teachers' teaching contexts, data revealed mainly challenges that they faced in their teaching. More specifically, a common challenge that many teachers faced was lack of resources, especially technology resources, and funding (n=4, 16.66%). This was expressed by teachers form Greece, Spain and Egypt and was mainly the result of the recent global economic crisis. Teachers 11 and 12 from Greece talked about the educational reforms that were taking place in the country at the time, and their constant uncertainty about the future. With regards to Egypt, Teacher 14 also stressed that in the Middle East things were worse than in Europe, and the opportunities for continuous professional development (CPD) were very few, therefore he expressed his deep appreciation for the opportunity for development that he was given through this course and the need for more support of ESP practitioners by stakeholders.

Other challenges mentioned were teachers' constant effort to enhance students' motivation (n=4, 16.66%), the different levels of students (n=4, 16.66%), difficulties in finding appropriate material (n=4, 16.66%), and students coming from diverse cultural and linguistic backgrounds (n=3, 12.5%). Teachers also stressed the difficulty of balancing the divergent learning needs of students (n=3, 12.5%), with one of the teachers emphasising that often the beliefs that learners have regarding their needs are very different from the course designer's/ instructor's. Moreover, teachers from Greece raised the issue of having large audiences in their courses, which made the lesson less interactive and more lecture oriented (n=2, 8.33%). The same teachers, Teachers 11 and 12, also mentioned lack of communication amongst ESP practitioners in Greece and lack of events related to ESP organised in the country. Teacher 11 also said that some colleagues failed to realise the importance of CPD and lifelong learning. Teachers 14 (Egypt) and 15 (Greece) also talked about how "certificate-bound" their countries were, in the sense that any CPD opportunity had to result in a certificate in order to be officially recognised. Other challenges mentioned by the teachers were students' reluctance to accept innovations (e.g. the flipped classroom) (n=2, 8.33%), difficulties faced in the teaching of certain terms that needed specialised knowledge (e.g. music terms such as sharp (♯), flat (♭)) (n=1, 4.16%), and failure to keep up with updates in the field (n=1, 4.16%). Finally, one teacher also mentioned the daily workload of an ESP practitioner (4.16%),

while other teachers stressed time constraints (4.16%), and being asked to teach ESP in very short notice with no preparation (4.16%).

Many of the challenges mentioned by the teachers were universal, since similar challenges were listed in Campion's (2016) study. Apart from referring to the development of specialised knowledge by the ESP practitioners as the major challenge, Campion also acknowledged the difficulties of organising formal training opportunities for practitioners. As some teachers in the present study, Campion also recognised the value of informal learning opportunities such as collaboration with colleagues, and raised the issue of self-directed development and how much teachers understand the benefits of being involved in such activities.

4.5.1.2 *Reasons for attending the course*

The qualitative data obtained during this stage of the study also revealed some of the reasons for which teachers attended the course. These were the teachers' wish to meet ESP practitioners and exchange ideas on ESP teaching practices and possible future collaborations (n=7, 29.16%), their wish to acquire knowledge related to ESP teaching practices (n=7, 29.26%) and also their need to develop professionally (n=1, 4.16%). Additionally, a teacher pointed her acquaintance with me and her admiration of the work being delivered by the CUT LC (4.16%). Similarly, another teacher stated that the course appeared different than others and very promising (4.16%). Following are some indicative participants' statements on the Google Classroom platform at the beginning of the course:

> *I decided to attend this course because ESP is...my job!! My everyday reality!! My passion, my research focus, the half...or sometimes even more...of my daily schedule! I want to meet new colleagues, people who share similar concerns, experiences, problems, solutions!* (Teacher 23)

> *I joined the course as I do not feel well-equipped to teach ESP, especially academic English, whose complexity I acknowledge both as a teacher and as a postgraduate student. I can see that ESP is becoming more and more prominent and I would like to be more involved in its teaching, As I am about to complete my master in a few months, probably I will have the minimum requirements to teach Academic English but I know I lack experience and guidance.* (Teacher 5)

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These results are similar to the results of Chostelidou, Griva and Tsakiridou's (2009) study which identified the following incentives behind language teachers' wish to attend an ESP training course: improvement of language teaching methods, training on ESP syllabus, update on ESP teaching methods, strengthening of self-esteem, promotion of professional growth, financial incentives (extra payment on salary) and exchange of ideas with colleagues. While in Chostelidou, Griva and Tsakiridou's (2009) study the idea of exchanging ideas with colleagues was among the last on the list, in this present study networking and exchanging ideas were mentioned by many of the participants, who appeared to appreciate the idea of sharing and learning from each other, which is the governing principle of connectivism.

4.5.1.3 Expectations from the course

In relation to teachers' expectations from the course, eight language teachers (33.33%) stated that they expected to learn new things and develop their ESP teaching methodology, become part of a network of teachers where they could learn new things from colleagues (n=5, 20.83%), and also learn about the latest developments in the ESP field (n=5, 20.83%). Furthermore, teachers expected that the course would help them to develop professionally (n=5, 20.83%) and also plan their courses and their lessons more effectively (n=4, 16.66%). One participant stated that she expected to learn more about ESP assessment methods (4.16%) and another about the latest ESP material released (4.16%).

4.5.1.4 Different personality characteristics

During the course, different personality characteristics among the teachers were observed, such as some teachers' eagerness to directly contact me and other teachers regularly, commenting and asking for new information (n=2, 8.33%). Such attributes were observed mainly in some cases of teachers from Middle East countries. Despite the fact that research on cultural differences in online learning is not extensive, studies have shown that there is a significant cultural group difference in learning style preferences of learners with diverse cultural backgrounds (De Vita, 2001; Donggil & Eunyoung, 2011). According to Donggil and Eunyoung, learners from Middle East countries have an active learning style, in other words, they "like being involved in the outside world and enjoy testing in many ways (e.g. discussing and commenting)" (2011, p. 135). Nevertheless, in

this study such differences are treated as personality characteristics since, due to the small sample, it is not possible to reach the conclusion that they are culture related.

These were the findings that thematic analysis yielded in relation to the first thematic category, which concerned participants' characteristics and professional experiences. Discussion now turns to the second thematic category, the course experience.

4.5.2 Thematic category B. The course experience

The second thematic category that resulted from the data analysis involved issues pertaining to the course experience, and more specifically, the course content, the facilitator, different challenges faced during the course, changes made, positive aspects of the course, and the teachers' performance.

4.5.2.1 General comments

Starting with some general comments, the teachers and the facilitator spoke positively about the experience they had with the course. Teachers stated that they enjoyed it (n=8, 33.33%), while some of the adjectives teachers they used to describe the course in general were: very interesting experience (n=6, 25%), well-prepared and highly organised (n=4, 16.66%), informative and useful (n=4, 16.66%), enriching (n=1, 4.16%), enlightening (n=1, 4,16%), rewarding (n=1, 4.16%), helpful (n=1, 4.16%), fun and great (n=1, 4.16%). Following is an extract from one of the interviews conducted after the completion of the course:

> Teacher 20*: Yes, I was saying that on the whole I found it quite informative, very useful. In particular, shall I tell you what I liked in particular?*
>
> Facilitator*: Yeah, whatever you want to say, please. I was going to ask you anyway.*
>
> Teacher 20*: OK. So, I really liked the fact that we had to work with people.*

Teacher 8 stated the following:

> *It was a very enriching experience. I'm very happy I did it because I learnt a lot.*

Teacher 11 gave the following general comment:

> *For me I think it was very helpful, very interesting, very well-organised and no real challenges, I think.*

4.5.2.2 Course content

As far as the course content is concerned, data included references to different course elements and processes that both the participants and I followed. More specifically, in our reflections, the participants and I recalled the topics and tasks that were covered in each session; therefore, data included all sorts of information including details on course registrations and descriptions of what each session involved. Data from my field notes also revealed processes followed to build the course. This information will not be discussed here as it consists of description of processes as they occurred during the course, which can be found in the previous sections and in Appendix C, in the ReTEESP Online Curriculum.

The participants in the course also provided information regarding the tools they employed to communicate with each other, in order to complete the tasks. Representatives of two out of the five teams of the teachers mentioned that they used Google Drive and Google Classroom in order to communicate with each other.

Reference was also made by a few teachers to the ways they were notified about new posts. Three teachers noted that they were informed about new posts and material from Google Classroom and the Facebook closed group that I maintained for the programme, while two teachers also mentioned email.

Another element that the course involved that is worth discussing was the feedback that I gave to the teachers and that teachers gave to each other. Especially towards the end of course, where they had to comment on each other's major assignment, that is the design of a lesson which they had to teach in their classes, it was evident that the constructive feedback helped the teachers think about their practices and eventually come up with solutions on how to improve them. This process also helped them learn from each other. This is a characteristic part of a discussion Teachers 19 and 22 had during the Webinar, in which they had to give feedback on each other's lesson:

> Facilitator: *Ok. Who wants to go first? [Teacher 22] would you like to be the first?*
>
> Teacher 22: *Yeah. I really liked your ideas* (Teacher 19's ideas)*, and because I also teach the passive, I've never taught it like this, and I really like what you've done with them, both the YouTube and the songs, and I also like what Elis said*

with the ATM, I went to the link to check it out and then I saw it was a list about the ATM and I realised it was a nice way to teach the passive voice and to engage in the activities in this way. But generally, it was really nice, and I think it is easier to understand the passive voice this way, because it's not easy for them to understand how the passive works.

Teacher 19: *It's not easy because we don't teach it in a way that is meaningful for them. We teach them the rules, this is what I did last year, I gave them the examples and the rules and we practised, so this lesson was all about getting them to really use it and understand how it worked in a meaningful way. I think that's what is important.*

Teacher 22: *I really liked it, especially the ATM, and if you don't mind, I would like to use it with my students for the passive voice…*

Another part from the same discussion:

Teacher 19: *To be honest with you that was my second lesson plan. I wrote it down, I taught it and then I decided not to present it to you, because it was a bad example of what we've been doing here, so I had to change it, because I used a text from our book and then I realized that I hadn't used any authentic materials, and I did not have something specific in mind, specific tasks to teach in a specific way. I did it the way I usually do it in a General English lesson for students. So when I changed it around and tried to do it in a different way, addressing a different audience then I had a different lesson plan, and this made the difference. I wish I had the time to do this process every time, with every group…*

Facilitator: *Look, let me tell you something. It's not bad to use the book. Everybody uses a book. In fact, I believe that it is something that provides stability to the students. It's a reference tool that they have. They can go back to their book and have a look at the grammatical structures, you know things that they did… It's not bad to be using the book. We also use books for the University students.*

Teacher 19: *Yes* (speaks simultaneously).

Facilitator: *It's not something which is prohibited, but if you have the opportunity to enrich your lessons with something authentic or if your books are selected*

having in mind this element of authenticity, this element of motivation that the students should have, then it's gonna be fine.

The following dialogue between two other teachers shows how they gave feedback to each other constructively, without criticising and being judgmental of the work produced by their colleagues. This was either due to the fact that being teachers, the participants in the course might have been aware of the benefits of constructive feedback or because I first tried to provide teachers with constructive feedback from the beginning, stressing the positive points of their work and suggesting things that could potentially improve it. Teacher 15 was a GE teacher who wished to learn more about ESP teaching and tried to implement ESP aspects in her GE class.

Teacher 14: *May I suggest something [Teacher 15]?*

Teacher 15: *Yes, of course.*

Teacher 14: *You could mention something about airspace museum or something about airplanes and you should take them for a visit. But kids would love that.*

Teacher 15: *Actually, we don't have such a museum, but we use our imagination.*

Teacher 14: *Yeah, and also the internet has tones of resources like that. Tones of resources and videos. Frankly speaking let me tell you a little secret that I do. I use the news. One of the main resources that I use in my ESP is the news. The news for me whether it's CNN or BBC is current and updated, what we call authentic material. If you want to see how language works listen to the news. So, if you did research there, in the topics in the news about the Right brothers you would find documentaries, many many things you could give them as links and they can do them at home and come back and discuss, as you know, and you can take it from there.*

Previous research in education has proved that the provision of constructive feedback is beneficial for both the person who provides the feedback and the person who receives it. Li, Liu and Steckelberg's (2010, p.532) study showed that active involvement in the peer assessment process improves learning, and "the more constructive feedback students are able to give their peers, the better they perform on the task".

Apart from peer feedback, a big part of the course concerned reflection, from which teachers appeared to have benefited as well. The following extract was taken from Teacher 18's reflective journal, in which she described her effort to implement the lesson she designed with her ESP class.

Moreover, while in most classes I plan the progression of the activities in my mind, this time it was rewarding for me to see that what I had thought of in detail before class could actually be practised in real time. While class was in progress, I kept thinking of changes I could make on the plan, in order to fit tasks (especially task rubrics) into that day's class content and students' willingness to participate.

In an effort to connect learning theories with actual teaching practices, I think that the benefits of connectivism and constructivism should be reflected in tasks, whose successful completion requires collaboration, the use of the web and critical thinking skills. So, we should begin with classroom tasks, which practice all four skills (reading-writing-speaking-listening) in an integrated way, but also the 21st century skills, without which our student cannot become autonomous learners and acquire indispensable life-skills. If we practice such activities and skills in class, our students will hopefully learn how to act like this in real life. However, as teachers, we need a lot of inspiration, energy and time to think of such tasks, as well as training and collaboration with other colleagues, because this is not an easy effort.

In the extract, the trainee reflected on her lesson plan and its implementation trying to synthesise what she learnt from the course with her everyday reality. She seemed to have realised how important the theories of connectivism and constructivism are and how these should be reflected in the tasks that she assigned to her students. She mentioned the practice of all four skills and 21st century skills, which was stressed in the course, and she appeared to have thought of these issues in depth, since she admitted that to achieve all these was not an easy task for the teachers, who needed to collaborate with their colleagues for better results. Apart from the benefits of reflection, as these were pointed out by Schön (1983), Wallace (1991), Prosser and Trigwell (1999), Ramsden (2003) and Bolton and Delderfield (2018), this process of reflecting on the lesson was considered as useful and enlightening by Lee (2008). Lee's study, in which the researcher investigated

the case of lesson study in Hong Kong, proved that through studying the lessons, teachers developed professionally, learnt to see things from students' perspectives and that their views and decisions were respected.

4.5.2.3   Challenges faced

Apart from the content of the course, the data obtained also concerned different challenges that were faced during the course. These challenges revolved around issues such as the course topics, tasks, material, workload, technology tools, instructions, time constraints and deadlines, communication, collaboration and reflection. Table 11 shows the challenges faced during the course with the number of files referring to them and the number of references made to them by the teachers and the facilitator.

Table 11. Challenges faced during the course

Challenges faced during the course	Files	References
Time constraints and deadlines	17	47
Technology tools (Skype, Google Classroom, Google Drive, G Suite for Education accounts, Facebook)	10	33
Communication and collaboration	16	23
Tasks	5	8
Workload	3	3
Reflection	2	2
Instructions	2	2
Material	2	2
Topics	2	2
Total	25	122

As seen in Table 11, one of the biggest challenges faced by both the participants and myself was time constraints. Due to heavy workload and limited time, I worked hard to

administer the teachers' work, send them feedback, new materials and tasks on time. This was evident in her entries in my field notes.

> *Yesterday, Thursday 5th March I posted Session 3 in the afternoon. I notified everyone in the closed Facebook group about it. I worked late on Sunday night and early on Monday morning to prepare the material, because I had classes and meetings later on. I uploaded the material, which included organising the teachers into groups. The administrative work is too much, and this does not allow me the freedom of working on the course content.*

> *Today I reviewed all the responses to the tasks, saw everybody's reflections and gave them feedback. There are some people whom I have to contact e.g. [Teacher 24] and [Teacher 1] still have incomplete tasks. We spoke via Messenger. I still need to contact [Teacher 20] and [Teacher 3]. They did the quiz, but not the other tasks which obviously required more engagement.*

Time pressure was a challenge felt by the teachers as well, since 50% of them (n=12) expressed this either in their reflections or by sending me messages via Messenger or in the focus groups and interviews in the end. This is an indicative extract from one of the focus groups:

> Facilitator: *Let me ask you about certain challenges… Did you face any particular challenges with the course? Anything?*

> Teacher 18: *Not, really. Apart from the fact that, OK… even though this does not have to do with the course, time was a limit because I wanted to do everything I had to do, in order to be able to follow the course, so that was the only thing that… but it was OK.*

The following extract was taken from Teacher 10's reflective journal:

> *This week has been hectic. Nevertheless, the material and the tasks for this session were once again easy to follow (straightforward instructions). I wish I had more time to collaborate with colleagues.*

To add to this, we also had to deal with the issue of time difference, since participants came from different countries and in some cases from different continents. Time

difference sometimes created confusion, and even though each participant was automatically sent the time of the Webinars in their own time zone, teachers still had doubts and sometimes they sent me messages to confirm that they had understood the information correctly.

Teachers also encountered certain challenges with the technology tools used for the course. More specifically, Teacher 9, who had not used Skype for some time, sent me messages asking for instructions on how to join the Webinar. Also, some teachers who used Firefox (web browser) faced difficulties with Skype and where instructed to switch to Google Chrome. For the teachers who could not attend Skype Webinars, I decided to repeat the Webinars on a new date and time. I also encountered some technical difficulties related to the sound in one of the Webinars, and therefore I had to use my mobile phone to conduct the Webinar, which eventually worked well. For all these reasons, I was reluctant to use Skype with all 24 participants; I repeated the Webinars many times with smaller audiences instead.

Some teachers also faced challenges with Google Classroom. More specifically, six teachers (25%) mentioned that they came across some kind of difficulty, at least one time with Google Classroom, with one of them saying that she did not like the interface (4.16%). Problems faced had to do with not being sure whether an assignment was submitted, figuring out how the platform worked and finding their way around Google Classroom mobile application. As far as Google Drive was concerned, three participants had difficulties with finding the folders shared with them at the beginning (12.5%). Another problem encountered by Teacher 18 was the fact that she did not know how to access the document she worked on in Google Drive. Teacher 11 also expressed the view that moving from one folder to the other was challenging for her. Moreover, another challenge faced was the difficulty of some of the teachers at the beginning of the course to understand where to post their first assignment. This was due to the fact that most of the participants were not familiar with the G Suite for Education tools, and it meant that my instructions should have been simpler and clearer.

Regarding their G Suite for Education accounts in general, only two teachers encountered some kind of difficulty (8.33%) at the beginning of the course. Teacher 15 confused his personal Google account with the G Suite Google account provided to him and could not

have access to the course material. Teacher 5, on the other hand, faced problems with logging in her account, and I had to reset her password.

With regards to the Facebook closed group that was maintained for the course, this was generally well-accepted by the participants. Two of the participants however (8.33%) did not have a Facebook account, because they considered Facebook as a tool purely for social networking that could not be used on a strict professional basis. These two teachers did not wish to create Facebook accounts, and this was respected by the facilitator who did not wish to impose the use of Facebook on the teachers. Nevertheless, recognising the value of social media in learning nowadays and in the creation of bonds between online community members (Dogoriti et al., 2014; Yildirim, 2019), I decided to maintain the private Facebook group, despite the decision of the two teachers not to participate in it.

The next challenge that teachers faced during the course related to the communication and collaboration they had with each other. As mentioned earlier, they contacted each other using tools such as Google Classroom or Google Drive or through commenting on the closed Facebook group, but this was done mostly asynchronously. Teacher 14, also tried to contact other teachers via Facebook Messenger asking them for advice and ideas on ESP material, with no response nevertheless. This could be due to the fact that participants were not familiar with each other and hesitated to establish any form of relationship with each other outside the course boundaries, especially at the beginning of the course. Moreover, Messenger is a social networking tool which is used mostly for personal communication, and in this stage of the study I did not suggest its use, as the facilitator of the course. Another possibility could be that teachers hesitated to share their material and ideas on a private basis, and they felt better to operate within course limits. However, the majority of the participants felt comfortable with sending me private messages via Messenger or emails for help, advice, clarifications or to comment on something (n=14, 58%).

The following extract from one of the interviews is indicative of the situation:

> Facilitator: *Let me ask you something. How did you communicate with your group-mates?*

Teacher 9: *Ok. In fact, we didn't communicate so much. Ok... There was, this task we were working on and basically what we were doing, I think [Teacher 23] was the first one to...was it [Teacher 23]?*

Facilitator: *and [Teacher 18] I think...*

Teacher 9: *(she pauses to think)... they were the first ones to share their ideas, and then we did. There was no synchronous communication as such. I sort of started like a chat and we asked questions, and I remember asking something, but it was sort of difficult.*

Facilitator: *Ok, let me ask you, why was it difficult, was it because of time schedules or was it anything else? I mean...*

Teacher 9: *I guess so... I mean we tried in a way doing what we had to do, but we didn't do any serious attempt like to arrange a meeting like me and you now.*

As far as collaboration is concerned, my criteria for organising the participants into groups were their previous teaching experience (teachers with common ESP disciplines were grouped together) and common educational contexts. Nevertheless, Teacher 14 expressed his disagreement with the second criterion, stating his wish to interact and work with colleagues from different educational contexts, and acquire new knowledge this way. Moreover, due to lack of time, as they stated, instead of collaborating, teachers often cooperated (n=8, 33.33%), despite the fact that collaboration was included in the instructions. This challenge was faced in the pilot study as well. According to Hathorn and Ingram (2002, p.33), "collaboration can be defined as the interdependence of the group participants as they share unique ideas and experiences", whereas cooperation involves "dividing the work and delegating a portion to each individual". In order for collaboration to occur, Hathorn and Ingram (2002) support that the group needs to have a group goal and equal participation, and there needs to be interaction, interdependence, independence from the instructor and group members should be synthesising information to reach new insights. Recognising the value of both processes as necessary in social constructivist learning, Paulus (2005) argues that collaboration entails a shared meaning of the process, therefore it is very useful in the learning process. Even though, only eight participants reported that their group work involved mostly cooperation, the results

indicated that I should probably reconsider the instructions on tasks, to somehow make collaboration a prerequisite for the completion of the task.

Teacher 9 attempted to give an explanation to this, by stating the following:

> *You cannot change people. Everybody knows that they have to… I mean it's this kind of thing, this situation. It's different with real University students, where you have to give them a mark, etc. But, yeah, communication is a little bit difficult or challenging. It's nobody's fault* (laughs).

Her comment implied that when learners are officially assessed in a course, they are motivated to follow the instructions of the facilitator more meticulously. However, in cases where learners have only intrinsic motivation, such as the case of the ReTEESP Online, it is more difficult for the learners/ teachers to show the same commitment, especially when they have other obligations as well.

Furthermore, some teachers stated that some of the tasks were challenging. More specifically, Teachers 10 and 22 found the task of thinking of ten questions that they could use to conduct needs analysis challenging. Teachers 22 and 15 also pointed out that designing a lesson plan while thinking about all the parameters mentioned in the course was challenging for them. Finally, Teacher 10 stated that the lesson plan made her feel a bit constrained. Additionally, Teacher 15, felt that the tasks that demanded interaction were challenging because she did not feel that she had the academic background to respond efficiently.

With regards to the course workload, one teacher, Teacher 9 expressed the view that the course was overloaded and that was challenging for her because she felt overwhelmed with the time pressure and the workload, combined with her personal life and work schedule.

Another challenge mentioned by Teacher 12 was reflection. Claiming that she had not been engaged in a similar activity before, it took her sometime to understand what reflection involved.

Additionally, in one of her entries in her reflective journal, Teacher 10 observed that some of the material on Learning Theories were difficult to comprehend.

As far as topics are concerned, Teacher 17, said that she found challenging the fact that she realised how many topics ESP covers, and how many issues she should take into account when teaching ESP.

4.5.2.4 Ways challenges were addressed

During the course, I tried to address the participants' needs and the challenges they faced, by communicating with them regularly and providing feedback in order to eliminate any feelings of isolation. Changes, such as provision of more material, rearrangement of groups, extension of deadlines, etc. were introduced to minimise challenges. Moreover, to facilitate learning, motivate the learners and reduce the levels of anxiety, I tried to cater for different learning styles through using various delivery modes and no grading in assessment procedures, just constructive feedback by both their peers and myself and reflection. I also arranged live sessions regularly.

Challenges faced during the delivery of the ReTEESP Online, i.e. technical difficulties, lack of time to dedicate to the course, participants inability to coordinate with each other, difficulties with tasks, etc. are faced in online courses in general. According to Gillett-Swan (2017, p. 21), one of the major problems in online learning in general, is the creation of "one size fits all" courses, in other words courses based on the assumptions that learners share the same knowledge, and have the same skills and experiences. In such cases, when some learners cannot perform adequately, they develop feelings of isolation and their motivation drops; for this reason, it is important that the facilitator is always ready to adapt the course to the needs of their learners/ teachers, be supportive and have good knowledge of technical issues to help the learners. It is also necessary that the delivery modes cater for all learning styles, and the same applies for the assessment methods. Hew and Cheung (2014) focused on the motivations and challenges related to instructors' or students' use of MOOCs. Their study revealed that the challenges for students involved lack of incentive, a lack of focus on the discussion forum, having insufficient prior knowledge about the topic, ambiguous assignments and course expectations, failure to understand the content and having no one to turn to for help, and lack of time due to other more important priorities and commitments. Facilitators faced lack of student response in the online discussion, a sensation of speaking into a vacuum due to the absence of student immediate feedback, heavy demands of time and money and issues about evaluating student work. Despite the fact that literature shows that there are a lot of advantages

connected with learning through MOOCs, and despite the similarities of ReTEESP Online with some of the challenges encountered in MOOCs, ReTEESP Online was not designed to be a MOOC, because it was based on the needs of a specific group of language educators, and it was flexible and adaptable.

4.5.2.5 *Positive aspects of the course*

Apart from the challenges met during the course, data also revealed many positive aspects of the course as these appear in Table 12. As Table 12 shows, a total of 370 references were made to positive aspects of the course out of 41 data files, whereas in Table 11, the references to challenges were only 122 and the data files 25. These numbers prove that the positive aspects of the course were more than the challenges encountered.

Table 12. Positive aspects of the course

Positive aspects of the course	Files	References
Course Content (material, tasks, reflection, collaboration, organisation, topics, methodology)	36	161
Practices that can be integrated in an ESP class	23	53
Knowledge acquired	27	52
Interesting parts from the course	15	37
Technology tools	11	20
Development of professional community spirit	15	25
Ideas on future collaborations	8	14
Development of personal relationships	6	8
Total	41	370

In relation to the content, the course material appeared to be one of the most widely recognised positive aspects of the course. Teachers liked the material and the ways it was presented (through live sessions, Power Point Presentations with audio support, documents created by the facilitator, articles) (n=15, 62.5%), and they were happy to hear that this material would be available even after the completion of the course. Having in

mind that only 17 out of 24 language educators (70.83%) managed to successfully complete the course in Stage 1, as mentioned in section 3.8.1, it could be claimed that almost every participant who completed the course was pleased with the course material. Teacher 11's comment in her reflective journal is representative of how teachers felt:

> *Session 4 on learning theories but mostly on resources -use of material and various technology tools was quite illuminating. I enjoyed reading the guide on resources and tools, and even more the comments and suggestions from colleagues. Some of the ideas and practices are really interesting. I would like to have a more careful look on the software and applications suggested as I already use a few of them but as it turns out there is much more to explore!*

Teacher 18 also added that the documents were short and to-the-point and that the information about the different ESP journals and professional associations that I had shared with them was very useful and motivating to start becoming engaged in research.

Apart from the material, teachers thought that the assignments were useful too, and appeared pleased with the tasks. Specifically, some teachers expressed the view that the lesson plan was a good way to revise everything they learnt (n=10, 41.66%). They liked the variety of ideas that were shared through the lesson plans, and Teacher 14 added that lesson plans were good for reflection and quality control. Two teachers thought that the sample lesson plan was very useful. Teachers 19 and 22 were also pleased with the needs analysis task with Teacher 19 admitting that she had never thought of conducting needs analysis so meaningfully and accurately before.

These are Teacher 19's words:

> *The assignments were really thoughtful because they have things that I will be using again. The lesson planning process and the needs analysis, I mean, we all need to do that, especially for me, because I teach GE classes and I do know my students and I know that, the fact that I have to sit down and think about their needs again, and I have to think about their profiles and how they can be instructed and how I can take all these into account when creating a lesson plan. I mean this was all very helpful.*

Teachers also referred positively to the idea of reflection (n=8, 33.33%) with many of them stressing how useful and insightful reflecting on one's practice is. Teacher 11 wrote the following in her reflective journal:

> *Reflection is an ongoing process; the more we practise, the deeper (and the more enjoyable!) it can become. As teachers and especially as ESP practitioners with all the multifaceted roles we hold, we can't help revisiting and evaluating the success of the lesson, in both planning and teaching. But most of the times what practically happens due to lack of time, of course, is that the process of reflection is done rather at a surface level; we don't actually put everything down in an organized and detailed way. I'm glad that this online course initiates (and is based on) the reflection process.*

Comments written by the teachers in their reflective journal and things said in the interviews and focus groups showed that collaboration too was positively perceived and regarded as useful by the teachers (n=10, 41.66%). Even though in some cases teachers were engaged in cooperation rather than collaboration, they enjoyed working together, exchanging ideas, and sharing information on how to improve their teaching practices.

Teachers also acknowledged that the course was well-organised and structured (n=10, 41.66%). Here is what Teacher 23 stated in one of the focus groups:

> Teacher 23: *Thank you, because I'm sure you spent so much time preparing this. It was very obvious that you had spent so much time preparing things, every single slide, every single document and it was, I mean the organisation was absolutely very, very well-planned and well-organised. Seriously, congratulations* (Teacher 10 nods affirmatively, smiling, showing that she agrees)*!*

Furthermore, six teachers (25%) found the course comprehensive in terms of the topics covered.

Teacher 20 said:

> *I think there was quite a lot of information, it was a short course, not a long one, but it did have information on learning theories, on designing courses on needs analysis on ESP, so I think there was a lot of information there and it is a good*

springboard if you want to give someone information. So, given the tight limitations I think it was quite comprehensive.

Special reference was made to needs analysis, ESP lesson planning, and learning theories.

The last aspect of the course content that was positively commented on by the teachers was methodology. Four teachers (16.66%) mentioned that they liked the methods that were used to pass on knowledge to the teachers.

Another positive aspect of the course was the fact that all the 17 teachers who completed the course identified aspects of the course that they could employ in their own teaching. In other words, the "practising what you preach" approach, as supported by Wallace (1991), which the course had adopted since the beginning, was recognised by the participants. Some of the elements that teachers said that they would adopt were the following: the reflective journal (n=7, 29.16%), Google Classroom (n=5, 20.83%), the needs analysis processes that were recommended (n=5, 20.83%), some technology tools (e.g. Cmaps, Kahoot) (n=5, 20.83%) and Google Drive (n=3, 12.5%). They also mentioned learner autonomy (n=1, 4.16%), generally the methods used (n=1, 4.16%), group work (n=1, 4.16%), stating the learning outcomes at the beginning of each session (n=1, 4.16%), and intercultural awareness (n=1, 4.16%). Apart from methods used for the delivery of the course, teachers also mentioned using ideas that were inspired by the course such as the use of authentic texts (n=3, 12.5%), lesson planning (n=3, 12.5%), contacting professionals in the field (n=2, 8.33%), tasks suggested by other participants (n=2, 8.33%), and incorporating 21st century skills (n=2, 8.33%) in their teaching.

Following is an extract from a focus group:

Teacher 19: *Yes, it was really effective the way you did it, so actually this is what I had in mind. To actually copy the way you worked with us to deliver the lessons, the materials, and then try to do the same for my students.*

Facilitator: *Hm, hm…*

Teacher 22: *Also, every time you gave us a handout* (she refers to a document posted on the platform for every new session) *with what each session is going to be about and the objectives of each session and the aims so that we are familiar with what we were going to do basically, and also the Power Point, you were talking on the PowerPoint and I think that was very interesting. It was easier for*

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me to follow because I was sitting back, I heard what you were saying, I was looking at the screen…

Furthermore, both the teachers and I stated that we felt that we had acquired new knowledge from the course including new ideas regarding our teaching and material we can use. It was generally accepted that this new knowledge came from sharing and exchanging ideas. Following is an extract from my reflections, as the course was taking place:

I am very satisfied with the results so far. Teachers seem to be enjoying the course and wonderful ideas are being shared. I myself have learnt new things from the participants.

Some of the things that teachers mentioned that they learnt from the course were the following: information about the flipped classroom (n=3, 12.5%), things at a theoretical level (n=1, 4.16%), the connectivist approach (n=3, 12.5%), information on professional ESP associations (n=2, 8.33%), information about each other's teaching contexts (n=1, 4.16%), how to utilise authentic texts (n=1, 4.16%), how to design lesson plans (n=1, 4.16%), how to conduct needs analysis (n=1, 4.16%), how to find materials for an ESP class (n=1, 4.16%), how to improve learning skills (n=1, 4.16%), and how to create Power Point Presentations with audio support (n=1, 4.16%). One teacher mentioned improvement of time management skills (n=1, 4.16%) and another teacher stated that she had broadened her knowledge in teaching ESP.

In their reflective journal entries, teachers were asked to provide information regarding the aspects of the course which they considered interesting. Their comments revolved around the following issues: the material and the information (n=4, 16.66%), the course tasks (n=2, 8.33%) and more specifically detailed lesson planning (n=2, 8.33%) and setting learning objectives (n=1, 4.16%). Other interesting elements were other people's experiences including the facilitator's (n=3, 12.5%), ideas on tasks from colleagues (n=3, 12,5% n=3, 12.5%), interaction with colleagues (n=1, 4.16%), reconsidering one's own ESP practices (n=1, 4.16%), and using authentic material (n=1, 4.16%).

The use of technology was yet another aspect which was viewed positively by the participants and me, regardless of the minor technical difficulties that were encountered. Two of the teachers that had not easy access to a computer found the Google Classroom

mobile application very useful (Teachers 1 and 14). Generally, teachers were pleased with Google Classroom (n=12, 50%) and Google docs. One participant stressed the collaborative aspect of Google docs and the practicality of cloud technology. These findings were compatible with previous research conducted on the use of the G Suite for Education (Brown & Hocutt, 2015; Liu & Lan, 2016). Other participants praised the affordances of the closed Facebook (n=11, 45.83%), even the ones that considered themselves as less familiar with technology (Teachers 11 and 12). It is worth mentioning that all the teachers agreed with my idea to keep the group active after the completion of the course. Teacher 5 suggested that the group became public so that other language teachers could join.

Another positive aspect of the course was the fact that during the course a sense of belonging to a CoP, as defined by Wenger and Trayner-Wenger (2015), was developed. The findings of the study showed that the teachers enjoyed the benefits of working with each other online, "interacting regularly" and being involved "in a process of collective learning" (Wenger & Trayner-Wenger 2015, p. 1). During the course we started connecting with each other. This was expressed many times during the course, but mostly in the last Webinar, where most of the teachers and I felt like they knew each other, and we had to say goodbye to colleagues with whom we had been working intensively for the past six weeks (n=15, 62.5%).

These are some extracts which show how participants felt:

> Teacher 14: *I just want to say it's nice to be here and thank God for technology that gets people together like that. I really appreciate the effort you have brought up front, Elis. And I believe it takes a lot of courage. You know, I've been trying to do this myself for the last fifteen years but up until now I didn't go through it, so this is a great thing to happen.*

> Facilitator: *I would like to thank you guys, because without you this wouldn't have become a reality and thank you for all the hard work you have put into the course, your willingness to participate, the ideas that you've shared. It shows that you are all professionals in the field.* (Extract from last Webinar)

> *The group discussion was very useful, because we had the chance to exchange ideas and learn from each other. I liked my colleagues' enthusiasm and*

willingness to make comments and offer help. In general, I liked the feeling of 'belonging' to a group of people who share more or less the same concerns as me and are willing to share good ideas. (Extract from Teacher 18's reflective journal)

Teacher 11: *We can be in contact and complement each other.*

Facilitator: *Of course.*

Teacher 11: *...and sharing. And this what we have in mind, this is what [name of Teacher 12] and myself will try to do.*

Facilitator: *And that's great! I'm really happy for that!* (Extract from last Webinar)

During the course, especially towards the end of the course it was noticed that there was also a development of relationships of a more personal nature between participants themselves and between the participants and me(n=6, 25%). This was evident in the last webinar when participants engaged in small talk with me and the other participants in the webinar. The participants asked questions about the weather and each other's daily schedules, they talked about Easter Holidays that were approaching and they even shared some information about their family status.

As the course was progressing, ideas for future collaborations were expressed by the participants. Some ideas were the following: continue exchanging ideas on Facebook or on Google Classroom/ keep the community active (n=7, 29.16%), continue delivering training sessions (n=5, 20.83%), establish an ESP organisation in the region (n=1, 4.16%), organise Erasmus exchange staff visits (n=4, 16.66%), collaborate on projects (n=1, 4.16%), and organise "show and tell" sessions by all the participants (n=1, 4.16%).

4.5.2.6 The facilitator

The data obtained also revealed teachers' views on how I handled things during the course. Teachers said that the course was facilitated successfully, sending responses and feedback promptly and being accommodating (n=9, 37.75%). While the course was taking place, I made decisions to proceed with changes, in order to meet the needs of the teachers or to solve problems that arose. Specifically, when Teacher 14 asked to be allocated in a different group, because he believed that he would gain more, I proceeded with changes

in the groups structure. Furthermore, to deal with time difference I had to deliver the webinars many times, and started Doodle polls to see teachers' preferences. I also provided extra material and information when I was asked.

4.5.2.7 *Teachers' performance*

Finally, the last aspect that data revealed pertaining to the course experience was teachers' performance. Some teachers showed samples of excellent work and signs of good collaboration between them (especially Teachers of Groups 1 and 4, n=11, 45.83%).

To conclude, as far as the content of the course is concerned, different challenges were encountered by both the participants and me, which were overcome through quick decision-making, flexibility and my good knowledge of the online environment in which they operated. However, apart from the challenges, there were many positive aspects of the course noted by both the participants and myself. It could be claimed that the positive aspects of the course correspond to the elements for effective online learning as proposed by Anderson (2008a). Anderson (2008a, p. 344) embraces the theoretical model developed by Garrison, Anderson, and Archer (1999), according to which, effective online learning must consist of three "presences": a) cognitive presence, elements in other words that enact learning through the activation of critical thinking skills; b) social presence, which involves the establishment of an environment in which participants feel safe to interact and collaborate; c) teaching presence, which relates to the role of the facilitator, who needs to organise the learning experience, assign tasks which encourage interaction and add "subject matter expertise" (Anderson, 2008a, p. 345). According to the results, the ReTEESP Online, combined these three components. However, there were challenges that had to be addressed in the future.

The suggestions made by the participants in order for the course to improve are analysed in the following section.

4.5.3 Thematic category C. Suggestions for improvement of the course

The third thematic category which resulted from the analysis of the qualitative data related to the different suggestions for the improvement of the course. These suggestions concerned the course content, duration and evaluation procedures, as shown in Table 13. A total of 72 references were made to suggestions for improvement within 27 files.

Table 13. Suggestions for improvement of the course

Suggestions for improvement of the course	Files	References
Course content (material, topics, tasks, collaborative work, webinars, feedback, reflection)	26	66
Course duration (deadlines)	3	5
Course evaluation procedures	1	1
Total	27	72

4.5.3.1   Course content

Starting with the course content, the suggestions expressed firstly concerned the course material. I suggested teachers to share information about their own research projects in the future, if they were involved in research. Suggestions by teachers involved giving teachers a ready-made questionnaire for needs analysis (n=3, 12.5%), including a "show and tell" component, where the facilitator would show how she implemented good practices in ESP (n=3, 12.5%), sharing more updated references on ESP (n=2, 8.33%), adding lists of ESP course material (n=1, 4.16%), more material on learning theories (n=1, 4,16%) and readings on reflection (n=1, 4.16%), and continuing feeding Google Classroom with any useful ESP material after the course (n=1, 4.16%). The fact that teachers asked for ready-made material, showed that even though they were explained the philosophy behind social constructivism, some teachers still found value in the idea of receiving ready-made things. Some of them felt safer if they had a sample of work produced by the facilitator. Ally (2008, p. 19) nevertheless, claims that ideally learners should construct their own knowledge rather than receiving it from the instructor, and that the construction of knowledge is realised through "good interactive online instruction". To achieve a balance between the two ends, the facilitator could perhaps provide the teachers with samples of ready-made work, after the teachers produced their own, for purposes of discussion and reflection.

There were also suggestions concerning the topics that the course could cover. Teachers suggested the following: Learn about blended learning/ using technology tools, e.g. Google Classroom, Power Point with sound, C-map, Kahoot (n=6, 25%) and ESP assessment (n=1, 4.16%), extend the topic of using authentic texts in class to more

practical ideas on how this could be done (n=1, 4.16%), extend the topic of needs analysis (n=3, 12.5%), focus more on the actual content of the lesson (n=1, 4.16%), learn about CLIL in relation to ESP (n=1, 4.16%) and more practical examples of what colleagues do every week (n=1, 4.16%), and share ideas on how to engage students in speaking tasks (n=1, 4.16%).

As far as suggestions regarding the tasks that teachers were engaged in are concerned, teachers suggested the following: An open discussion forum where they could talk about issues on ESP or their everyday experience in the classroom should be created (n=4, 16.66%). This could be done through a blog, Facebook or Facebook Messenger, with which users feel more convenient, because they use it in their everyday life. A discussion forum would make communication and collaboration easier and would help teachers learn more about each other. Also, teachers would be urged to meet online and chat in order to complete the sessions (n=2, 8.33%). The two teachers admitted that their collaboration on the lesson plan was based on asynchronous interaction, and that they had been writing comments on the Google document they had created for the lesson plan. Teachers also suggested that more interactive tasks needed to be included in the course (n=4, 16.66%). Other suggestions involved assigning to the teachers a project in which they could implement one of the tools they learnt in the course (n=1, 4.16%), asking teachers to explore the references given to them and share useful points with colleagues (n=1, 4.16%) or do something with these readings, e.g. read and compare (n=1, 4.16%).

Regarding collaboration, on the one hand, I realised that teachers needed more interaction; on the other hand, I did not wish to push the teachers into doing things that could cause any inconvenience to them, for instance forcing them to contact each other privately or within their groups through using video conferencing software. As mentioned earlier in the analysis, when one of the teachers attempted to contact other teachers, he received no response; perhaps the reason was because his intention was to ask for material, which was not viewed positively by some teachers. For this reason, I decided to leave collaboration on the teachers. Teacher 18 suggested that I could assign a group leader that would keep the group organised and would be responsible to communicate with team members. Another participant suggested groups of mixed nationalities, so that teachers learnt about different educational contexts, and teachers from less developed educational backgrounds gained knowledge from colleagues coming from more

developed countries. This was also suggested by Teacher 14 at the beginning of the course.

This is Teacher 5's comment in the interview after the course:

> Teacher 5: *Well, that makes sense to me, cause OK, it's not always easy to go to international seminars to meet other people. There are time constraints, money constraints. I've been lucky enough to be able to work abroad, and I really wanted to, but the others who don't have this kind of opportunity, I think the others would like to have this kind of contact, especially because there are some countries that think that other countries are superior in teaching practices, and they would like to learn from them…*

Other suggestions to facilitate collaboration were to exchange views on Google docs using a different colour for each participant (n=1, 4.16%). I could also assign to some people from the group a part of an assignment and to the rest another part, and then to ask them to complete the assignment together (n=1, 4.16%). This way they would be forced to collaborate.

Another aspect of the course for which there were suggestions for improvements was Webinars. Apparently, some participants, especially Teacher 14, were very eager to participate in Webinars (n=2, 8.33%). As I mention in my reflections, they appreciated synchronous contact very much not only with the me but also with other participants. Therefore, this could imply that Webinars were well-received by some participants and a future implementation of the course should consist of this form of instruction. Furthermore, I recognised the need to find a platform other than Skype that was more reliable in catering for a bigger number of participants in a synchronous Webinar.

The only suggestion regarding feedback that was expressed by Teacher 11 was that she felt that she needed more feedback by me.

Regarding reflection, Teacher 9 suggested that I took the most interesting ideas from teachers' reflections and shared them with the rest to enact discussion.

4.5.3.2 Duration of the course

Concerning the course duration, one suggestion was to make the course longer so that the teachers learnt more (n=2, 8.33%). Two of the teachers (8.33%) argued that if the course

were longer, then the pace would have been slower, and it would have been easier to consolidate knowledge and reflect on it. Another teacher suggested that I should chase the teachers more as far as deadlines were concerned (4.16%). Because of the fact that some teachers completed the tasks earlier than others, while others needed more time to cover everything, the time flexibility that the course provided (3-6 Weeks) was regarded as an effective way to deal with this challenge. This was a characteristic of the course that I wished to keep for a future implementation of the course. However, the course could be extended if more topics were added.

4.5.3.3 Course evaluation procedures

Finally, the last suggestion concerned the course evaluation processes. Specifically, Teacher 12 expressed the thought of having a questionnaire to evaluate the course after its completion; however, I explained that obtainment of qualitative data in this case was more logical, since the number of participants in the course was low, and since I was looking for more in-depth answers rather than numbers.

The results of the data analysis showed that the suggestions for improvements mainly concerned the inclusion of tasks and components that promoted more synchronous communication and collaboration between the teachers and between the teachers and myself. Despite the fact that the course was inspired by social constructivist and connectivist approaches and was based on collaboration, reflection and interaction, teachers longed for more communication, and they also wished to see me more often. They mostly employed asynchronous communication to collaborate and cooperate, admitting that there was no intensive effort to contact each other synchronously, even though many of them wished there was. However, according to Biesenbach-Lucas (2004), asynchronous communication has proved to be beneficial as well, since trainees/ learners have the time to use their critical thinking skills, reflect on the learning process, organise their work, work better and develop more solid relationships with their peers.

This section presented the results and a discussion of findings in Stage 1 of the study. The next section provides a summary of these findings.

4.6 Conclusion

The reflection on the implementation of the ReTEESP Online in Stage 1 by everyone involved in the course led to several findings concerning different aspects of the course. These findings informed the next cycle of the study, Stage 2, in which the ReTEESP Online was refined. The key findings from the implementation of ReTEESP Online are summarised in Table 14.

This chapter described the first cycle of this TAR. The next chapter focuses on the second cycle of the study.

Table 14. ReTEESP Online implementation: Key findings

Participants' characteristics and professional experiences	Positive aspects of the course	Challenges faced	Ways challenges were addressed	Suggestions for improvements
- They came from different backgrounds and had different personality characteristics - They faced many challenges in their ESP teaching - They attended the course to meet colleagues and exchange ideas, acquire knowledge, develop professionally, and because they liked the course and the facilitator	✓ Teachers enjoyed the course / Interesting, well-prepared, highly-organised, informative and useful ✓ Teachers were satisfied with the course content (material, tasks, reflection, collaboration, organisation, topics, methodology) ✓ Teachers identified practices that they could use in their ESP teaching ✓ Teachers and facilitator acquired new knowledge	• Time constraints/ Heavy workload and deadlines met with difficulty • Difficulties with the use of technology • Lack of synchronous communication between teachers. • Lack of collaboration in some cases. Teachers cooperated rather than collaborated • Disagreement regarding the organisation of groups for groupwork	☼ The facilitator adapted the course ☼ The deadlines were extended ☼ Doodle was used to find common time for Webinars ☼ Teachers were divided into groups and Webinars were repeated many times ☼ The facilitator respected the teachers' preferences regarding	➢ Extension of the course to another two weeks to cover more topics (e.g. latest developments in ESP, AR in ESP, the use of technology in ESP, ideas on future action) ➢ Inclusion of "show and tell" sessions ➢ Creation of more opportunities for synchronous communication ➢ Creation of a discussion forum ➢ Encouragement of more interaction and collaboration

- They expected to acquire new knowledge, develop their ESP teaching, become part of a network, develop professionally, learn about assessment methods and new ESP material	✓ Teachers liked the technology tools used in the course ✓ Professional community spirit was developed/ Sense of belonging to a CoP ✓ Ideas on future collaborations were generated ✓ Personal relationships were developed ✓ Teachers were satisfied with the facilitator ✓ Some teachers' performance was excellent	• Challenges faced with certain tasks, materials and topics	the organisation of groups ☼ The facilitator left the teachers free to decide whether they wished to use synchronous communication in groupwork (she only recommended them to do so) ☼ Constant guidance was offered to the teachers through synchronous and asynchronous communication	➢ Replacement of Skype with another teleconferencing tool to cater for more participants

CHAPTER 5.   IMPLEMENTATION: STAGE 2 – THE SECOND TECHNICAL ACTION RESEARCH CYCLE

5.1   Stage 2 Overview

This chapter describes the processes followed in Stage 2, the second cycle of this TAR study as they are presented in Figure 17. After the completion of Stage 1 and the participants' and facilitator's reflections on the course, the curriculum was refined based on the findings of Stage 1, and the ReTEESP Online: The Sequel was created, which involved additions that were made to the initial course. The implementation of this sequel course with the same group of participants and observation followed, and finally the second TAR cycle ended with reflection.
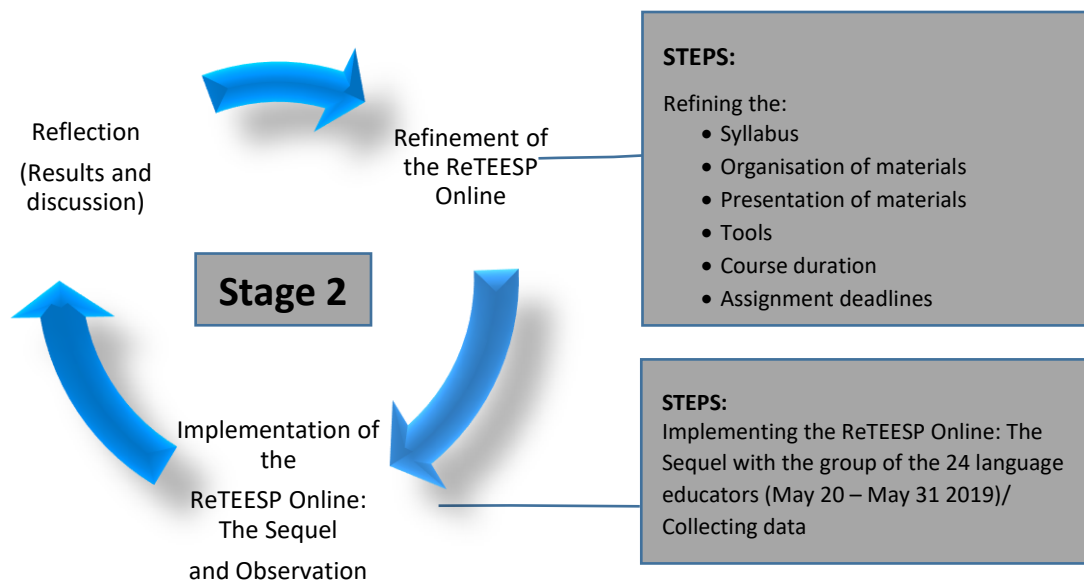
Figure 17. Stage 2 - The second TAR cycle

The chapter starts with the first step of Stage 2, the refinement of the ReTEESP Online.

5.2   Refinement of the ReTEESP Online

The first step of Stage 2 concerned the revision and renewal of the ReTEESP Online. Table 15 shows the changes/ additions which occurred with the transition from Stage 1 to Stage 2 of the study.

Table 15. The ReTEESP Online refinement

Stage 1 The ReTEESP Online	Stage 2 The ReTEESP Online: The Sequel
Theoretical foundations and methods of instruction	
Based on: • Social constructivism and connectivism • Teachers' educational context • Sociocultural TE models with elements from the reflective model of TE and critical pedagogy • A practising what you preach approach • Principles of successful online TE	✓ Same
Delivered: • Online • Through interactive online lectures (Webinars), online discussions, independent reading/ writing/ listening, independent research, individual and collaborative online work and continuous individual and collaborative reflection	✓ Same ➢ Addition: • More Webinars for more synchronous communication (four scheduled 40-min Webinars of presentation and interaction)
Course facilitator:	✓ Same

• Researcher • Course designer • Guide • Sharing good practices • Enacting discussions/ stimulating interaction • Adapting the course to meet teachers' needs • Creating appropriate conditions for learning	
Aims of the course	
• Help ESP practitioners or future ESP practitioners gain a better understanding of the notion of ESP and its principles and how ESP can be taught • Engage educators in hands-on activities that would enable them to develop in areas associated with ESP teaching and give them the opportunity to implement their new knowledge in their ESP practice • Prepare the teachers how to handle the different ESP disciplines through connecting them with other ESP practitioners and generally equipping them with the tools needed to get out of the ESP maze	✓ Same ➤ Addition: 　• Complement ReTEESP Online and improve it 　• Provide teachers with the opportunity to study issues in the ESP field that they did not study in the ReTEESP Online
Duration of the course	

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| 3-6 Weeks | ➢ Addition: |
| | • 2 Weeks |

Topics	
• Introduction to the ReTEESP Online	➢ Addition:
• ESP and its characteristics	• ESP Revisited: The latest developments
• The ESP lesson planning process	• Acting, changing, improving: Action research in
• ESP students' needs analysis	ESP
• The ESP lesson	• The use of new technology tools in teaching ESP:
• The ESP lesson in practice	Show and tell
• Sharing thoughts and reflecting collaboratively	• Where to now? Ideas for future action and possible
	collaborations

Technology tools	
• The G Suite for Education (Google Sites, Google Classroom,	✓ Same
GDrive, Google Docs, Google Slides, Google Forms)	➢ Replacement:
• YouTube	• Skype replaced by Zoom
• Email	➢ Addition:
• Skype	• Messenger group serving as a chat room

• Facebook	• Google Calendar for scheduling Webinars
• Messenger	
• Doodle	

Assessment methods	
• Formative and ongoing	✓ Same
• Through different performance tasks	
• Feedback by the facilitator	
• Individual and collaborative feedback by peers	
• Self-reflection	

The refinement of the course involved the expansion of the ReTEESP Online by two more weeks involving topics and practices that were considered important for ESP practitioners, as these were pointed out in Stage 1. The new addition to the course was named ReTEESP Online: The Sequel, and its aim was to complement the initial course and improve it, and of course to provide teachers with the opportunity to study issues in the ESP field that they did not have the opportunity to study in the first version of the course. A detailed description of the curriculum can be found in Appendix C, Stage 2: The ReTEEP Online: The Sequel curriculum, where a course outline can be found along with details on each of the four sessions that were added to the ReTEESP Online course.

The sequel course revolved around four major topics, as seen in Table 15, which were developed through four scheduled 40-min Webinars. Based on the teachers' request for receiving information on the latest ESP developments, the first Webinar was inspired by the latest research that I had read on ESP, projects I was involved in as a researcher as well as Conferences and events I had attended that year. In general, the Webinar was based on innovations in ESP and in FLT in general that I had the opportunity to be informed about.

The second Webinar dedicated to AR, was inspired by the fact that, being an action researcher myself and having attended events on teacher research, I understood the value of AR and its contribution to social change, education and specifically language education nowadays. Moreover, as seen in section 2.3.6, AR was regarded as an efficient way of PD by many researchers (Ali & Bano, 2013; Chen, 2000; Daoud, 1999; Feng, 2009; Kavanoz, 2020). In a specialised field such as ESP, where generalisations are not possible, and where the individual needs of learners are of utmost importance, AR was perhaps one of the most essential topics in an ESP TE course.

The third Webinar on the use of technology, was requested by the teachers in Stage 1 and was regarded as a very up-to-date topic, since technology today is first of all an integral part of our everyday reality and thus widely utilised in all forms of education and at all levels. This Webinar incorporated teachers' request for a "show and tell" session, during which teachers would share with their colleagues good practices that they implemented in their teaching, including the use of technologies.

Finally, the last Webinar was a nice way to wrap things up and keep the doors open to opportunities for future PD and collaboration. These issues were raised in the reflection phase of Stage 1. This Webinar helped teachers to find ways to maintain the professional bonds that they established through this two-year period of collaboration and interaction. It was built on the belief that PD is ongoing and never-ending.

The theoretical foundations on which the course was built and the teaching methods that were used were the same as in Stage 1 of the study, since the participants and I were pleased with them. More emphasis was given on the teachers' need for more synchronous interaction, and that was why more Webinars were added.

The tools that were used for the course were the same as in Stage 1, so that teachers understood that this sequel part was a continuation of the first version of the course, and also for purposes of consistency. The only changes made were the addition of Google Calendar for Scheduling Webinars and a Messenger group for more direct communication, and the replacement of Skype by Zoom. Skype was replaced by Zoom for the delivery of Webinars, as the use of Skype with many participants proved to be challenging, as explained in section 4.5. I decided to use the Zoom Basic Plan which was free at the time. For individual meetings there was possibility for unlimited time, while for multiple participants there was a limit of 40 minutes duration for each Webinar. The time was considered as appropriate for synchronous communication (20-25 minutes presentation and the rest would be dedicated to answering question or commenting), and the discussion could continue asynchronously in the Chat Room. I created a Zoom account, meetings for all the Webinars, and used Google Calendar to invite the participants to the Webinars. Figure 18 shows a screen shot from Webinar 1. Regarding the addition of a Messenger group, after the suggestions by teachers in Stage 1, this would serve as a discussion forum. The group was named ReTEESP Online: The Sequel Chat Room. It would allow for more direct and immediate communication amongst the participants, and it could enhance the feeling that all of them were members of a CoP sharing the same professional interests and worries. Figure 19 is a screen shot of the initial messages exchanged in the chat room.

Figure 18. Webinar 1 (The ReTEESP Online: The Sequel)
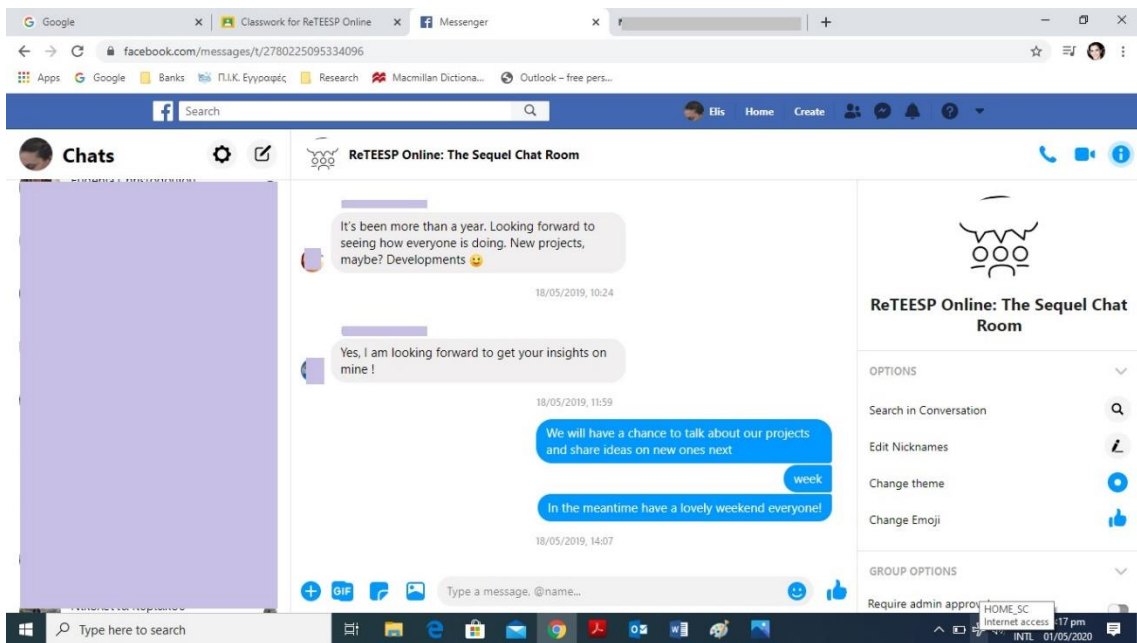
Figure 19. ReTEESP Online: The Sequel Chat Room

The assessment methods remained the same as in Stage 1.

The next section describes the implementation of the ReTEESP Online: The Sequel and talks about the findings deriving from this stage of the study.

5.3 Implementation of ReTEESP Online: The Sequel

The sequel course targeted the same group of 24 language instructors who participated in Stage 1 of the study. It took place during the period between the 20th of May to the 31st of May 2019. The launch of the ReTEESP Online: The Sequel was announced through the private Facebook group and email. The teachers that registered for the course in this stage of the study were 14 out of the 24, and eventually nine of them completed the course successfully and were active throughout the course. As explained previously, May was a hectic month for most of the teachers. Some participants claimed that they could not join due to different personal matters, while they also felt comfort in the idea of having access to the material for as long as they liked; this way they could study the material whenever they found the time. Furthermore, there were teachers who faced different technical issues, as in Stage 1 and could not join. Details regarding the participants in Stage 2 were provided in section 3.8.2.

After the completion of the ReTEESP Online in Stage 1, the participants and I continued to be in touch through the ReTEESP Online private Facebook group, and we continued exchanging useful ideas and informing each other about developments in ESP, new publications released and events in field. I also had the pleasure of meeting one of the teachers at an international Conference in person and was also in touch with two other teachers, discussing the possibility of visiting the Cyprus University of Technology Language Centre on a staff exchange programme. In other words, the group continued to be active between the two cycles of the research.

The sequel course included two live Webinars each week, at a time convenient to most of the participants. The time which was considered as the most appropriate was 12.00 pm Cyprus time, UTC/GMT +3. This time was selected having in mind the time difference between countries, the teachers' and the facilitator's work schedules, and the fact that it would be difficult for teachers to sacrifice part of their personal time during the night for PD. As concerned the possibility of some teachers not being able to attend the Webinars during that time, it was decided that the Webinars would be recorded, so that teachers would be able to watch and replay them, if they wished, at a later stage. After each Webinar teachers were provided with useful material and they were invited to take part

in interactive and collaborative activities, synchronous and asynchronous discussion and reflection.

The next section presents the reflection on the implementation of the ReTEESP Online: The Sequel, concentrating on the presentation and discussion of the results of this phase of the study.

5.4 Reflection (Results and discussion)

During the implementation of the sequel course, data were collected through the facilitator's field notes, participants' reflective journals, discussion on messenger chat room and interviews. Details on the data collection tools can be found in Section 3.9.1.

The thematic analysis of the data shed light on many aspects of the course and revealed many elements that were successful as well as others that needed improvement. Two major thematic categories resulted from the analysis each of which was comprised of many subcategories. The two categories were: A) The course experience and B) Suggestions for the future. These are illustrated in Figure 20, where each category is represented by a different colour.

Following are the results of the data analysis.
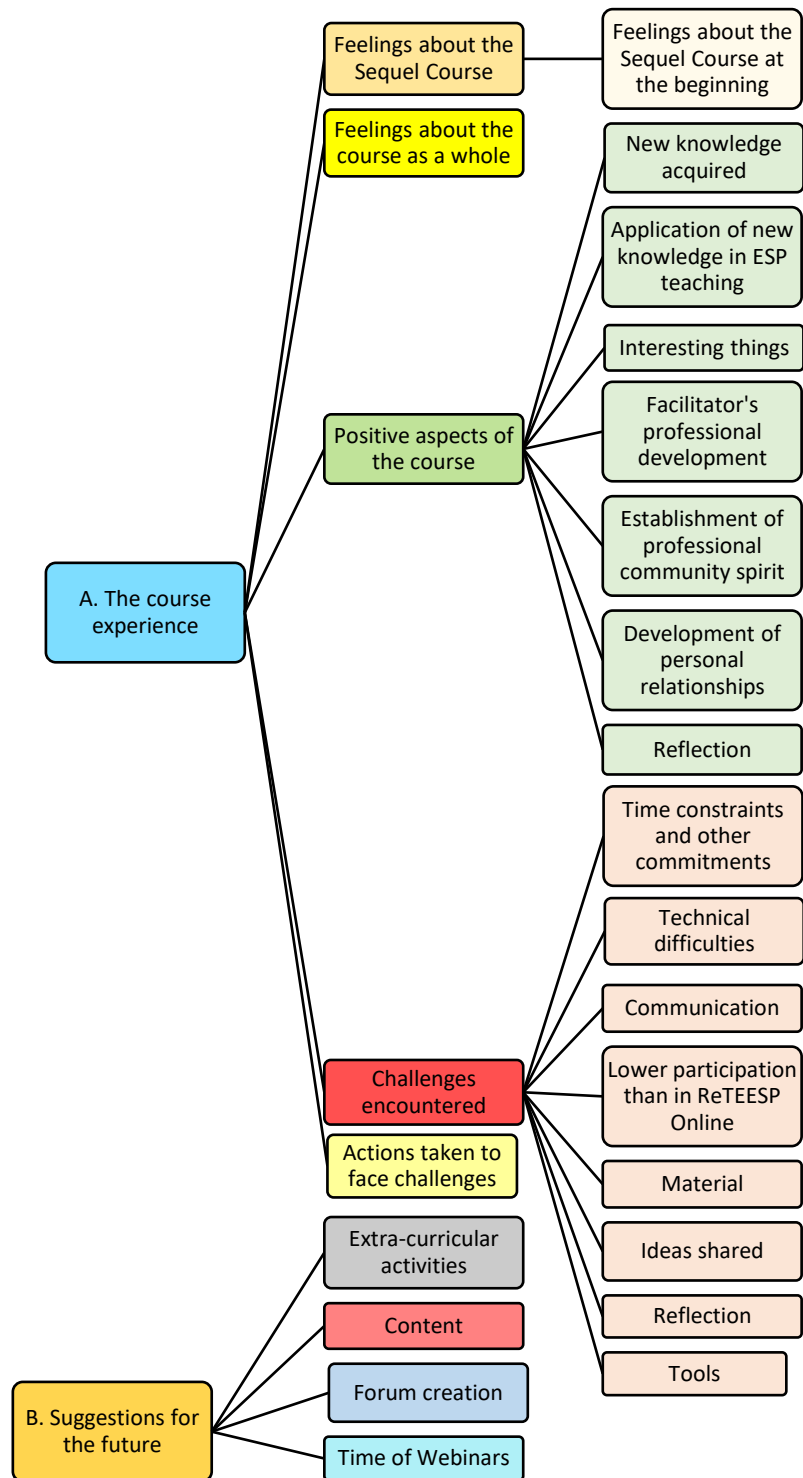
Figure 20. The thematic categories that derived from the study in Stage 2

5.4.1 Thematic category A. The course experience

The first category that resulted from the thematic analysis related to the teachers' and the facilitator's experience with the course. The data collected revealed feelings and thoughts that the participants had about the sequel course and the course as a whole, positive aspects of the course as well as challenges that they faced during the course.

5.4.1.1 *Feelings about the sequel course*

Starting with the participants' feelings about the sequel course, at the beginning, when the teachers were introduced to the course content, eight teachers (the most active ones) out of a total of 14 registered teachers (57.14%) stated that they were looking forward to it. Teacher 10 said that her first impression was that the course had addressed teachers' feedback in the previous stage of the study, while some teachers talked about expectations that they had from this course. These expectations involved hearing about new technological developments and practical examples which they would be able to adapt and implement in their classes (n=4, 28.57%), learning about new interesting research studies (n=2, 14.28%), unravelling the difference between some trends that appear to be common but are not (n=1, 7.14%), and also have the opportunity to collaborate with people from other institutions in the future (n=1, 7.14%).

 While the course was taking place and after the course was completed, the teachers continued to express their views on the sequel course. Participants were positively oriented towards the course characterising it as interesting and useful with new ideas (n=7, 50%). The number of participants that expressed this view is high, taking into consideration that only nine of the participants were active and eventually managed to complete the sequel course. Teacher 10 acknowledged the fact that the sequel course was "a step further", characterising the ReTEESP Online in Stage 1 as more theoretical. She added that the course was not demanding in terms of what they had to prepare, the webinars were short and timely-managed, so its duration was ideal. She also characterised the ideas expressed by the facilitator for the future as "easily and realistically implemented". Furthermore, three teachers, including Teacher 10, also emphasised that the idea of recording the sessions was helpful since some teachers could not participate in the live sessions.

These are some comments expressed by Teacher 10:

So once again what I have to say is that you did an amazing job in terms of organisation. The material was there for us, you did try to motivate us as much as possible. The sessions were really targeted in terms of the topics the materials and what was required by. It wouldn't take long what we had to prepare, the sessions didn't take long, you were pretty flexible and you did try to motivate us, because I think this sequel was all about us participating and exchanging ideas.

Teacher 18 liked the fact that the sequel course was more interactive, admitting that the fact that participants could communicate with each other more often (both orally and in writing) was very important, since she usually worked alone and missed interaction with colleagues at work. Interaction and networking were also emphasised by Teacher 8. Teachers also characterised the Webinars as well-organised and interesting (n=5, 35.71%). Teacher 18 stated the following in her reflections on Webinar 2:

It was a thought-provoking and inspiring webinar, because it made us ponder on what we think needs improvement in our classes and offered ways to not only make changes, but also share the results of these changes with others. Thank you once again!

Teacher 22 wrote the following in her reflections:

I think this Sequel is a great continuation of last year's course since it will give all of us the opportunity to explore new ideas/technologies and learn something new. Exploring the use of new technology tools and ideas for future collaborations will be very helpful for my current teaching position at a college.

5.4.1.2 *Feelings about the course as a whole*

It is important to note that participants in the course were also asked to present their views on the experience they had with the two courses as a whole, in other words the ReTEESP Online in Stage 1 and its addition, the ReTEESP Online: The Sequel in Stage 2 together. On the whole, all teachers were pleased with the two courses, noting that generally it was a successful endeavour and that the combination of the two parts was efficient. The teachers' comments which follow demonstrate the view that the majority had about the ReTEESP Online in both Stages 1 and 2.

On the whole, the ReTEESP Online has been a great experience, because it combines ongoing learning with networking opportunities. The fact that there are many sectors on which ESP research can focus and several colleagues that are interested in collaboration is very encouraging, especially when combined with immediate action. (Teacher 18)

The teacher's reference to the combination of "ongoing learning with networking opportunities" is an interesting one, as these were among the learning outcomes set at the beginning of the course. Reference to the value of networking implied that a connectivist approach to learning (Siemens, 2005) and a sociocultural model of TE (Franson & Holliday, 2009) were recognised as efficient and was appreciated. The importance of ongoing learning was also made by Teacher 11, who added that she actually enjoyed the break between the two courses, because she believed that it is more beneficial for teachers to be provided with new information and be updated after some time instead of participating in just one single TE course. In the interview she admitted:

It kept me updated, and it's like it's an ongoing process that is not one shot and is the end...

Teacher 14 was yet another teacher who valued the fact that the two courses were an opportunity for the teachers to join a network, an ESP CoP, which as he asserted, many colleagues outside the group wanted to join. In his comments he also noted the significance of reflection.

Well first of all, I wasn't sure what it is when you first did it that last year, if it was intriguing and I thought well it's going to be one of those knowledge-laying type of presentations. But when I got involved last year, it seemed that it had a potential. That we could really not only enjoy it but really develop our profession. But then it came again that it was too short last year, it was really quick and it was kind of short. But the sequel actually proved to be very beneficial because in the last year session you laid some foundations, you put some titles. And this year's was when we really felt that reflection thing. It was not for me a long time ago since I realised that reflection is also important in the process of professional development and the groundwork. So, this year actually really kind of settled in with me in terms of reflection, and that's something I want to thank you for. So that became one of my practices now. I use reflection

now more often before I proceed with my work. So, all in all it was good, beneficial.

Yeah, as I told you before, many colleagues wanted to join them (the courses in both stages), *and I gave them the probability of you may be doing it again on different occasions. I think it would be very beneficial especially in the ESP area, because I feel that we are like stray horses now where everybody is going on his own, and we need a lot of getting together, we need a community of practice, even when we are a part of a larger community like the EFL community.* (Teacher 14)

Other comments made by Teacher 8 also revealed that she was satisfied with the two courses claiming that the sequel course had taken her a step further, helping her realising certain things:

I think it was very productive, and I think that as a teacher myself, we took this one step further, Ok? Because even within one year we saw for example that our teaching and learning has been enhanced by more tools for ESP. It made me also realise that there is also a small gap in the area of contextualisation, for example for students. What you've mentioned at the beginning I don't remember if it was Webinar 1 or 2, you mentioned the culture, how there is an emerging need for familiarisation of students with their context, so again, I associated this with my practice.

In all their comments teachers agreed that the combination of the two courses together was successful, therefore it could be claimed that the addition of the sequel course was beneficial and this way the ReTEESP Online had actually improved. According to the teachers' and the facilitator's views, the sequel course complemented the ReTEESP Online.

5.4.1.3 *Challenges encountered*

The data related to the course experience also revealed that certain challenges were encountered during the ReTEESP Online: The Sequel. As seen in Table 16, the challenges faced during the sequel course concerned time constraints and teachers' other commitments, technical difficulties, lower participation than in the first course, some problems with communication, the ideas shared in the course, the material and the

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reflection process. The number of files indicates the files which referred to these challenges, and the number of references indicates the references made to them by the teachers and the facilitator.

Table 16. Challenges faced during the sequel course

Challenges faced during the sequel course	Files	References
Time constraints and other commitments	10	18
Technical difficulties	4	16
Lower participation than in ReTEESP Online	2	7
Communication	3	7
Ideas shared	6	7
Material	3	4
Reflection	1	1
Tools	1	1
Total	26	61

First of all, not all the 17 people who had completed the first course registered for the sequel course, as seen earlier; only 14 people registered with only nine of them finishing the sequel course. The rest could not complete it due to personal and professional commitments as three out of 14 teachers stated (21.42%), but would watch the Webinars when they found the time. Moreover, not all teachers managed to participate in all the live Webinars again due to other obligations and lack of free time (n=9, 64.28%). Teacher 13, added that she shared offices with other colleagues and that made her participation in discussions even more difficult. According to Lee and Choi (2011), dropout rates are generally high in the case of online courses. Nevertheless, in the case of this course, "dropout" may not be the appropriate term to describe some teachers' failure to complete the course, due to the fact that the Webinars were all being recorded and access was given to the teachers to watch them whenever they could, which gave the teachers the freedom and security to see the course material at a time of their convenience.

In addition to tight work schedules and lack of free time, other challenges involved technical difficulties such poor internet connection (n=1, 7.14%) forgotten passwords (n=3, 21.42%) and Zoom time restrictions (40 minutes with an audience of more than three people for the free Basic Plan used for the delivery of this course). Additionally, after the completion of the two stages of the study, in July 2019, a notification was posted on Google Classroom by Google that, as of September 2019, a new version of Classroom would be launched including a Classwork page to help teachers organise classwork. Any classes using the previous version would be automatically converted to the new version of Classroom. Unfortunately, this was a challenge that I could not address since it was beyond my control. This raised concerns regarding the extent to which users can control these technologies; such concerns are in line with Sultan (2010) and Dillon, Wu, and Chang (2010), who expressed some worries over the use of cloud technologies in education.

Another issue that came up concerned the communication between some participants, which created feelings of discomfort at some point. More specifically, it concerned the persistence of one of the teachers to contact another teacher in order to ask for information and material. I handled this by intervening and kindly explaining that people had the freedom to participate in the course as much as they liked, so no one should expect responses from anyone, a view that was accepted and respected. Furthermore, a minor challenge encountered involved a couple of teachers using the Messenger Chat Room to report on technical difficulties they faced instead of sending me a private message, which was annoying for other participants. I addressed this by kindly asking the teachers to send me private messages, in case they wished to say something that did not concern the group.

Additionally, after the completion of the course, Teacher 14 mentioned that he would have liked to see the material posted on Google Classroom at least one day before the Webinar so that there would be time to study them and be engaged in discussion beforehand. Because of the fact that this comment was made after the completion of the course, this issue was not addressed; it was something to be addressed in the future. Another challenge faced related to some material I recommended to the teachers; Teacher 14 had no permission to access certain material that I recommended because he needed to be a member of the particular organisation. This was a challenge beyond my control,

which however resulted in a very interesting discussion regarding professional organisations and memberships.

Regarding ideas that were shared during the course, Teacher 15 said that the idea of using social media in her teaching was challenging, because she was teaching young ages, but she understood the value when teaching adults, especially ESP students.

Reflection was yet another challenge referred to by Teacher 8:

> *The reflective aspect of the course gave me the chance to reflect on my practice. Maybe some people will not consider that as a challenge but at some point, I think it made me think, because… for example, with the technology. Maybe I'm not using enough. Maybe I'm using too much. So, I had a chance to see what the others are doing trying to see how I can enrich my practice or how I could add more pedagogy and not rely so much on technology.*

Finally, one last challenge mentioned by Teacher 11 was the use of Facebook and thus Facebook Messenger. Due to the fact that this teacher did not have a Facebook account, as in Stage 1, for her own personal reasons, she felt that she missed important information that was shared in the private group that was maintained for the course. Nevertheless, she realised that what was achieved through a social networking site as Facebook (i.e. more direct, updated and immediate sharing of information) (Dogoriti et al., 2014; Yildirim, 2019), could not be achieved through a course platform such as Google Classroom.

5.4.1.4 *Actions taken to face challenges*

To cope with the challenge of teachers not being able to participate in all the Webinars due to lack of time and other commitments, I decided to record the Webinars with the participants' permission and upload the videos on the Google Classroom platform for everyone to watch in case they could not attend. Furthermore, the Facebook Messenger group that was created, which served as a Chat Room, allowed for the discussion to continue after the completion of the Webinars.

To address the technical difficulties teachers faced, I helped the participants, first of all, by sending instructions on how to access Google Classroom in my initial email and resetting forgotten passwords. I also used the same Google Class I had created for the first course to make it easier for the teachers to navigate and also to allow them to have

all the material for the course gathered in one place. To face Zoom time restrictions, the Webinars were scheduled for 40 minutes to stay within the time limit of the free Basic Plan.

Other challenges, such as misunderstandings between teachers or miscommunication were dealt with direct communication between the teachers and me to solve any problems that arose.

Comparing the challenges faced with ReTEESP Online in Stage 1 with the challenges faced in Stage 2, it can be noticed that time constraints and the teachers' busy professional and personal schedules were challenges encountered in both phases of the study. This was logical since the language instructors participating in the study were working people, most of them at an age of having various family commitments. As far as technical difficulties are concerned, the findings suggested that in Stage 1 these related more with the G Suite for Education tools, such as Google Classroom and Drive, as that was the phase when teachers were introduced to these tools.

As seen in both stages, the challenges and the way they were addressed implied that an impersonal approach to these teachers' education on teaching ESP would not have the same success (Hew & Cheung, 2014). In other words, the teachers needed guidance, motivation and encouragement to proceed in the course, and also the opportunity to interact with other people and the facilitator and share ideas, worries and feelings of distress whenever necessary. As seen in Stage 1, the course as a whole was successful because, among other things, the teachers were offered all these.

5.4.1.5 Positive aspects of the course

The data obtained also revealed different positive aspects of the sequel course as these appear in Table 17. According to the table, the potential of teachers applying new knowledge in their ESP teaching was the positive aspect of the course with the most references, along with references to interesting parts of the course and acquisition of new knowledge. Comparing Tables 16 and 17, it can be seen that more references were made to positive aspects of the course rather than challenges, therefore it could be argued that the positive aspects of the course were more than the difficulties encountered.

Table 17. The positive aspects of the sequel course

Positive aspects of the course	Files	References
Application of new knowledge in ESP teaching	14	44
Interesting parts of the course	15	33
New knowledge acquired	16	32
Establishment of professional community spirit	5	10
Facilitator's professional development	1	9
Development of personal relationships	5	8
Reflection	4	6
Total	22	142

To start with, during the course there were different elements that were identified as interesting by the participants. First of all, the teachers characterised the Webinars as interesting, making special reference to the topics (n=5, 35.71%). Learning about technologies was also regarded as interesting by almost all the participants who successfully completed the course (n=8, 57.14%). Technologies mentioned were VR (n=5, 35.71%), telecollaboration (n=1, 7.14%) and tools such as the G Suite for Education (n=2, 14.28%), Quizlet (n=2, 14.28%), Kahoot (n=1, 7.14%), Expeditions (n=1, 7.14%), Prezi (n=1, 7.14%), Timetoast (n=1, 7.14%) and LMSs (n=1, 7.14%).

Other interesting and useful elements noted were learning about AR (n=5, 35.71%) and about the potential of students' work placements abroad (n=1, 7.14%), sharing experiences with colleagues (n=4, 28.57%), learning about enhancing students' employability skills (n=1, 7.14%) and teacher empowerment (n=2, 14.28%), and being provided with an updated list of bibliographical references (n=1, 7.14%).

Teacher 8 said that the Webinar on AR made her realise that "all ESP practitioners are, somehow action researchers", as she stated.

Other comments made by teachers which are representative of the data collected were the following:

The Webinar was very interesting. Topics thoroughly presented, many of them fall right within my interests, concise and supported with the relevant literature! Well done! List of readings very useful! (Teacher 23)

Webinar 1 was very interesting in that it managed to make us aware of the fact that there are many tools available that could be creatively used in order to enhance teaching methodology and raise students' motivation in the ESP class. It is difficult to say what was more interesting (everything was). Regarding technological innovations, this seminar suggested specific ways of using technological tools, such as telecollaboration and serious gaming. What was really interesting was the suggestion for 'work placements abroad, which could really motivate students. It is extremely helpful that for all these points there is respective literature, which is current and gives us the chance to keep ourselves updated. (Teacher 18)

I really liked the way Elis has expounded the latest developments/trends in ESP. It was like finding the compass I needed to orientate myself :-) (Teacher 8)

Apart from different interesting elements identified in the course, another positive aspect of the course was the fact that this sequel course, as the ReTEESP Online in Stage 1 of the study, was an opportunity for everyone involved to acquire new knowledge, as the teachers and I asserted. The teachers stated that they learnt new things associated with the following: First of all, they referred to knowledge related to technology and its use in ESP (n=7, 50%), and more specifically VR (n=3, 21.42%), serious gaming (n=3, 21.42%), tools such as Quizlet, Expeditions, and the use of Twitter in ESP (n=2, 14.28%), cloud technologies such as the G Suite for Education (n=2, 14.28%) and its website creator (n=1, 7.14%). The fact that seven out of nine participants who completed the course stated that they learnt new things associated with technology in combination with the finding according to which eight teachers regarded technology as an interesting topic carries important assumptions. Firstly, it can be assumed that teachers were interested in learning about technology use in ESP and eventually incorporating it in their ESP classes. Secondly, the findings imply that the sequel course managed to provide the teachers with some knowledge on using technology in ESP.

Teachers also mentioned that they learnt about the merits of using literature in an ESP classroom (e.g. rise of cultural awareness) (n=1, 7.14%), teacher empowerment (n=1,

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7.14%) and telecollaboration (n=1, 7.14%). Moreover, Teacher 8 pointed the view of students as global citizens and the cultural aspect of ESP teaching, characterising it as an idea she had never heard about before. This shows that the elements of critical pedagogy that were instilled in the course (Tao & Gao, 2018) were understood and appreciated by the teachers. Teacher 13 also said that she learnt about the European project the Cyprus University of Technology Language Centre was working on at the time. Some teachers also claimed that through the course they also gained deeper understanding of AR (n=3, 21.42%).

Apart from the teachers however, I also acknowledged that I had learnt new things through the ideas that colleagues shared via the tools utilised in the course. More specifically, the course was an opportunity for me to hear about technology tools that I had never used in my teaching before (i.e., Expeditions, Timetoast, and Padlet) and learn about formalised ESP assessment tools such as the STANDEM (Standardised Language Testing in English for Medical Purposes), information on which was shared in the course chat room. Additionally, after working with Google tools for so long, I felt that I had learnt well how to exploit them for TE purposes. As in Stage 1 of the study, findings demonstrate that this course was not only beneficial for its participants, but could also prove enlightening for me, the facilitator as well. This idea was expressed by Russell and Korthagen (1995), who talk about how teacher educators develop professionally through practising their profession.

Apart from the fact that they learnt new things, some teachers demonstrated their interest in applying some of the knowledge they had acquired in their teaching practices. Firstly, teachers stated that they wished to integrate many of the technology tools and practices mentioned in the course in their teaching (n=7, 50%). Such practices were telecollaboration (n=3, 21.42%,) and the use of Augmented Reality (n=1, 7.14%). The tools were Kahoot (n=3, 21.42%), Timetoast (n=2, 14.28%), Prezi (n=2, 14.28%), VR (n=1, 7.14%), note-taking tools (n=1, 7.14%), Twitter (n=1, 7.14%), serious gaming (n=1, 7.14%), the G Suite for Education (n=1, 7.14%), and Quizlet (n=1, 7.14%). Teacher 23 said that she already used a lot of the tools mentioned and she proceeded further by expressing her interest in examining their effectiveness in terms of enhancing students' language performance through research.

Apart from the various technology tools, AR was also regarded as a practice that could prove very useful in an ESP environment, and almost all teachers that completed the course agreed that it should be implemented in their teaching practices (n=8, 57.14%). These findings demonstrate that teachers realised and appreciated the role of AR as a way of improving the teaching practice and developing professionally, as suggested by Daoud (1999), Maclean (1997) and Chen (2000). Therefore, it could be claimed that the course objective that related to helping teachers understand the value of AR and making them think of ways to implement it in their practices was achieved.

Apart from integrating different technology tools and AR in their practices, Teachers 22 and 8 also referred to ideas such as enhancing students' employability skills through educational visits as well as students' enculturation in their professional environment; these ideas were shared by the facilitator during the sequel course. The two teachers said they wished to explore them more in their classes.

Another positive aspect of the course was the fact that, as in Stage 1 of the study, we all felt that a professional community spirit was developed and maintained throughout the two stages of the study. As seen in Stage 1 of the study, a CoP had been established; data form Stage 2 show that this CoP was sustained, and even though not all 17 teachers that had completed the ReTEESP Online in Stage 1 could attend the sequel course (only 14 of them registered for the sequel and only nine managed to complete it), they were still active on Facebook and the Chat Room on Messenger. The CoP spirit that was developed among the teachers is illustrated in the facilitator's reflections:

> *During these two days I have been preparing the material for Webinar 4: Where to now? Ideas for future action and possible collaborations. The idea behind this is to encourage the participants to continue this professional relationship we have established and cooperate on future projects. Basically, keep this community of practice alive and active.*

> *Teacher 8 said that she is interested in future possible collaborations with these colleagues and she seemed to be very enthusiastic about the whole experience with the course and willing to contribute to Webinar 3, talking about her experience with using the VR with her ESP students.*

This was not only felt from the part of the facilitator only; teachers appeared to feel the same as shown in the following comments:

> *And I really enjoyed it. And the other thing was that we have the chance to communicate, and even if there were some messages, I mean written communication, that was perfect again, we cannot all meet and discuss in a live session, OK this is very difficult, but is very nice to hear that you are not alone (she laughs). That was perfect for me!* (Teacher 18)

> *First of all, I would like to say thank you for giving us the opportunity to join this network, because from me was like the most useful benefit was networking, networking with various ESP practitioners, instructors, who… basically, we had the chance to get to know each other and what's going on in different contexts.* (Teacher 8)

> *When we first met last year, we didn't even know the last names of each other, I mean it was hardly known. But we still felt that we were connected, believed in the same thing, sharing lights and interests, there was something really nice and that's actually a hell of a good way to keep the drive going. So, hopefully the sequel keeps going, you know. Rambo did 5 movies you know.* (Teacher 14)

Among other things, the sequel course was an opportunity for everyone involved to connect even more and develop closer professional relationships and even share personal information. As seen in section 4.5.2, this started in Stage 1 of the study, and continued after the completion of Stage 1 through messages sent via Messenger and Facebook involving interesting updates on ESP and LT in general. Between the two courses I even had the pleasure of meeting one of the teachers in an international conference in person, when we both realised that we were attending the conference. This kind of personal bonding between some teachers (n=5, 35.71%) and me also continued throughout Stage 2 and even after the completion of Stage 2. Some examples of this are teachers' engagement in small talk with me before the start of a Webinar, the discussions which they had on participation in conferences and future collaborations and wishes expressed for meeting each other in person.

Another positive aspect was the fact that the whole process of designing, delivering and evaluating the ReTEESP Online: The Sequel was very beneficial for me personally. The

benefits were not limited to new knowledge acquired through the interaction with the teachers, but they also contributed generally to my PD both as an ESP practitioner and as a teacher educator; this is one of the greatest qualities of AR (Baumfield et al., 2008). To start with, the sequel course was an opportunity for me to explore new tools in the TE process, such as Zoom and the groups feature of the Facebook Messenger. Furthermore, while the course was being designed and implemented, I came across useful material and ideas that would also inform my own teaching practices as an ESP practitioner and as a teacher educator. What is more, this process of iteration, and repetition of the TAR cycles helped me become more confident as a teacher educator, more practical, flexible and alert to deal with professionals from different educational contexts all around the world, who faced technical difficulties, had questions, needed feedback and encouragement to continue developing. The whole process allowed me to develop the "self-awareness" required in order to cope with the challenges encountered (Roberts, 1998, p.3). My general thoughts on both stages of the study starting from the problem identification, moving on to the design of the course, pilot testing, actual implementation of the ReTEESP Online, reflection, refinement and implementation of the new additions to the course are reflected in these extracts from my field notes:

> *The result of the study was beyond my expectations. First of all, the whole experience from the beginning of Stage 1 of the study was an opportunity for me to see things retrospectively and reflect on my experiences in the ESP field so far. This helped me contemplate on my course as a professional and understand the things that helped me evolve professionally (education, teaching practice, reading, conferences/ workshops/ lectures attendance, research, sharing experiences and collaborating with colleagues).*

> *After this process of introspection, my task was to help colleagues with whom we shared the same concerns, interests and wish to develop in the area of ESP. The journey to achieve this was demanding but extremely rewarding, as it was an opportunity for me to develop more and gain more experience as a teacher educator. Every single step of the way meant new knowledge and new experiences. The literature review shed light on many aspects of ESP, how people learnt and how teachers are educated. I could see my experiences from a scientific point of view, and through the review of the literature and previous*

research in the field, I could guide this group of language instructors to gain new knowledge and experiences in the ESP field, based on solid scientific evidence.

Through the implementation of the ReTEESP Online not only did I gain new knowledge from the exchange of ideas shared between colleagues, through the discussions on Google Classroom and on Messenger, but I also learnt how to work with teachers. Up to 2017, my teaching career was dedicated to teaching English. This research marked the beginning of a wonderful journey into TE, which I hope will last for long.

Moreover, the study marked the beginning of new friendships, especially between teachers and the facilitator, and collaborations. The communication within the group did not fade between the two stages of the study and it still continues even after the completion of Stage 2.

All of the above are in agreement with the literature that describes the value of AR, both for the context in which it is applied and also for the researcher (Ali & Bano, 2013; Chen, 2000; Daoud, 1999; Feng, 2009; Maclean's, 1997; Räsänen, 2008; Sullivan & Girginer, 2002). The researcher's self-improvement and development are among the merits of AR that were exalted by McNiff (2010) and Dikilitaş and Yayli (2018).

Another aspect of the course that proved to be very beneficial and was viewed positively by the participants was the practice of reflection. As in Stage 1, the value of reflection was well-understood and appreciated. In the following entries, two of the teachers made special reference to how they perceived reflection in the course:

Maybe the fact that there was that reflective journal, and something that we take for granted or we don't think of a lot, when we have mentioned them in writing, then we realise that we become more aware of what we think. I think this is very important as well. because this leads to learning. (Teacher 18)

The component of reflection is amazing. Just tried it a couple of times, to me it's a yoga. It's going deeper into your thoughts, you are not pushed by the agenda by the schedule by what you have to do. You are empowered by what you really want! And there's nothing wrong with that. It could be something silly but at

least you know what you are empowered by. Thank you very much again and again and again. (Teacher 14)

The fact that reflection was appreciated in both stages of the study is essential since reflection was among the founding principles of this course, as seen in section 2.4. Teachers appeared to embrace this, and this is not only evident in their comments about reflection but also in the reflective process itself. As in Stage 1, teachers' reflections suggest that they were involved in processing and synthesising information that they obtained from the course with their everyday teaching reality. Their reflections show "deep engagement" with the theory, which according to Maggioli, (2012, p.7) is a prerequisite of learning how to teach. This is a view supported by Prosser and Trigwell (1999), Ramsden (2003) and recently Anderson (2020), who emphasise the significance of deep thinking while reflecting to achieve deeper learning. In the following extract, Teacher 8 contemplates on the process of integrating Augmented Reality in her practices in her reflective journal. The topic obviously interests her, and she goes deeper by finding information on the topic on her own:

I could use Augmented Reality which enhances (augments) a real-life environment.

An enhanced version of reality where live direct or indirect views of physical real-world environments are augmented with superimposed computer-generated images over a user's view of the real-world, thus enhancing one's current perception of reality (from augmented-reality).

This could be achieved through a tablet or through somebody's phone provided that the needed software could be sustained. For example, the application Aurasma allows you to place your phone or your tablet over a picture or objects or take a picture of an object (trigger), and then choose your overlay which will reveal the picture you have taken in an augmented form. This could be used for Vocabulary, for example, in the Nursing course. (Teacher 8)

The reflections of Teacher 22 on the topic of AR also show her interest in the topic and her effort to understand how this can be applied in her own teaching reality. This is another example of how teachers employed reflection during the course:

It was very interesting to see exactly how Action Research works and what steps are involved (plan, act & observe, reflect, revised plan, act & observe, reflect). It's something that I could implement in my practices but I need to do a lot of planning and reflecting. It could work best with the students I see more than once a week. These students are between the ages of 16 and 19 so I would have to be very careful with my choice of data collection tools. One of the challenges that I am currently facing is the motivation of students coming to classes after they have completed their exams. We still offer classes even though most of them have completed all of their exams. Their attendance though has dropped significantly lately. A similar action research to the study by Dehnad & Nasser 2014 can be used to tackle the situation. Obviously, that took a lot of planning and time. I think it would be useful to change the material used after the exams to make it more relevant to their interests and needs. Then I could give students a questionnaire to assess students' attitudes towards the changes.

(Dehnad & Nasser 2014 - Data was collected by means of interviews with both teachers and students to determine the changes to be made in the syllabus, classroom observations to monitor students' behavioral changes, and a questionnaire to assess students' attitudes towards the changes.)

To conclude, as far as the first thematic category is concerned, the findings revealed that the teachers' and my general views about the course were positively-oriented. Moreover, the data showed that certain challenges were faced during the course; nevertheless, the course had a lot of merits as well. The section that follows elaborates on the second thematic category, the suggestions for the future.

5.4.2   Thematic category B. Suggestions for the future

During the course and after its completion, certain suggestions were expressed by everyone involved in the course on how the course could improve and how they could proceed with this PD endeavour in the future. These suggestions are summarised in Table 18. A total of 18 references were made to suggestions for improvement within 14 files.

Table 18. Suggestions for the future

Suggestions for the future	Files	References
Extra-curricular activities (staff exchange visits, students' educational visits, co-teaching, telecollaboration projects, collaboration on research projects, publication of material, maintaining the CoP)	8	10
Content (more challenging, practical, collaborative tasks, inviting participants teaching other languages)	4	6
Forum Creation	1	1
Change in the time of Webinars	1	1
Total	14	18

5.4.2.1 *Extra-curricular activities*

A series of extra-curricular activities were suggested that the participants and I could be engaged in, in order to maintain this CoP and continue developing together as ESP practitioners. The last Webinar was dedicated to this. These were my suggestions:

- Continue to maintain this community of practice by:
    - keeping the Facebook group running/ Perhaps opening it to the wider public in the future
    - keeping the Messenger chat room (only for the participants of this course)
- Staff exchange visits (Erasmus staff mobility)
- Students' educational visits
- Co-teaching some classes (one or two sessions)
- Telecollaboration projects between our students
- Collaboration on research projects

Almost all of the teachers who participated in the sequel course and managed to complete it (n=8, 57.14%) embraced these ideas (one of the teachers did not provide feedback on the last Webinar or after the completion of the course). Two of the teachers (14.28%) even started planning for a visit to the CUT LC in the context of ERASMUS+ Staff

Mobility for Teaching programme and a bilateral agreement between the Ministries of Education of Greece and the Republic of Cyprus. Two other teachers (14.28%) suggested the organisation of a conference where teachers could meet face-to-face, as this would allow everyone to gain even more, and also brainstorm on how practical obstacles such as the need for funding could be overcome. The same teachers also suggested the publication of an online magazine dedicated to ESP topics. Other suggestions concerned online collaboration among students through an online forum either on Facebook or any other platform (n=1, 7.14%) and student exchange visits (n=1, 7.14%). It is worth noting that two teachers (14.28%) urged me to continue with a similar course in the future. This is what they said in the interview:

> *My question is are you planning on doing something maybe next year perhaps or something different?* (Teacher 22)
>
> *So, I'm looking forward to your email saying that you're going to start the next one. I'm going to pass it round to these guys, they'd be very happy to join in, and enjoy it, and get to feel the buzz.* (Teacher 14)

5.4.2.2 *Course content*

Regarding the course content, Teacher 14 expressed the view that in the future the course could include some more challenging tasks towards the end and also address different ESP disciplines.

Two teachers (14.28%) suggested the addition of more practical tasks. One of them, Teacher 10 suggested that in case the course continued to include two sessions per week, one session could be theoretical and the other one more practical. Her comments in the interview also implied that last year's ESP lesson planning was too easy for her. She suggested frequent use of small practical exercises/ scenarios. In the interview she said:

> *I'm thinking in one session could be theory, some sort of exercises, I think this is what is missing, it needs to have the opportunity to get that initial prompt by you and then you need to ask us to submit something. I don't know if that's going to work, but I felt that when I was exposed to others, when you were expecting all of us to submit something, say something, I could feel the pressure. Otherwise I could just you know hide, so I think if you could have... last year it was a bit also, you know, lesson planning, it was a bit too beginners'. So, if you could update*

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that material, upgrade it in some sort of sense with practical information and recent bibliography I think that's gonna work better. Does it make sense? Do you see what I mean?

I think it works really good that you give a short presentation about the topic about your experience, and I think you need to give people the opportunity to prepare something before the online sessions, as you did with Session 3. But do it in some sort of exercise. What do you guys do? Or you could have scenarios. You're asked to teach this. To prepare that. What do you do?

Teacher 10 also added that the sequel course could be enriched with more collaborative activities in small groups of 3-4 where participants would have a deadline before the Webinar, as done in the case of Webinar 3. People would feel obliged to work more and participate in the Webinars. A final suggestion was for me to run a seminar/ course on theoretical principles on foreign language teaching in general and open it to other foreign language teachers, who teach different languages and form different groups; this way it could have an intercultural dimension. This course could be of the same length.

5.4.2.3   Creation of forum

Another suggestion made by Teacher 18, referred to the creation of a forum, completely independent from the course, where teachers would have the opportunity to raise questions concerning their job. A private Facebook group could be used for this.

5.4.2.4   Time of Webinars

Teacher 10 stated that evening sessions worked better for her, due to professional obligations during daytime. The idea of having evening sessions was also suggested by Teacher 15.

The findings in Stage 2 of the study show that even though additions and changes were made to the ReTEESP Online, and even though teachers perceived the additions positively, there was still room for improvement. What is worth discussing is the fact that both the teachers and I seemed to agree that this effort to address this group's need for ESP TE, could not be limited to a single time course of six to eight weeks. This is evident in the way they discussed future plans, and the fact that some of them encouraged me to organise a third course. These findings are in agreement with Jendrych (2013), who

asserted that ESP teachers will need to learn a lot of things that they were not taught at the university, and this will continue throughout their professional life. "As simple as that. As demanding as that. The bar for qualified ESP teaching is going higher and higher" (Jendrych, 2013, p. 55). This was known to me before the design of the ReTEESP Online from the literature review, and it was actually one of the principles the course was built on. I aimed at developing an intervention that would provide the teachers with the opportunity to achieve that.

This section elaborated on the findings from Stage 2 of the study. The conclusions are drawn in the next section.

5.5 Conclusion

The reflection on the implementation of the ReTEESP Online: The Sequel in Stage 2 by everyone involved in the course yielded important findings which related firstly to the different aspects of the course, such as the way the participants viewed the course, positive aspects and challenges encountered, and secondly suggestions for future improvements and future action.

The key findings from the implementation of the ReTEESP Online: The Sequel are summarised in Table 19.

This chapter described the second cycle of this TAR. The next chapter provides a discussion on the most important findings of the study obtained in both Stages 1 and 2 concentrating on all the five RQs.

Table 19. ReTEESP Online: The Sequel implementation: Key findings

Feelings about the sequel course	Feelings about the course as a whole	Positive aspects of the course	Challenges faced	Ways challenges were addressed	Suggestions for the future
- Teachers looked forward to it - They felt that it addressed their feedback in Stage 1 - They characterised it interesting, useful, more interactive with new ideas - Well-organised - It complemented the ReTEESP Online	- Teachers characterised the course as a whole (The ReTEESP Online and the ReTEESP Online : The Sequel) successful - Opportunity for ongoing learning and networking	✓ Course had many interesting elements/ Especially the topics ✓ New knowledge was acquired by teachers and the facilitator ✓ Teachers could apply new knowledge in their teaching ✓ Facilitator developed professionally as a teacher educator and ESP practitioner ✓ CoP strengthened	• Time constraints and teachers' other commitments/ Lower participation numbers • Technical difficulties • Difficulties in communication between some participants • Difficulties in accessing the material shared by the facilitator • Reflection was regarded as challenging • The Facebook and Messenger groups were	☼ Recording and sharing of Webinars/ Teachers could watch them later ☼ Continuation of discussions in the Messenger chat room and on Facebook ☼ Constant guidance was offered to the teachers through synchronous and asynchronous communication ☼ Feelings of discomfort were dealt	➢ Involvement in extra-curricular activities (staff exchange visits, co-teaching, telecollaboration, etc.) ➢ Maintenance of the CoP ➢ Inclusion of more challenging, practical and collaborative tasks ➢ Inclusion of teachers of other languages in the course ➢ Creation of an independent ESP forum

	✓ Personal relationships/ bonding developed ✓ Reflection understood and appreciated more	not followed by all teachers	with direct communication between the facilitator and the teachers to solve any problems that arose ☼ Same class on Google Classroom was used for consistency and to minimise teachers' anxiety with technology ☼ Webinars were scheduled within Zoom's time limits	➢ Scheduling of Webinars in the evening

CHAPTER 6. DISCUSSION OF KEY FINDINGS

6.1 Introduction

The purpose of this chapter is to present the most important results that derive from both stages of this TAR, synthesising the key findings and referring to the relevant literature, in an effort to respond to the RQs that guided the study.

These were the RQs, as presented in section 3.3:

1. What challenges does the implementation of the proposed course (the ReTEESP Online) confront?

2. How are these challenges addressed?

3. What changes can be made to improve the course in the future?

4. Does the online course proposed address the needs of this group of language instructors in terms of ESP TE?

5. What constitutes an effective short ESP TE course in this context?

Each RQ will be the focus of each of the following sections.

6.2 Research Question 1

What challenges does the implementation of the proposed course (the ReTEESP Online) confront?

Despite the fact that the course was designed following a thorough examination of different parameters involved, and mainly taking into account the teachers' needs and professional realities, the reflection phase in both Stages 1 and 2 reveals certain challenges the implementation of the course confronts. The challenges encountered in Stages 1 and 2 of this TAR are presented in detail in sections 4.5.2 and 5.4.1 respectively and synopsised in Tables 11 and 16.

In summary, the findings show that the challenges faced in the first implementation of the ReTEESP Online in Stage 1 are more than the challenges in Stage 2. This is logical and expected somehow, since after the first implementation of the intervention, the improvements that take place minimise the possibilities of encountering similar problems

in the second implementation of the course. This reflects Denscombe's (1998, p. 129) remark that in this ongoing reflective cyclical process of AR "research feeds back directly into practice". Generally, it can be claimed that the implementation of the course in both stages of the study does not confront serious challenges that question the theoretical foundations of the course, as these are listed in section 2.4. This is evident in the teachers' general comments on the course in both stages; teachers describe their experience with the course with positive comments using positive adjectives. The challenges reported are discussed in order of importance based on the number of times they were mentioned by everyone involved in the course.

The most serious challenges relate to teachers' lack of free time, tight deadlines and teachers' busy work schedules in combination with time difference between countries. This is logical, as the course also addresses practising teachers, and this can also explain the reduced participation in the sequel course. This fact reinforces the idea that ESP TE today needs to be flexible so that it meets the needs of all current or future ESP practitioners, even those who cannot leave their teaching positions to seek PD, as initially suggested in section 2.3.2 of the literature review. It may also denote that short courses occurring at a regular basis could be a better solution for ESP TE for ESP practitioners or future ESP practitioners than long courses which demand teachers' constant commitment. Findings from Stage 1 also reveal that, when a course leads to official certification, course participants feel more obliged to attend the course and perform well. In the case of this course, teachers' motivation is mostly intrinsic, even though a certificate of attendance is issued by the CUT LC upon completion, and a gift voucher to buy books online is given to one of the participants in the end.

Other challenges involve certain technology tools that are used in the course. The most serious challenge faced concerns the tools used for the delivery of Webinars; Skype is not such a successful Webinar tool, as it fails to cater for a large number of participants, while tools like Zoom with all its features are not for free. Perhaps a more promising and less expensive tool is Google Meet, which is included in the G Suite for Education. Difficulties faced with other tools that are used in the course, i.e. the G Suite for Education, Google Classroom, G Drive are minor and not faced by many participants, as the percentages in section 4.5.2 reveal, and they mostly relate to the fact that teachers are not acquainted with these tools at the beginning of the course. Henry and Meadows (2008)

elaborate on the presence of such challenges in online courses due to the different dynamics. They support that, because there is no face-to-face interaction, online course participants need detailed step-by-step guidance with supplementary explanatory content added to the course material. Another challenge related to technology concerns the use of the private Facebook group. Despite the fact that Facebook is one of the most popular social media tools used in education that can enhance informal learning, according to Raynes-Goldie and Lloyd (2014, p. 153), "the architecture and policies of Facebook create a number of significant privacy and boundary management issues". For this reason, some teachers hesitate to use it in the teaching and learning process. Lastly, another challenge encountered relates to the fact that the interface of the platform used for the delivery of the course (Google Classroom) may change in the future. This could potentially create problems to teachers who may visit the platform to find the course material in the future. Such challenges arise in case colossal technology companies like Google make decisions regarding changes in applications without providing their users with any other choice than to accept them (Dillon et al., 2010; Sultan, 2010).

Other challenges concern the limited opportunities for synchronous communication, which also limit the opportunities for synchronous collaboration. This also happens due to time constraints; lack of free time leads teachers to often cooperate asynchronously rather than collaborate (Hathorn & Ingram, 2002). Even though both processes promote social constructivist learning approaches, the shared meaning which collaboration fosters is vital for the learning process (Paulus, 2005). Furthermore, through synchronous communication the feeling of social presence is strengthened, which is vital in online learning (Henry & Meadows, 2008; Maggioli, 2012; Parsons et al., 2019). When a tool for synchronous communication is missing from the course, teachers rarely take the initiative to contact each other on their own, since they are not acquainted. Moreover, some communication misunderstandings can be created between teachers, which proves that every group, even an online CoP, is a living organism which reflects participation in social life (Wenger, 2010). This also stresses the need for the facilitator's active and constant presence in the course, catering not only for the processes of teaching and learning, but also for the social aspect of the course, which is an essential part of the educational experience, and an important aspect of a CoP (Henry & Meadows, 2008).

Other challenges, less widely expressed than the previous, involve some difficulties with materials, tasks and the process of reflection. More specifically, some teachers may feel overwhelmed by the course and the workload, and they may find the tasks difficult (e.g., designing the needs analysis process, designing a lesson plan having different parameters in mind, interacting with colleagues and reflecting). Some teachers may even feel that lesson planning is an activity that creates constraints or they may believe that other perhaps more experienced colleagues can perform better. On the other hand, some other teachers, the more experienced ones, may think that the course is not so advanced, especially at the beginning where the basic principles of ESP are covered. All these challenges are somewhat expected, since the course is addressed to both novice and experienced ESP practitioners.

The next section answers the second RQ.

6.3   Research Question 2

How are these challenges addressed?

The challenges encountered in the course are addressed through action taken both during the course and after the completion of the course with improvements made after reflection.

As far as time constraints and tight deadlines are concerned, these can be dealt with an expansion of the duration of the course, and extension of deadlines, if this is possible; the course can have a minimum and a maximum duration. The issue of time differences between countries can be addressed through the participation of teachers in polls (e.g. Doodle polls) to set the time of Webinars; to cater for all time preferences Webinars are repeated and recorded, and recordings are made available to the participants. This can also minimise technical difficulties such as connection and sound problems when participants are more than five, if access to teleconferencing tools that can cater for many participants is not possible.

As regards challenges with technology tools, these can be dealt with, first of all, by obtaining information on the participants' technology literacy during the needs analysis process; this way the course facilitator can be aware of how much help and support the participants will need with technology during the course. In any case, the facilitator must

provide teachers with constant guidance and support learning (Henry & Meadows, 2008; Maggioli, 2012; Parsons et al., 2019) through sending them clear instructions of what they need to do, both in writing and in multimedia form (e.g. visuals, videos, interactive tutorials, etc.). The problems faced because of limited synchronous communication are dealt with the facilitator's encouragement of the teachers to communicate with each other using Google docs features, while they collaborate, and the addition of a Chat Room to the technologies used in the course (e.g., created using Facebook Messenger, as this is a tool that is used by almost all the participants in their everyday life); thus, communication can be more direct and immediate. The teachers' suspiciousness over Facebook should be respected and Google Classroom can be used as the main platform for the delivery of the course; the Facebook private group can be maintained only as supplementary, to share useful information regarding ESP events, research released and other material that will enrich the learning process. Research shows that the use of social networking sites such as Facebook can be beneficial. Social media are positively perceived by adult learners helping them build a sense of community (Dogoriti et al., 2014; Yildirim, 2019) and can facilitate the integration of informal learning into formal education (Rosell-Aguilar et al., 2018). However, De Villiers (2010) argues that participation in Facebook groups should be voluntary and, as in any class, participants can decide for themselves whether they like to be active and how to engage with the material.

Other issues, such as misunderstandings between participants or objections regarding the allocation of participants in groups and feelings of discomfort, can be addressed with discussion with the facilitator who needs to explain the criteria behind the organisation of groups and, in agreement with the participants, come up with appropriate solutions. The facilitator's constant monitoring of the situation is the way to solve all the problems that arise and any feelings of discomfort created. The course facilitator needs to be always alert and provide immediate responses to the teachers ensuring the smooth operation of all the aspects of the programme., According to Oblinger and Hawkins (2006), online courses do not just involve content, in other words, the uploading of relevant material, but they also involve learners' active participation and the facilitator's coaching and building of an appropriate learning environment. Otherwise, course participants lose their motivation and this has negative consequences on their learning (Hew & Cheung, 2014).

Regarding challenges concerning the course syllabus, the course designer must expect that, for novice ESP practitioners, certain material or tasks may be difficult while, for other more experienced practitioners, they may be basic. For this reason, reflection and feedback is significant, as they can lead to the improvement of the syllabus along with other aspects of the course. In this regard, certain additions can be made to the course, while tools and practices that have not proved to be efficient can be removed. For example, Stage 2 cycle commenced with a refinement of the course (section 5.2), which involved the extension of the course to two more weeks and the creation of ReTEESP Online: The Sequel, which included topics that were of interest to the teachers (i.e., the latest developments in ESP, Action Research in ESP, the use of technology in ESP teaching, and ideas for future action). These topics were added based on the feedback that was obtained by the teachers in Stage 1 and also on the latest development in the field of language teaching. Since the teaching methods and modes of instruction were regarded as successful, the researcher decided to utilise them in the sequel course too. More Webinars were added however, to promote synchronous interaction, which teachers requested in Stage 1, and show and tell tasks were also incorporated in the syllabus. Skype was replaced with Zoom for more effective performance, and sessions were arranged so that they did not exceed the 40 minutes limit (25 minutes presentation and 15 minutes interaction). Finally, to encourage more synchronous communication and interaction among the teachers and develop the sense of belonging to a CoP, the Chat Room on Facebook Messenger was created.

Generally, challenges may be addressed with the facilitator constantly managing and catering for every aspect of the course, making changes, providing frequent feedback to the teachers, clearly stating the learning outcomes of each session from the start, addressing any problems that might arise and being able to communicate successfully with the teachers (Henry & Meadows, 2008).

The section that follows provides a response to the third RQ.

6.4   Research Question 3

What changes can be made to improve the course in the future?

The findings from the two stages of the study prove that the combination of the ReTEESP Online and its sequel is successful, based on solid theoretical foundations, as these are

laid in the last section of the literature review (section 2.4.). Nevertheless, the completion of the reflection phase in Stage 2 leads to the extraction of conclusions regarding changes and additions that can be made in order to improve the ReTEESP Online in the future. These are explained in detail in section 5.4.2.

First of all, one of the most important findings of this TAR is that TE and PD are ongoing and that they cannot cease to progress as developments in education and in other aspects of everyday reality continue to take place (Hansen, 2008). This is evident in the facilitator's and teachers' reflections and their various suggestions on additions to the course, and their eagerness to continue participating in the course in the future. Adopting the distinction made by Wallace (1991) and Richards and Farrell (2005) that TE is initiated by others while PD depends on the teachers themselves, the intervention that this TAR suggests embraces both of these practices in the belief that both are vital for the evolvement of ESP teachers' expertise and professional knowledge. According to Mann (2005), teachers' development is multidimensional involving many processes, such as AR, reflective practice, peer observation, journal writing, collaborating on publications, etc. For this reason, from its beginning, ReTEESP Online aims to be the starting point of a long journey into learning, expanding the teachers' horizons to many different forms of development; this carries implications for the future.

More specifically, one of the most important suggestions for the refinement of this course is to enrich it with extra-curricular activities such as staff exchange visits, students' educational visits, co-teaching of ESP classes, involvement in telecollaboration projects and collaboration on research projects. Such activities will give the opportunity to the teachers to experience more, acquire new knowledge through collaboration and interaction, reflect on new practices and become engaged in lifelong learning and PD. All these practices are in accordance with social constructivism (Beck & Kosnik, 2006; Detel, 2001; Powell & Kalina, 2009; Vygotsky, 1978), connectivism (Bell, 2011; Duke et al., 2013; Siemens, 2005; Siemens & Conole, 2011) and sociocultural TE models (Franson & Holliday, 2009; Johnson, 2009), which according to research may constitute the underlying principles of ESP TE nowadays (see section 2.4).

It is worth mentioning that after the completion of the course, these plans started to be materialised, as one of the teachers from Greece visited the CUT LC. There she had the opportunity to meet the researcher and course facilitator, see the University premises,

observe classes and co-teach an ESP class with the facilitator, meet other colleagues, discuss issues concerning ESP teaching methodology and research, talk about possibilities for future collaboration, enjoy Limassol, where the CUT is based, and establish a strong professional relationship with the facilitator. The visit would be returned by the facilitator at a later stage. A similar visit was planned by another teacher in the context of the ERASMUS+ Staff Mobility for Teaching programme, but unfortunately, due to the pandemic of 2020, it had to be postponed.

To maintain this CoP, the teachers and the facilitator may continue using the ReTEESP Online: The Sequel Chat Room and the Facebook group for sharing interesting information. This group can be open to the public, a thought expressed during the reflection process; nevertheless, this should be done cautiously, since even though the benefits could be numerous, research shows that the issues of privacy that could arise (Miron & Ravid, 2015) could outweigh the benefits. Furthermore, a Facebook group can be created, which would operate as a forum for exchanging ideas on ESP, open to anyone interested in ESP, so that teachers would gain a lot from their interaction with ESP practitioners beyond the community of the 24 language educators who participated in the course.

As far as the course content is concerned, the course should continue catering for the teachers' needs and being context-driven, in other words, taking into account the educational environment each teacher operates in, so that better educational results are achieved. It should focus on the latest developments in the ESP field, considering technological advancements and the changes in the wider social, economic and political setting. This should always be considered for the development of global skills of active 21st century ESP teachers who will later educate active 21st century learners (University of Oxford ELT Expert Panel, 2018), a view which is in agreement with the principles of critical pedagogy which this course embraces as seen in section 2.4. Therefore, as far as topics are concerned, these may include the use of specific software and LMSs for blended and online learning, the need for which was intensely sensed during the 2020 pandemic, the employment of AR to cope with specific problems faced in an ESP class, the status of the ESP practitioner, the teaching of different ESP disciplines, development of appropriate materials, sharing good teaching practices, ESP assessment and ESP

course evaluation. The list of topics may be endless and should depend on the developments at that particular time.

Findings show that Webinars are well-accepted by the teachers and they constitute an opportunity for discussing things, getting to know each other, and bonding with colleagues. They can be a great tool for synchronous communication that enables interaction between the facilitator and the participants and the participants themselves through chat, audio only, or through audio and video (Polanco-Bueno, 2013). Most importantly, Webinars in courses which are not addressed to massive numbers of people can promote a more personal approach to learning, which enhances participants' motivation (Hew and Cheung, 2014). Therefore, Webinars may be part of the course in the future. To eliminate the issue with the limited time of the free version of Zoom, Google Meet can be used for the delivery of Webinars, which after the 2020 outbreak, has been incorporated into Google Classroom. Regarding the time Webinars are scheduled, this can be discussed with teachers again, and morning sessions can turn into evening sessions.

Moreover, the course can include more collaborative, practical and challenging tasks that may cater for the needs of more experienced ESP practitioners.

Discussion now turns to the fourth RQ.

6.5   Research Question 4

Does the online course proposed address the needs of this group of language instructors in terms of ESP TE?

This RQ focuses on whether the intervention designed in the context of this TAR has managed to fulfil the cause it was designed for, in other words, address the teachers' need for ESP TE. The response to this RQ is discussed in relation to the teachers' needs reported in the needs analysis conducted at the beginning of the course (section 4.3.2). Teachers' needs are synopsised into four major needs: Improvement of ESP teaching methodology, PD, improvement of ESP syllabus design skills, and learning about the latest developments in ESP.

6.5.1 Improvement of ESP teaching methodology

The need for improvement of their ESP teaching methodology was the need expressed by almost all the participants in the course, 41.66% of whom had received no ESP training in the past, and 29.16% of whom had no experience in teaching ESP. Findings from Stage 1 show that teachers received new knowledge related to ESP teaching. New knowledge reported by the participants in the course concerns the following: information about the flipped classroom, learning theories such as connectivism, how to use authentic texts in their teaching, design lesson plans, conduct needs analysis, find materials for an ESP class, improve students' learning skills and create Power Point Presentations with audio support.

The fact that the course is built on a "practising what you preach" approach, as supported by Wallace (1991), urges the teachers to consider elements from the course that can be applied in their ESP teaching practices. The good organisation of the course, the way the material was presented, the learning outcomes stated at the beginning of each session, the appropriate and to-the-point material, the useful tasks and the collaboration and reflection processes are practices that the teachers wish to incorporate in their own teaching. Furthermore, thematic analysis reveals that teachers also like Google Classroom and Google Drive, the affordances of a private Facebook group, the needs analysis processes that were recommended, some technology tools (e.g., Cmaps, Kahoot) and generally the methodology used in the course. Other useful ideas gained in Stage 1 are the development of intercultural awareness, the use of authentic texts, lesson planning, contacting professionals in the field, tasks suggested by other participants and the development of 21st century skills in the ESP teaching and learning processes.

Findings also reveal that teachers learn about the latest developments in ESP, especially about the use of technologies such as VR, serious gaming, tools such as Quizlet, Expeditions, Twitter and the G Suite for Education. They also learn the benefits of using literature in an ESP class and telecollaboration, and they understand AR better. The facilitator's knowledge on ESP teaching methodologies is also enriched. More specifically, during the course, I acquired new knowledge on different tools and ESP assessment processes proving that TE, especially if this is based on the active involvement of the participants, interaction and collaboration, improves also the practices of the teacher educator (Korthagen, 1995). Participants in the course expressed the wish to apply

many of the tools and practices they learnt about (i.e. telecollaboration, integration of Augmented Reality, VR, Kahoot, Timetoast, etc.) in their teaching.

It is worth mentioning that, through the course, teachers understand the importance of teacher research, which they are willing to incorporate in their practices to develop their ESP teaching methodologies. After the completion of the course, the teachers appear ready to "demystify research" (Smith, 2020, p. 07) following the examples of many other teachers worldwide. The way AR can be used for the development of teachers' ESP practices is also praised by other professionals (Ali & Bano, 2013; Chen, 2000; Daoud, 1999; Feng, 2009) as seen in the literature review.

6.5.2   Professional development

Regarding teachers' need for PD, the course aims at equipping the teachers with the appropriate tools in order to develop professionally and continue to do so in the future. Findings show that this is achieved to a certain extent, as PD should be ongoing and learning should be lifelong.

More specifically, the ReTEESP Online incorporates information on ESP journals, professional ESP associations and fora teachers can become members of, which according to Smith and Kuchah (2016) may promote teacher research and eventually empower teachers, exposing them to research conducted in the field and informing them about events organised in the ESP field. Additionally, the reflective journal helps them gain more insight on their practice, and can potentially help them develop their ESP teaching in the future (Almabekova, 2010). Development of time management skills is another PD achievement mentioned. Furthermore, findings imply that teachers have the opportunity to become familiar with AR and how its transformative potential helps teachers enhance their teaching and professional skills in general (Burns, 2015; Dikilitaş, 2015; Rebolledo Cortés, 2013; Smith, 2015; Smith & Rebolledo, 2018), which also contributes to the development of the institution/ school they work (Snoek & Moens, 2011). Last but not least, teachers refer to the sense of belonging to a CoP, which will continue being active in the future through the Facebook group, through offering them future opportunities for more organised ESP TE programmes developed by the facilitator and also through future opportunities for collaboration that teachers hope for.

Additionally, the facilitator also benefits professionally, since apart from gaining new knowledge related to the ESP field. As the results show, I also developed both as an ESP practitioner and as a teacher educator feeling much more confident and capable of carrying on with my two roles successfully.

At the end of the course, participants made plans for the future to continue developing professionally through maintaining this CoP and collaborating on various projects including co-teaching, co-researching their practices, organising events, etc.

6.5.3 Improvement of ESP syllabus design skills

Teachers' need to improve their ESP syllabus design skills is a need that was taken into account when the course was designed and delivered. Due the fact that this is a short course, the best way to address the need for developing ESP syllabus design skills is to do it through the lesson plan assignment, the purpose of which is to serve as a miniature of a syllabus covering all aspects of the teaching and learning processes. As seen in section 4.3. dedicated to the design of the course, lesson planning and delivery are processes which are often used in TE; therefore, they often appear in MA courses, and they are also suggested by the BALEAP TEAP Scheme, as described in section 2.3.2.

The study of how to develop a lesson plan involves a collaborative investigation on how to conduct situation analysis and needs analysis, how to set general aims and specific objectives, and decide on the resources, tools, tasks and the process of the lesson. In this sense, the teachers are provided with the opportunity to study all the aspects involved in a micro syllabus design process. Almost half of the teachers in the study claim that the lesson plan is an efficient way to revise everything, from needs analysis to assessment processes, paying attention to their own educational context, as suggested by Chen (2000) and Mahapatra (2011).

Apart from studying how to develop their lesson plan, teachers collaborate on the actual development of a lesson plan, they are urged to implement it in their classes, and reflect on the process, both individually and collaboratively. All these processes, along with the provision of constructive feedback (Li et al., 2010), allow the consolidation of all the knowledge acquired.

6.5.4 Networking/ Sharing ideas

Another strong need that teachers had when they registered for the ReTEESP Online was to become part of a network, an online community of ESP practitioners with whom they could share ideas and practices on the common interests they had around ESP (Eckert, 2006; Siemens, 2005; Wenger, 1998; Wenger & Snyder, 2000). According to the facilitator's and the teachers' comments during and after the course, this wish is fulfilled since the network, the CoP started in Stage 1 continued being active in Stage 2, and it still exists through the Facebook group and the Facebook Messenger Chat Room.

During the course, the teachers and the facilitator appear to enjoy interacting, sharing ideas and learning from each other and this is suggested in sections 4.5.2 and 5.4.1, where the positive aspects of the course are laid for Stage 1 and 2 respectively. Special reference in the analysis is made to the value of constructive feedback between the teachers (Li et al., 2010). Additionally, findings show that more personal relationships and bonding is created between some participants in the course; this bonding between the participants made the process of learning more humane and realistic and also motivated the teachers to continue participating in the community. A strong proof of all these is teachers' eagerness to maintain the CoP and continue its activities through organising events, exchange visits, collaborations on research projects, etc., as this is illustrated in their suggestions for the future in section 5.4.2.

6.5.5 Learning about the latest developments in ESP

Among the teachers' needs in terms of ESP TE was learning about the latest updates in the ESP field. In the two stages of the study the teachers have the opportunity to acquire both basic knowledge related to ESP as well as its latest developments.

In Stage 1 such innovations are the integration of some technology tools (e.g. the G Suite for Education, Cmaps, Kahoot) in the teaching practices and also the incorporation of 21st century skills in the ESP syllabus. In Stage 2 the first Webinar is specifically dedicated to the latest developments in ESP, including: information on teacher empowerment, students' engagement and motivation enhancement and the view of students as global citizens (Almeida & Puig, 2017; Organ, 2017); EMI and CLIL (Content and Language Integrated Learning); technology-enhanced learning and teaching, and more specifically

the integration of new technologies and practices in the education process, such as VR (Steuer, 1992), serious gaming (Michael & Chen, 2005), cloud computing (Kakoulli Constantinou, 2018, 2019), telecollaboration (Bohm, Koeper-Saul, & Mossmann, 2019; Guadamillas Gómez, 2017) and software such as Quizlet, Kahoot, Expeditions, Prezi and Timetoast.

Despite the knowledge acquired within the context of the course, as in every field of education, developments in ESP are continuous; therefore, it is essential to stress once more that the effort of keeping abreast of the latest developments in the field needs to be constant. In conclusion, it is fair to claim that the intervention designed to address the needs of this group of language instructors in terms of ESP TE leads to the improvement of the teachers' knowledge in terms of ESP. However, the study findings show that the effort must be unceasing. It cannot stop, for the journey into learning is long and continuous, and so is the struggle for PD. As McNiff (2010) argues, the purpose of AR is not to find final answers, because for AR such thing does not exist. The linear cause and effect relationship that explains everything in traditional research has no value in AR, the nature of which embraces the view that nothing is static and everything is susceptible to change.

6.6 Research Question 5

What constitutes an effective short ESP TE course in this context?

The results of the study lead to the drawing of conclusions regarding what constitutes an effective short ESP TE course in this context; in other words, a short ESP TE course outside the boundaries of formal university education, the participants of which are EFL instructors or ESP practitioners representing different ESP fields, from different parts of the world, who wish to receive education on issues of ESP teaching methodology or update their knowledge on the latest developments in ESP teaching practices. In general, any ESP TE endeavour, may be based on the general principles of ESP, as these were formulated though reviewing the literature on 1) ESP and the latest developments in the field, and 2) ESP TE, through analysing theories of learning, elaborating on TE models and focusing on literature pertaining to ESP TE; these general principles are described in section 2.4. This section however, focuses on more specific inferences that can be drawn from the study in order to respond to this last research question.

First of all, a course as such, apart from drawing on the literature review on ESP TE and existing ESP TE courses, needs to be based on an analysis of teachers' needs in their own educational contexts. Therefore, it is significant to collect information regarding participants' professional profiles and ESP practices that need improvement, their Information Technology literacy, the reasons they wish to receive education for, their wishes and expectations before the course commences. This process will facilitate the course design procedure, and will determine the syllabus as well as the level of support that participants will need by the facilitator.

Secondly, the course design needs to be based on recent developments in the field of curriculum design, such as the backward approach, as suggested by Wiggins and McTighe (2005), according to which firstly the desired results are set, and then the content and methods of the curriculum are specified. The template/ framework suggested for the design of units (Wiggins & McTighe, 2005, p. 22) is very useful for this purpose.

Moreover, a short ESP TE course that addresses such an audience needs to be offered online, since the majority of the participants are teachers that cannot leave their teaching positions, and they all come from different parts of the globe. For this reason, certain parameters need to be taken into consideration, that will ensure that the course is pedagogically sound and that technology is not just used for the sake of using it (Dede, 2006; Duffy et al., 2006; Ketelhut et al., 2006; Powell & Bodur, 2019); furthermore, principles for successful online courses (Henry & Meadows, 2008; Maggioli, 2012) should be respected and followed (see section 2.3.5).

Being influenced by the latest theories of learning and TE models, the course can be built on a social constructivist (Vygotsky, 1978) and connnectivist perspective (Siemens, 2005) to TE, taking into account the social context in which the ESP practitioners operate and being based on discussion and a constant exchange of ideas, collaboration and networking. The course can also be based on sociocultural TE models (Franson & Holliday, 2009) with elements from other TE traditions, especially the reflective model of TE (Wallace, 1991) and critical pedagogy (Hawkins & Norton, 2009; Johnston, 1999). It may also adopt a "practising what you preach" approach (Wallace, 1991), so that the techniques and methods of instruction used in the course can be used by trainees in their language classrooms. Additionally, among the most important findings of this TAR is

that TE and PD are ongoing, as developments in education are continuous (Hansen, 2008).

A number of methods of instruction can be utilised during the course, as long as they support the learning theories and TE models on which the course is based. For example, interactive online lectures, online discussions, independent reading/ writing/ listening, independent and collaborative research, individual and collaborative online work, and continuous individual and collaborative reflection. The course facilitator should act as a guide, rather than the only carrier of knowledge, and their role should be to stimulate interaction and learning and to support the teachers.

As concerns topics, these can revolve around basic concepts such as what ESP is and what it involves, ESP students' needs analysis, resources, tools and tasks for the ESP classroom, the ESP lesson in practice and collaborative reflection on the teaching process, recent developments in ESP, etc. before the course moves on to more advanced topics, especially if many of the teachers are novice ESP practitioners. In any case, the topics can be determined by the needs analysis process. The syllabus of the course in both Stages 1 and 2 of the study, as it appears in Appendix C, may provide ideas of topics that can be included in a short online ESP TE course of this kind. The syllabus may also provide useful ideas regarding tasks that can be used in such a course; in general, these tasks must be founded on the theoretical approaches on which the course is built, and therefore should promote interaction and collaboration among the participants. They should also be based on real-life scenarios and ESP teaching practices (e.g., creating ESP lesson plans, implementing them in a real class, reflecting on them collaboratively and sharing constructive feedback with peers) as suggested by previous research on ESP TE (see section 2.3.6), as well as existing frameworks for ESP TE, such as the BALEAP TEAP Scheme, as described in section 2.3.2.

Since such a course is delivered online, an appropriate and reliable platform on which the course will be built should be utilised for its delivery. The G Suite for Education that has been used for the purposes of this study is highly recommended, since the package offers tools that are useful and can support the philosophy on which the course is built, as explained in section 4.3.4.4. Other tools can also be used to enrich the course and facilitate its delivery, such as YouTube, Email, Facebook and Messenger, Doodle and also Google Meet for the delivery of Webinars.

As far as assessment methods are concerned, since the course is offered online, these need to be formative and ongoing (Henry & Meadows, 2008; Maggioli, 2012), and performance tasks should reflect real life classroom practices. Furthermore, constructive feedback by both the peers and the facilitator, as well as self-assessment though reflection should have a central role in the assessment processes.

In any case, as seen in the discussion in Chapter 4, today's quality ESP TE should not be for the masses, but it should be custom-made to meet the needs of ESP practitioners in their own contexts. This was also a claim made in McMorrow's (2007) online forum report, which rejects pre-package TE courses. A course should be flexible and adaptive so that it meets the teachers' needs as they might change during the course. "One size fits all" courses cannot be effective, especially in online learning, where feelings of isolation and anxiety might easily appear (Gillett-Swan, 2017, p. 21; Hew and Cheung, 2014).

The final chapter which follows draws the final conclusions and refers to the limitations and strengths of the study, its contribution to knowledge and implications for future research.

CHAPTER 7.   CONCLUSION

You are a piece of all this. Whatever you do has potential influence in other people's lives. If you plant a flower in your garden, it contributes to the wider wellbeing of the planet. If you are at peace with yourself, you contribute to the wider peace.

(McNiff, 2010, p. 131)

7.1 Introduction

This concluding chapter discusses the limitations and strengths of this study and its contribution to the field of knowledge. It also refers to possible future research directions. Finally, it draws the final conclusions.

7.2 Limitations and strengths of the study

A discussion on the limitations of a TAR study needs to start with a reference to what traditional research regards as the main limitation of AR, that is the issue of generalisability (Argyris & Schön, 1978; Denscombe, 1998; Cohen et al., 2007; Burns, 2005). Opponents of AR may point to the localised approach of this study, in the sense that it addressed a specific group of 24 language instructors, taking into account their specific needs and their specific educational contexts, arguing that results cannot be generalised. They may also identify limitations such as the fact that the researcher had a participatory role in the study, and the fact that no effort was made to minimise any external variables that might affected the study. Finally, because of the fact that it involves development that follows a series of cycles, it could be claimed that this TAR could keep going on for a long time.

Following are the responses that this research study gives to the above points:

1. Generalisability does not concern AR, the nature of which is to provide solutions to localised problems (Burns, 2005). McNiff (2010, pp. 1030-131) stressed the value of the localised nature of AR, expressing the view that all things have an "interconnected and generative transformational nature", and that each individual may contribute to the evolution of the society they live in through their actions. She strongly emphasised the idea that nothing occurs in isolation and that

everything is interconnected, thus every single action research project has its own significance and influence in the world. In contrast to traditional research, which tries to provide fixed answers to everything that exists "out there", AR conveys the message that knowledge is not fixed but changing and that the pursue of knowledge is ongoing (McNiff, 2010; McNiff & Whitehead, 2010). The process of constant improvement that action researchers follow in order to provide solutions may provide useful insights to the body of knowledge, and as the number of action researchers increases, so is the contribution to the body of knowledge;

2. Even though this is a TAR study, because of the way the study developed, it can be claimed that its results may potentially bear important implications towards different related cases. Firstly, in this study what is regarded as a localised approach expands beyond the geographical boundaries, as the 24 participants in the study, as well as the six participants in the pilot study, came from different parts of the world representing different ESP disciplines and different levels of education (Secondary Education, Higher Education, Vocational Education); therefore, the localised nature of this study rather refers to the specific professional field of the participants (ESP) and not to a specific educational context (e.g., ESP practitioners of a specific country or ESP practitioners of HE). In other words, it can have wider implications. In addition, the iterative cycles of the study and the fact that a pilot version of the course was implemented with a different audience, under circumstances identical to the actual study, allow the extraction of conclusions that can be transferable to other related contexts. For these reasons, and because of the fact that this study was conducted conforming with principles of validity, reliability and taking into account ethical considerations that could arise, it can be argued that the results can be generalised to some extent. The conclusions drawn can apply to similar ESP TE circumstances and may constitute the basis on which other similar ESP TE endeavours can be built. However, the conclusions can become even stronger if they are supported by more research in the field.

3. AR is participatory in the sense that the researcher is involved and is part of the improvement process, gaining significant knowledge and developing their own "living theory" (McNiff, 2010);

4. Instead of minimising external variables, AR embraces them, and tries to explain them by going deep in the analysis of the data. This is what the present study did. Moreover, the iteration and the cyclical research process of continuous improvement followed in this study ensured quality and reduced subjectivity (Burns, 1999, 2005; Melrose, 2001). This was also achieved through the clear and explicit statement of the methodological processes followed in the study (Burns, 2005). The reduction of subjectivity and the increase of validity was also achieved through the use of triangulation in other words the use of at least two different tools for the collection of data (Cohen et al., 2007, p. 141; Baumfield et al., 2008, pp. 28-32; Melrose, 2001, pp. 169). Subjectivity was also minimised through the use of a critical friend (McNiff, 2010).

There are however, some other limitations without which the study might have yielded more results leading to even deeper insights. First of all, the findings were reported mainly in aggregate form, without referring to certain parameters e.g. the participants' educational background, place of work, etc. that may have affected the participants behaviour and opinions in some cases. This could not have been done for ethical reasons, since this might have revealed the identities of the participants and would jeopardise confidentiality.

Another limitation concerned the fact that, some teachers did not manage to complete the course, due to factors that were beyond the researchers' control, such as lack of reliable internet connection. Moreover, another limitation concerned the lower participation in Stage 2 than in Stage 1, the main reasons for which were teachers' lack of time and overloaded professional schedules at the time. This could have been avoided if the ReTEESP Online: The Sequel did not take place during May, which is a very busy month for teachers in general. To address this, the researcher asked the teachers to provide her with feedback at a later stage, when they would find the time via email, but only three of them responded to this request. As participation in the study was purely voluntary, the researcher chose not to repeat her request.

Finally, it would have been interesting to investigate how the ESP learners perceived the changes occurring as ESP TE took place. However, from the early stages of the study, the researcher's decision was to focus on the teachers and herself, as the researcher and facilitator of the course, and the developmental process they underwent as the study

unfolded. Therefore, the study offered a detailed and in-depth account of the teachers and the facilitator's views, who were directly affected by the intervention. Examination of the ESP learner views is something that could be addressed by future research.

The next section focuses on the contribution of the study to the body of knowledge.

7.3 Contribution to knowledge

This Chapter began with an extract from McNiff's (2010) book *Action Research for Professional Development: Concise advice for new and experienced action researchers.* The extract was chosen because it describes vividly how everything in this world is interconnected, capturing thus the influence every single act has on society and, by extension, the contribution of any AR study to the body of knowledge.

This section explains how the study led to the enlightenment of the researcher, and how it contributed to the formulation of her own personal theory of practice. Then the sections that follow describe how the study also contributes to the poorly researched area of ESP TE, and carries implications for ESP researchers, ESP practitioners, ESP teacher educators, course designers and stakeholders/ decision-makers/ institutions. Finally, the contribution of the study to the general field of AR is explained.

7.3.1 The researcher's personal theory of practice: My own "living theory"

Counteracting Shah, Ensminger and Their's (2015) view that AR does not generate theoretical knowledge, McNiff (2010) argues that, since theory involves the provision of a well-substantiated explanation, action researchers may claim that through AR, they generate their own theory of practice, which she calls their own "living theory", as discussed in section 3.4.2. Her view is in line with Postholm and Skrøvset's (2013) who also theorise their own experiences.

In the light of the above, through the several steps of this AR process and all the improvement stages of the study, the researcher, in other words *I*, am eligible to claim that I have undergone a process of development and change both as an ESP practitioner and as an ESP teacher educator. In this thesis, among other things, I am sharing with the readers my own personal journey into learning and evolvement, which constitutes my own living theory that reflects the importance of what I have done in this research and

how my actions influenced the people who were involved in it. My own theory of practice is my explanation of what I did from the time this study was conceptualised until the last conclusions were drawn. Every single step of this journey from the identification of the problem in Stage 1 to the literature review, the design of my intervention, its implementation, the reflection stage, the progression to Stage 2 and repetition of the steps, was based on explanations that eventuated from the data elicited from the study. The data have been analysed and discussed in the previous Chapters, and the readers of this thesis may draw from it and learn from the knowledge I and the participants in this study gained.

7.3.2 Contribution to research in ESP TE and implications for researchers

As shown in the literature review in Chapter 2, there is still a lot to be done in the area of ESP TE. This study contributes to the limited research in the area of ESP TE in a variety of ways.

First of all, the study yields useful insights for researchers in the area of ESP TE, since it provides a new innovative form of ESP TE, outside the boundaries of formal university education, which relies on online networking and the formulation of an online CoP receiving ESP TE in the form of a short online course. The results of the two cycles of the study (Stages 1 and 2) as well as the pilot study provide guidelines in relation to what could be regarded as effective ESP TE in such a context today. The COVID 19 pandemic has shown how useful online education could be today, especially in contexts where on site education is not possible. In this sense, this study is timely and perhaps more useful than never before. Moreover, the rich data obtained generate ideas for future research in the area.

Furthermore, the study explores research conducted in ESP TE and provides a thorough review of the literature through the study of all the publications on ESP TE that could be found online (N=57) including research articles, review articles, research chapters, review chapters and PhD theses, starting from the 1980s to today. It provides a chronological review of these studies, focusing on the suggestions for ESP TE pertaining to a) the content of ESP TE, b) the nature of ESP TE and c) the methodology for its delivery (see section 2.3.6). This literature review may constitute a point of reference for any researcher in the area.

In addition, this literature review of ESP TE is combined with a review of learning theories and TE models as these developed through the years, providing thus a more comprehensive perspective on ESP TE matters, resulting in a series of principles on which ESP TE could potentially be based in our days. These principles provide the foundations on which ESP TE can be built and also provide some ideas regarding what ESP TE could involve nowadays.

Furthermore, the study reveals useful findings pertaining to the needs of ESP practitioners or future ESP practitioners in terms of ESP TE. These findings contribute to the limited research in the area, and they too could prove useful for the design of future ESP TE courses.

Finally, the study may also stimulate the interest of other researchers to conduct research in this area and explore aspects of ESP TE that remain unexplored. Such aspects are suggested in section 7.4.

Apart from its contribution to the field of ESP TE and its implications for researchers, the study also carries implications for other groups of professionals. These are described in the sections that follow.

7.3.3   Implications for ESP practitioners

This research could help ESP practitioners understand the importance of ESP TE in their lives as professionals. Following the example of the 24 language instructors who participated in the study, ESP practitioners could sense the complexity of their profession and their multidimensional role as ESP practitioners, realise the importance of receiving education on ESP teaching and set off for their own PD journey. This may involve attending an ESP TE programme, becoming part of network of ESP practitioners, being involved in teacher research, collaborating with colleagues, students and subject teachers or professionals in the specific ESP discipline they are teaching or all of these together. The effort needs to be ongoing and, as this study revealed, never-ending. This study may potentially guide ESP practitioners or future ESP practitioners to find their way to PD.

7.3.4   Implications for ESP teacher educators and ESP TE course designers

Generally, the study addresses the gap that exists in the field of ESP TE which concerns the lack of flexible solutions outside the bounds of formal university education that aim

at developing the teaching practices of ESP practitioners. The results of this study show that such solutions could involve the creation of networks (Bojović, 2006; Duyen, 2014) and CoPs, which foster collaboration between novice and more experienced teachers (Da Silva, Vial & Sarmento, 2017), and the organisation of short courses that allow practitioners to continue maintaining their job positions while receiving education in their own contexts (Chostelidou, Griva & Tsakiridou, 2009; Kakoulli Constantinou & Papadima-Sophocleous, in press).

The innovative way the particular intervention, the online ESP TE course, was designed and delivered and the reflections obtained by both the facilitator and the teachers can provide ESP teacher educators and ESP TE course designers with valuable insights. Apart from the foundations on which ESP TE could be based today, the details regarding the way the online course was designed and delivered can prove useful for any ESP TE course designer or ESP teacher educator. More specifically, the theoretical foundations of the course, the processes followed for the design of the curriculum (the backward design process), the technology tools used for the delivery of the course, the methods of instruction, the topics, tasks and the assessment procedures can all be used in similar contexts. Additionally, the Appendices provide a rich and detailed description of the course syllabus, parts of which can be replicated in other similar contexts by other experts in the field. Finally, the suggestions for future improvements give ideas on further development of ESP TE courses.

7.3.5 Implications for stakeholders/ decision-makers/ institutions

The study also bears important implications for people in high-ranked positions. At a time when ESP is thriving, due to the various socioeconomic changes occurring, it is time for Universities and other institutions to realise the need for ESP TE, both pre-service and in-service. It is also time to understand that the latest developments in the fields of TE in general and ESP TE in particular, as well as social developments globally, demand more flexible and up-to-date ESP TE solutions that are different from formal education offered by universities. This kind of solutions need to involve the creation of online networking and the creation of CoPs (Bojović, 2006; Duyen, 2014; Siemens, 2005), and the organisation of short online courses that allow practitioners to continue maintaining their job positions while receiving education.

ESP practitioners should be equipped with all the necessary tools and provided with guidance, so as to have better quality ESP programmes and more confident and experienced educators. This study could potentially help decision-makers form ideas regarding the nature of such programmes. What is important to realise is the advantage of quality programmes that are based on the needs of the professionals who attend them over "one-fits-all", mass production courses. People should not be seen as numbers, but as idiosyncratic cases operating in different educational realities.

7.3.6 Contribution to the field of AR

The present study also contributes to the general field of AR and more specifically to TAR. It reveals the value of AR, TAR in this case, for in-depth investigation of a problematic situation to provide possible solutions. It could potentially set an example of how educational problems could be handled, and it could encourage more researchers, teacher educators, ESP practitioners, stakeholders to be engaged in this type of research.

The next section focuses on future action that the researcher is planning to take and ideas for future research.

7.4 Future action and future research directions

This study aspires to be the researcher's starting point for future action into ESP TE. It could also generate ideas for future research.

Regarding future action, the researcher is planning to continue maintaining the online CoP that was created with the 24 language instructors and continue pursuing opportunities for ESP PD through organising Webinars and other events and sharing ideas with colleagues around the globe. Among the researchers' future plans is to reach out to other ESP practitioners who wish to receive TE, and widen this network of professionals. Another future action is the establishment of the ReTEESP Online as a course granted ECTS (European Credit Transfer System) credits and formally offered by the University, in this case the Cyprus University of Technology where the researcher is employed, or any other formal institution.

In terms of research, this could become a longitudinal study, in the sense that the researcher could continue recording the participants' and her own reflections of their

future experiences together, if the participants wish so. Moreover, it would be interesting to examine which parameters of the ESP TE they received the teachers have actually implemented in their practices and how their students perceived them.

In general, future research could involve the following:

- Examination of issues related to ESP practitioners' needs analysis in terms of ESP TE in different parts of the world. This could be a task for many individual researchers in the ESP area or even professional ESP organisations that would inform the design of better-quality ESP TE programmes;
- Investigation of how ESP learners perceive ESP practitioners' PD and what impact this might have on their performance;
- Examination of intercultural dimensions of this type of ESP TE endeavour that could stem out of this research in the future;
- More AR conducted in the field that would lead to ESP practitioners' PD. Findings could contribute to the wider ESP TE body of knowledge;
- Evaluation of existing ESP TE opportunities;
- Examination of methodologies used for the delivery of ESP TE, online, blended or face-to-face;
- Application of similar efforts in LSP in general.

7.5 Concluding reflections

One of the most important findings of this study is that ESP practitioners' effort to develop professionally never stops, as knowledge develops and as ESP practitioners' needs and educational contexts change in time. For this reason, this study supports that an ESP TE course should serve as a setting-off point for a long journey of study, interaction with colleagues, collaboration, practice, research and reflection; thus, its value lies in the way it will equip the ESP practitioners with all the necessary means to embark on this journey.

Closing this thesis, it is worth stressing once more the significance of this TAR study for the teachers participating in it, me personally as the researcher as well as the ESP TE field in general. Every single experience, from the very first email exchanged to the last reflections, constituted a step towards development for everyone involved in the process,

and could set an example for future similar endeavours. The study carries implications for the wider ESP TE field, where opportunities for PD are limited, ESP researchers, ESP practitioners, ESP teacher educators and stakeholders/ decision-makers/ institutions and the general field of AR. It also generates ideas for future action and points to future research directions. Praising the value of AR, concluding thoughts are captured in this final statement: The most precious of all was the journey and the knowledge and wisdom acquired while taking it.

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APPENDICES

APPENDIX A: Application to CUT Research Ethics Committee and approval

#86: PhD Research in English for Specific Purposes Teacher Education

Βασικά

Id:	**86**
Κατάσταση:	**νέα**
Προτεραιότητα:	**0/**
Ουρά:	**Forms**

Προσαρμοσμένα πεδία

Α1.1. ΣΤΟΙΧΕΙΑ ΕΡΕΥΝΗΤΙΚΗΣ ΠΡΟΤΑΣΗΣ - Τίτλος:	**English for Specific Purposes Teacher Education: A reflective 'practise what you preach' approach**
Α1.2. ΣΤΟΙΧΕΙΑ ΕΡΕΥΝΗΤΙΚΗΣ ΠΡΟΤΑΣΗΣ - Περίληψη:	**This is a Technical Action PhD Research that aims at addressing and improving the situation of insufficient ESP TE among a group of ESP practitioners and EFL practitioners with little experience in ESP, suggesting an intervention in the form of an online ESP TE programme called ReTEESP Online (Online Reflective Teacher Education in ESP). The research follows a cyclical pattern of continuous reflection and improvement of the intervention proposed.**
Α2.1. ΠΡΟΤΕΙΝΟΜΕΝΗ ΔΙΑΡΚΕΙΑ ΕΡΕΥΝΑΣ - Έναρξη:	**Τετ Ιαν 01 2014**
Α2.2. ΠΡΟΤΕΙΝΟΜΕΝΗ ΔΙΑΡΚΕΙΑ ΕΡΕΥΝΑΣ - Λήξη:	**Κυρ Ιουν 30 2019**
Α3.1. ΣΤΟΙΧΕΙΑ ΦΟΙΤΗΤΗ - Όνομα:	**Έλις Κακουλλή Κωνσταντίνου**
Α3.2. ΣΤΟΙΧΕΙΑ ΦΟΙΤΗΤΗ - Τμήμα:	**Τμήμα Πολυμέσων και Γραφικών Τεχνών**
Α3.3. ΣΤΟΙΧΕΙΑ ΦΟΙΤΗΤΗ - Ηλεκτρονικό Ταχυδρομείο:	**elis.constantinou@cut.ac.cy**
Α3.4. ΣΤΟΙΧΕΙΑ ΦΟΙΤΗΤΗ - Τηλέφωνο:	**99313715**
Α4.1. ΣΤΟΙΧΕΙΑ ΕΠΙΒΛΕΠΟΝΤΟΣ ΑΚΑΔΗΜΑΪΚΟΥ - Όνομα:	**Σαλώμη Παπαδήμα Σοφοκλέους**
Α4.2. ΣΤΟΙΧΕΙΑ ΕΠΙΒΛΕΠΟΝΤΟΣ	**Κέντρο Γλωσσών**

Υπενθυμίσεις

Νέα υπενθύμιση:

Θέμα:

Υπεύθυνος: elis.constantinou (Elis Constantinou) ▼

Έως:

Αποθήκευση

Ημερομηνίες

Δημιουργήθηκε:	**Σαβ Ιουν 01 22:34:49 2019**
Ξεκινά:	**Δεν έχει οριστεί.**
Ξεκίνησε:	**Δεν έχει οριστεί.**
Τελευταία Επαφή:	**Δεν έχει οριστεί.**
Έως:	**Δεν έχει οριστεί.**
Κλειστό:	**Δεν έχει οριστεί.**
Ενημερώθηκε:	**Σαβ Ιουν 01 22:34:50 2019 από elis.constantinou (Elis Constantinou)**

Σύνδεσμοι

Εξαρτάται από:	• **#87:**
Εξαρτώμενο από:	
Γονείς:	
Υποκατηγορίες:	
Αναφέρεται σε:	
Αναφερόμενο από:	

Δημιουργία | Εξαρτάται από ▼ | Ticket in Forms ▼

ΑΚΑΔΗΜΑΪΚΟΥ -
Τμήμα:

Α4.3. ΣΤΟΙΧΕΙΑ
ΕΠΙΒΛΕΠΟΝΤΟΣ
ΑΚΑΔΗΜΑΪΚΟΥ -   salomi.papadima@cut.ac.cy
Ηλεκτρονικό
Ταχυδρομείο:

Α4.4. ΣΤΟΙΧΕΙΑ
ΕΠΙΒΛΕΠΟΝΤΟΣ
ΑΚΑΔΗΜΑΪΚΟΥ -   25002599
Τηλέφωνο:

Α5. Επιλέξτε όσα
από τα πιο κάτω
πεδία σχετίζονται   Δεν Εφαρμόζεται
με την έρευνά
σας.:

Α6.1. Περιγράψτε   **A technical action research study which aims at exploring and addressing the problem of insufficient English for Specific Purposes Teacher Education (ESP TE), among a group of English for Specific Purposes practitioners and English as a Foreign Language (EFL) practitioners with little experience in ESP, suggesting an intervention in the form of an online ESP TE programme.**
συνοπτικά τους
σκοπούς της
Έρευνας:

Α6.2. Περιγράψτε   **This is a Technical Action Research study which develops in two cycles of continuous improvement. The first cycle starts with the identification of a problem (lack of ESP Teacher Education among a group of ESP and EFL practitioners) and moves on to the design of an intervention to tackle this problem. The intervention proposed is an online reflective Teacher Education course in ESP (ReTEESP Online). The course is run with 24 participants (teachers). Reflection on the course follows, and the study enters the second cycle during which the course is improved, based on the feedback obtained by the participants, and re-implemented with the same group. Reflection on the improved version of the course follows, and final conclusions are drawn.**
συνοπτικά τη
μεθοδολογία της
Έρευνας:

Α7. Ποια είναι η
πιθανότητα για
σωματική ή/και
ψυχολογική βλάβη   Δεν Εφαρμόζεται
και δυσφορία
στους
συμμετέχοντες;:

Α8. Η έρευνα σας   Δεν Εφαρμόζεται

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εγείρει οποιαδήποτε ζητήματα για την προσωπική ασφάλειά σας ή άλλων ερευνητών που συμμετέχουν στην έρευνα; Αν ναι, εξηγήστε πώς θα διαχειριστείτε αυτά τα ζητήματα.:

A9.1. Πώς οι συμμετέχοντες στην έρευνα θα ταυτοποιούνται;: **All the participants in the study will be given pseudonyms so that anonymity is maintained.**

A9.2. Πώς οι συμμετέχοντες στην έρευνα θα προσεγγίζονται;: **The participants have been invited through an open call in the social media and different online fora and professional organisations related to the field of English for Specific Purposes.**

A9.3. Πώς οι συμμετέχοντες στην έρευνα θα στρατολογούνται;: **Δεν Εφαρμόζεται**

A10. Θα λαμβάνεται έντυπο συγκατάθεσης από τους συμμετέχοντες;: **Ναι**

A10.1. Αν δεν θα ληφθεί έντυπο συγκατάθεσης παρακαλώ όπως εξηγήσετε τους λόγους: **Δεν Εφαρμόζεται**

A10.2. Αν θα ληφθεί έντυπο συγκατάθεσης, ποια είναι η διαδικασία λήψης συγκατάθεσης: **Before the study starts, the participants are informed that the course is offered in the context of a PhD study and they are invited to give their consent in participating in the study online, through Google Forms.**

A11. Ποια μέτρα θα ληφθούν ούτως ώστε να διασφαλιστεί η εμπιστευτικότητα των προσωπικών δεδομένων όπου αυτό απαιτείται;: **Anonymity will be maintained through the use of pseudonyms during the presentation of the research results.**

A12. Θα υπάρξουν οποιαδήποτε οικονομικά κίνητρα/πληρωμές (εκτός λογικών εξόδων για μεταφορά και χρόνο) στους συμμετέχοντες;: **Δεν Εφαρμόζεται**

A13. Η έρευνα θα περιλαμβάνει την παραγωγή καταγεγραμμένων **Ναι**

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μέσων, όπως
καταγραφή
εικόνας/ήχου;:

Α13.1. Πως θα
διασφαλιστεί η
σαφής συμφωνία
μεταξύ **The participants have been**
συμμετεχόντων **assured that they will not be**
και ερευνητών για **identified in any way in the**
τον τρόπο **future. This denotes that**
φύλαξης, χρήσης **any video or audio recorded**
και (αν απαιτείται) **data will not be publicized.**
καταστροφής των
καταγεγραμμένων
μέσων;:

Άτομα

Υπεύθυνος: **Nobody in particular**

Αιτούντες: **elis.constantinou (Elis
Constantinou)**

Cc:

AdminCc: **salomi.papadima (Salomi
Papadima)**

Ιστορικό

Σαβ Ιουν 01 22:34:49 2019 **elis.constantinou (Elis Constantinou) - Το Αίτημα δημιουργήθηκε**
Θέμα: PhD Research in English for Specific Purposes Teacher Education
Ημερομηνία: Sat, 01 Jun 2019 22:34:49 +0300
Προς: forms@ethicsforms.cut.ac.cy
Από: elis.constantinou@cut.ac.cy

In an era of internationalisation of business and education and of social and professional mobility, English for Specific Purposes (ESP) is an area of language education that is advancing during the last years with an increase in the number of publications, conferences and discussions on the subject. Despite the fact that the need for ESP programmes has grown exceedingly during the last decades, literature demonstrates that Teacher Education (TE) in ESP is underprivileged (Bell, 2002; Bojović, 2006; Basturkmen, 2010; Bracaj, 2014). Most ESP educators are General English (GE) teachers with insufficient training in ESP. The necessity of ESP TE has been reported in literature through the years (Kennedy, 1983; Madhavi Latha, 2014); nevertheless, it is nowadays more intense than ever. The proposed study is a Technical Action Research (TAR) study, which aims at addressing and improving the situation of insufficient ESP TE among a group of ESP practitioners and English as a Foreign Language (EFL) practitioners with little experience in ESP, suggesting an intervention in the form of an online ESP TE programme called ReTEESP Online (Online Reflective Teacher Education in ESP). The study follows a spiral and cyclical pattern of continuous improvement. As TAR dictates, the researcher will act as a facilitator in this process (Denscombe, 1998). The online programme proposed is founded on a 'practise what you preach' approach and grounded on Wallace's (1991) reflective model of TE, and it is based on ESP principles, the latest developments in the field of ESP TE and TE in general, the use of new technologies, the theories of social constructivism and connectivism. and principles of online teaching. The programme is also informed by a needs analysis process which occurred before its design.

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**Τεχνολογικό
Πανεπιστήμιο
Κύπρου**

Ημερομηνία: 20/11/19

Αριθμός Υποβολής: 86

Στοιχεία ερευνητή: Έλις Κακουλλή Κωνσταντίνου

Η Επιτροπή Ηθικής και Δεοντολογίας της Έρευνας (ΕΗΔΕ) του Τεχνολογικού Πανεπιστημίου Κύπρου έλαβε γνώση της υποβληθείσας ερευνητικής πρότασης με τίτλο «English for Specific Purposes Teacher Education: A reflective 'practise what you preach' approach» και ακαδημαϊκό υπεύθυνο την Σαλώμη Παπαδήμα, κατά τη συνεδρία της Ad hoc επιτροπής στις 20/11/19.

Με βάση τις υποβληθέντες πληροφορίες, η επιτροπή θεωρεί ότι δεν απαιτούνται επιπλέον ενέργειες για τη συγκεκριμένη πρόταση. Σε περίπτωση αλλαγών στο ερευνητικό πρωτόκολλο, η πρόταση πρέπει να επαναυποβληθεί.

Νοείται ότι, την τελική ευθύνη της επιστημονικής εγκυρότητας, αναγκαιότητας, πληρότητας και της συνολικής επιστημονικής αξίας της προτεινόμενης έρευνας έχει ο ακαδημαϊκός, επιστημονικός υπεύθυνος.

Η πρόεδρος ΕΗΔΕ

Δρ Άντρη Παναγιώτου

Participants' Consent Form

This is the participants' consent form that was completed by the participants in the study. The form was completed electronically via Google Forms.

ReTEESP Online Participants' Consent Form

This course is part of a PhD research study, which is an action research study. A study of the literature in ESP Teacher Education showed lack of research in the area and also pointed to the need for more ESP Teacher Education opportunities, a fact supported by the low number of ESP Teacher Education courses in the market, and the lack of specialised ESP practitioners. The purpose of this PhD research is to address the neglected need for ESP Teacher Education by proposing an intervention in the form of an innovative, online, short-term, ESP Teacher Education course, ReTEESP Online.

For this reason, your contribution in this course (e.g. reflections, responses in questionnaires, participation in focus groups, etc.) may be used for the purposes of this research study. In any case, your responses will remain anonymous and no names will be mentioned in any future report of the results of this research.

You are encouraged to ask any questions regarding this study any time you wish.

Your participation in this course and in this research is voluntary and you can stop at any time.

* Required

I have read the above information, and I agree to participate in this course and contribute to this research *

Yes

Name and Surname *

Your answer

Submit

The ReTEESP Online Participants' Questionnaire

Dear ESP practitioner,

The purpose of this questionnaire is to identify the profiles of ESP educators before they participate in the ReTEESP Online and elicit information about their previous training and experience in the field of ESP.

Please be assured that any information you provide will be confidential and all data will be used for the design and delivery of this course, which is part of my PhD research in the area of ESP Teacher Education. You need about 10 minutes to complete this questionnaire.

Thank you very much for your interest in participating in the ReTEESP Online and contributing to this research.

Elis Kakoulli Constantinou
Language Centre
Cyprus University of Technology

I have read the above information, and I agree to participate in this course and contribute to this research.
☐ Yes

A. ESP training

1. Qualifications (*tick as appropriate and write the title on the space provided*)
Subject (e.g., English Language and Literature)

☐ BA_____

☐ MA_____

☐ Doctorate_____

Others, please specify:

☐ _____

☐ _____

☐ _____

2. Have you received any ESP Teacher Training in the past?
☐ Yes ☐ No

3. If you have answered "Yes" in the previous question, what kind of training was it? (*Check all that apply*)

☐ Part of pre-service training

☐ Part of in-service training

☐ Part of BA

☐ Part of MA

☐ Part of PhD

☐ Seminars, Conferences, Lectures on ESP

☐ No ESP teacher training

Others, please specify:

☐ _____

☐ _____

B. Teaching experience

4. Years of experience as an ELT practitioner

☐ 1-5☐ 11-15☐ Over 20

☐ 6-10 ☐ 16-20☐ No ELT teaching experience

5. Years of experience as an ESP practitioner

☐ 1-5☐ 11-15☐ Over 20

☐ 6-10 ☐ 16-20☐ No ESP teaching experience

6. ESP courses you teach/ have taught (*check all that apply*)

I have taught/ teach English for:	
Business	
Communication	
Hotel and Tourism Management	
Nursing	
Rehabilitation Sciences	
Agricultural Sciences	

Environmental Science	
Mechanical Engineering	
Civil Engineering	
Electrical Engineering	
Computer Science	
Fine Arts	
Multimedia Studies	
Shipping	
Not applicable:	
Others, please specify:	

7. Describe your duties as an ESP practitioner (*check all that apply*)

☐ Course design

☐ Teaching

☐ Materials selection

☐ Materials development

☐ Course evaluation

☐ Research

☐ Others, please specify_____

C. **ESP Teacher Education needs**

8. **What would you like to learn during this course?**

_____

_____

_____

9. **For which reasons have you decided to attend an ESP Teacher Education course?**

☐ Professional Development

☐ Improvement of teaching methodology

☐ Improvement of ESP syllabus design skills

☐ Self-esteem increase

☐ Networking

☐ Sharing ideas with other ESP educators

☐ Employer satisfaction

☐ Salary increase

☐ Promotion

☐ Others, please specify_____

Section D - Personal details

10. Name: _____

11. Sex

☐ Male☐ Female

12. Age *(Tick as appropriate)*

☐ 20-29☐ 30-39☐ 40-49☐ 50-59☐ 60 or more

13. Current position (*check all that apply*)

☐ Secondary Education   ☐ Vocational Education ☐ Higher Education

Other (*please specify*) _____

14. Place of work at present:

☐ Cyprus

☐ Greece

Other (*please specify*) _____

15. How would you rate yourself in terms of using new technologies in your teaching?

☐ Highly competent

☐ Competent

☐ Somewhat competent

☐ Not competent

16. How familiar are you with using the following?

	Extremely familiar	Moderately familiar	Slightly familiar	Not familiar at all
Google Account				
Gmail				
Google Sites				
Google Drive				
Google Classroom				
Facebook				

17. Have you ever attended any other online training course in the past?

☐ Yes ☐ No

18. Comments/ Suggestions

_____

_____

_____

- **Thank you for your responses -**

Facilitator's Field Notes

Note: Parts of these extracts which identified the participants in the research have been removed.

Extracts from Stage 1

Monday 26th February 2018

Today the course is starting and I am really excited! I made this announcement in the Facebook group in the morning.

Facebook group announcement:

Elis Kakoulli Constantinou is feeling excited.

· 26 February at 09:24

Starting today!

So looking forward to talking to all of you via Skype! If for any reason you cannot join the Webinar at the time scheduled check out Doodle and join later on during the day (or night for some of you😊).

Webinar 1

A total of 14 people out of 24 people expressed true willingness to participate in the 1st Webinar.

See Excel file in Webinar 1 folder for details.

7 Webinar sessions took place with 2-3 people participating every time. The Webinars were recorded using the ATube catcher software.

Generally, the Webinars went well. It was nice meeting all these colleagues from different parts of the world. I had my camera on so they could see my face while I was talking. Some of them switched their cameras on and I could see their face while others preferred to remain to the audio call mode, something which I respected.

I feel that they liked what I said and that they expect a lot from the course now. I think that generally they found their way around the platform and they did not have any major questions or concerns. Teacher 19 asked about the workload. She said that this was one

of the concerns she had. So, whatever I decide to do in the course it needs to be practical and quick or else I will lose the participants. On the other hand, I do not want to sacrifice the quality of the course.

Teacher 14 posed some interesting questions and made some interesting comments about the ESP situation in Egypt. He seems to be paying attention to details. He said that there were many people who would like to participate but they are shy and they are afraid to join.

The Webinars made me understand how important human contact is. Talking to the other person live is really important. You can do it through the video, but it is not the same. I believe that communicating synchronously creates intimacy among people and it makes them more committed.

Minor difficulties were encountered during the webinar mostly related to connection:

1. Some of the participants who used Firefox to connect to Skype could not join the call. So, they were instructed to switch to Google Chrome.

2. I could not connect to Google Classroom. I used my small notebook to conduct the Skype calls. So, what I did was to ask the participants to join Google Classroom as I was talking to them and I worked on my CUT PC simultaneously and guided them through the platform. I had to send to Teacher 23 the Course Outline because she did not have her credentials with her.

The participants who did not manage to join the Webinars were sent a new email with new times for Tuesday 27th February and Wednesday 28th February.

Tuesday 13th March 2018

Today is the deadline for the trainees to submit their Session 4 tasks. Some of them have already done that and have written their reflections as well. Yesterday I saw everybody's work and gave them feedback. There are people who work very systematically and there are others (Teachers …) who don't. Teacher … is active but not in all tasks. The rest of the teachers have only completed Session 1.

I am very satisfied with the results so far. Teachers seem to be enjoying the course and wonderful ideas are being shared. I myself have learnt new things from participants. The only problem I spot and was also mentioned in their reflective Journals (by Teacher 9,

Teacher 16 and Teacher 12) is the difficulty they face to collaborate. It's cooperation instead of collaboration. I specifically asked them to contact each other and work on the tasks together however, I understand that different working hours and time difference makes this extremely difficult to work. However, I hope that at least the feedback that they will give to the groups will be collaborative.

Brainstorming for Sessions 5 and 6:

So far we dealt with needs analysis, setting of objectives and ideas on the ESP lesson (from material selection to creation of tasks). Now the next step is to have the participants design a lesson to teach in their class.

Try to have in mind the learning theories we talked about while you are designing the lesson plan. Use authentic materials. Can you integrate technology?

Provide motivation to students by assigning tasks that would be interesting to them.

Ask them to design a lesson. I will give them the template of the ESP lesson and I will also give them their own comments so that they can enrich it if they wish.

Give them a Sample ESP Lesson Plan (my ESAP lesson plan for Agricultural Sciences, Biotechnology and Food Science)

Ask them to give feedback to each other. (I'm having second thoughts about this. I think I will overload them this way. They will give feedback to each other anyway later on in the Webinar on the whole teaching process so I think I should skip that for now).

Go to your classes, teach the lesson and reflect on your practice. Reflect on the process.

Last webinar will be divided into two parts:

1. The first part they share their experiences from the class.

2. Focus group discussion on the course.

I have changed the learning outcomes on the Topics, Materials and Learning outcomes doc. They are not the same with the ones written on the course outline. They have been improved.

Extracts from Stage 2

Today, I received an email from Teacher 13 saying how much she enjoyed Webinar 1 and asking for the deadline of the reflective Journal. I realised that even though I don't want to appear pushy I need to set deadlines, so I decided to set Thursday the 23rd of May (right before the next Webinar) as the deadline for the first assignment. Ideally, the participants should complete Webinar 1 to proceed to Webinar 2.

Teacher 9 also sent me an email thanking me about the material and the links that I sent to her and once more she explained to me that she does not have the time to work on the course now and that she planned to have a look at it in the future.

Teacher 12 also thanked me for the material I shared with her, even though she cannot participate in the course due to personal issues.

Teacher 11 also sent me an email saying that it was great getting back together during yesterday's Webinar, and explaining that she might not have the time to participate in the next Webinar due to classes which she has at that time, but she said that she will try to have a look at everything later on and complete her reflections. She also added that she is sure that the Sequel will be very rewarding for all.

Teacher 6 also sent me an email apologising for not being able to participate in the course because of the heavy workload that she has at the moment.

Teacher 10 sent me a message asking me to reset her password because she couldn't remember it, and I sent her a new one. She replied back saying that she could not participate in Webinar 1 because of exams that they have at the moment, but she was planning to watch the video and complete everything soon.

I have prepared things for Webinar 2. I am planning to use parts of the presentation I did on action research in the past because I think that there is interesting information there that teachers might need to hear. The post will have a similar form as the previous posts for consistency, i.e. Topics and Learning Outcomes, A Worksheet, Useful Reading Material and of course the recording of the Webinar in the end. The deadline will be Monday noon, before Webinar 3. This post will also prepare the participants for Webinar 3 the topic of which is related to the tools that each of us uses in their classes. For this

reason, I have uploaded an empty list asking everyone to complete it with the technology tools that they use in their classes. In Webinar 3, we will talk about these tools.

I have created a Zoom meeting entitled *Webinar 2: Acting, changing, improving: Action research in ESP*, set for Thursday 23rd of May at 12.00 (Cyprus time). I created a Google Calendar event, and I included the Zoom link to the meeting and I invited all the participants to join the Webinar (not only the ones who registered but also the rest of last year's participants) in case they wished to join.

To remind them about the Webinar, I will send the link to the Zoom meeting in the Chat room on Messenger on Thursday morning before the Webinar.

Today I also posed a question regarding ESP assessment on the Chat Room (Messenger group). This was something that we did not have the chance to discuss yet. I asked if any participant has come across any formalized test for ESP purposes other than the usual IELTS, TOEFL, etc. which are mostly EAP oriented. I received responses from Teacher 14 about some standartised tests that he uses and also from Teacher 23. I thanked both for the information.

Participants' Reflective Journals

ReTEESP Online

An Online Reflective Teacher Education Course in English for Specific Purposes

Reflections

Reflection is the process that provides insight to the 'knowledge-in-action' and thus facilitates self-development and improvement. This reflection on practice implies that we should observe, summarise and contemplate on our learning (and teaching of course) in order to understand the benefits gained from this experience and also locate the problems that may potentially arise so that we are able to address them later on. This is a practice that you can integrate in your teaching practices. The following questions will help you reflect on the experience with the course so far. Write your reflections on this document.

Sessions 1 and 2

Questions:

1. What were Session 1 and Session 2 about?

Session 1 was about the course, its content and the way it will be delivered through google classroom (we navigated through the platform). We also had the opportunity to meet the course facilitator, introduce ourselves to the course participants' and find information about them. A questionnaire on our ESP profile and the ESP teaching needs was also completed.

Session 2 was about:

- the nature of ESP (i.e. what ESP is and its characteristics (needs analysis and authenticity both in terms of teaching material and the tasks students are engaged in, including the use of technology in our teaching), what an ESP student is, ESP branches), and

- the role and the responsibilities of an ESP practitioner (i.e. course designer, researcher, evaluator).

The course facilitator also provided an ESP lesson plan template and asked us to provide comments.

A list of reading resources, ESP coursebooks, journals and associations were also provided.

*2.	What did you find interesting from these two Sessions?*

Getting to meet new colleagues is always useful and motivating. So far the course is well designed and easy to follow –the instructions are detailed and the course material well-presented. Getting acquainted with google classroom is very interesting and something I would like to use in my teaching!

*3.	Was there anything challenging for you?*

It is only the second session, so so far, so good!

*4.	Where there any elements that you can integrate in your ESP classes? If yes, which elements?*

After years of teaching and due to heavy teaching and administrative workload, I think we tend not to revise our written lesson plans or evaluate our students' needs for every single class/module that we teach. We make changes and implement our teaching but we tend not to put it in writing.

*5.	Is there anything from today's class that you think could have been done differently?*

No. The material is well-presented. The workload is not heavy so far. We can follow it easily.

*6.	Any other comment that you wish to make about the course so far?*

The process of reflection is vital!

Samples of participants' comments in the class on Google Classroom

Teacher 9 Feb 27, 2018

Hello everyone! I'm [says her name] and I live in Barcelona. I work at the
[states the name of the University she works for]. I have been an English teacher
for 25 years and have taught all kinds of courses, mainly General
English and some ESP courses for Vet Science, for university staff, etc.
Right now I'm teaching both General English courses and an EMI course
(English as a Medium of Instruction) for university professors who want
to start teaching in English. I have decided to attend this course
because I thought it'd be interesting to see what other colleagues
around the world are doing and it was also recommended to me by a
friend/colleague in Greece. One of the biggest challenges in my teaching
is that we are asked to produce a course with virtually no preparation
from one day to the other and it is always very stressful for us.
Anyway, I'm looking forward to meeting you all and sharing experiences with you.
See you soon!

Teacher 22 Feb 27, 2018

Hi everyone! My name is [says her name] and I live in Nicosia, Cyprus.
I hold a [talks about her qualifications]. I teach students of various ages and levels
(Pre-Starters, A1-B2). My students share the Greek language but come from other
cultures too. I also deliver one-to-one ESP lessons to adults, specifically, Business
English, English for banking and English for the fashion industry lessons.
The main challenge I face in my teaching is balancing the different learning needs of
students.
I have decided to attend the ReTEESP online course to share ideas with colleagues,
learn the latest developments in ESP and expand my knowledge on how to evaluate
my students' needs.
Excited about this course!!

Teacher 12 Feb 26, 2018

Hello everyone!

My name is [says her name] and I am Greek. I hold a [talks about her qualifications]. I have taught EFL, ESP and EAP for about thirty years at Tertiary Education- [mentions the name of the University]- Department of [refers to the department] and the [mentions name of another University]. Valuable I consider my experience as an oral examiner for the [refers to an examination organisation]. I have also created teaching notes and coursebooks: [she refers to titles of three books]. Currently I have been teaching the following courses at [says the name of the University]:

-English for Business Communication (elective course)

-Business English (compulsory course)

-English for Accounting and Finance (compulsory course)

-Tourism English (compulsory course)

My students are mostly Greek but a significant number of students of various nationalities attend my classes, including Erasmus students. Nevertheless, the difficulties I am facing in my teaching environment are connected not with my students' different cultural backgrounds but with their different level of learning competence in the English language.

I have decided to attend the course you offer because I would like to get acquainted with the latest models and approaches in ESP teaching and testing, and learn more techniques for the evaluation of the course syllabuses I design. I would happily use new material and techniques in my classroom.

Looking forward to meeting you all!

Extracts from the conversation stream on ReTEESP Online: The Sequel Chat Room on Messenger

Note: The extracts have been quoted as they originally appeared in the Messenger group. Only the parts which identified the participants in the research have been removed. No grammatical, syntactical or spelling mistakes were corrected.

21 May 2019, 18:45

Course Facilitator

1. Dear all, yesterday's webinar was about the latest developments in ESP. We talked about different technology innovations, teacher empowerment, Universities' concern about "employability" and how we as educators can support that. What we did not refer to in this course is assessment. Has any of you come across any formalized test for ESP purposes other than the usual IELTS, TOEFL, etc. which are mostly EAP oriented?

Course Facilitator

I have come across this article by the British Council recently:
You removed a message
https://www.britishcouncil.org/exam/aptis/research/projects/assessment-literacy/assessing-english-specific-purposes-0

Assessing English for Specific Purposes | British Council
Discover why assessment of English for Specific Purposes isn't just the assessment of general language proficiency with specific terminology thrown in, but a different matter altogether.
britishcouncil.org

Talking about the Aptis test. Has anyone ever heard about it? Any other ESP tests that you have come across?
And another one that I wish to share with you is the following:
http://espeap.junis.ni.ac.rs/index.php/espeap/article/view/763

DESIGNING COMPLEX LSP TASKS FOR ASSESSMENT PURPOSES | Krekeler | Journal of Teaching English for Specific and Academic Purposes
DESIGNING COMPLEX LSP TASKS FOR ASSESSMENT PURPOSES
espeap.junis.ni.ac.rs

Freely available online.
It is interesting to see how difficult it is to design tasks for ESP assessment purposes when the tasks should reflect real-life communication. Happy reading! 😉

Teacher 8

Thank you for this my dear
@Elis Kakoulli Constantinou

!

21 May 2019, 22:24

Teacher 14

I have been using OET and others High-stakes .standardized test for vocational purposes EVP and EOP which I received my professional training back in 2002. Now, I am joining forces with an Egyptian colleague to Co present in the upcoming ILACE in Egypt regarding OET , TEA and TOLES. All are assessment for Medical professionals, Aviation Staff and legal english. I wish to discuss on this Forum some of the issues I face in my classroom and get your feedback.

22 May 2019, 08:52

Course Facilitator

Good luck with your presentation [Teacher's name]!
You may pose any questions you wish regarding ESP and you may receive some answers if there is anyone that can help.
Good morning! 😊
And thanks for sharing the names of the tests you use

30 May 2019, 15:18

Teacher 14

I would like to suggest one quick idea 💡
We are now across the Mediterranean
Cyprus and Greece in one shore and Egypt on the facing shore
Why not work smart not hard?
If we could organize to meet at least once a year on either shore for continuous communication
We hold in Egypt at least three major events NileTesol ILACE AUC in Egypt Conferece
I am subtly have similar events
We could support each other and attend annual conference on either shore and have some added value
Like relaxing and touring the beautiful countries of ours
Then if worked we could expand globally
We could call it
Tour de la ESP

Course Facilitator

That's a great idea [Teacher's name] and that's why I suggest that we keep informing each other about the events that are being organised locally and abroad. The problem is funding 😊

Teacher 14

We could do a communal or prize based among ourselves
Not all of us has to attend annually
The chosen ones inform the others

Course Facilitator

But that means funding ourselves... I'm not sure whether all of us can afford that
Perhaps those among us who can ask their institutions for funding could ask for a
scholarship and then the rest could apply for that when there is a local event.

Teacher 8

Funding is, indeed, a problem. However, we could also be meeting in conferences.

Teacher 14

I could approach the above mentioned organizers for funding help

Course Facilitator

Of course we could meet in conferences

Teacher 8

I mean, we keep this group and inform each other of our plans if there are any 😊

Teacher 14

We also have RELO , the American embassy and others line the British council

👍

1

Course Facilitator

And we could also keep this community alive by communicating through the Facebook
group or here

Teacher 14

It is hard work and may not succeed but i think it is worth a try ! Isn't it
Yes Elis indeed
The ESP isn't a local it is global

👍
1

And I think lack of funding is a legitimate challenge
We wouldn't do nothing if we don't have funding
Additionally,
We could produce some form of income generating ideas among ourselves
Like inline ESP magazine
We could use the trendy technology in publishing it
And promote it locally and across continent
We could also approach big organizations like TESOL intl. & IATEFL for funding or support
We have the desire!
If it works fine ! If not we'll , try something else

Course Facilitator

Thank you for all your suggestions [Teacher's name]! Let's see how the group feels about all these.

Teacher 14

Ok

Teacher 8

The online magazine is a very good idea.

Teacher 14

I think among us here we have few experiences that we could share on line with others
I know for sure other ESP ers who are dying for knowledge and experience without resources
We could provide basic online training for nominal fees
Really, group power is amazing 😉
I remember 22 years ago we had our first Egypttesol
Now we have three to four international conferences
Yet still under developed

Teacher 14

If anyone here is handy with starting a BLOG, we could start with one

Teacher 5

Hi guys
Sorry for not, answering
I am going to, read everything in detail

And get back to you in a, few hours.

Focus Group/ Semi-structured interview questions for Stage 1

Dear ReTEESP Online participant,

First of all, I would like to thank you for your participation in the ReTEESP Online and all the work you have put into the course.

As previously mentioned, the delivery of this course is part of my PhD research in the area of ESP Teacher Education. In this context, now that the course has been completed, I would really appreciate it if you could spend some time answering a set of questions, the purpose of which is to identify the challenges and benefits of the course and provide some suggestions for improvement.

With your permission this interview will be recorded.

Please be assured that your responses will remain anonymous, and no names will be mentioned in any future report of the results of this research.

Thank you.

Elis Kakoulli Constantinou

The ReTEESP Online course designer and facilitator

Questions

1. Describe your experience in participating in the ReTEESP Online. How do you feel about it?

2. What are the challenges you faced during the course?

3. What were the elements that you liked/ enjoyed?

4. Do you feel that you have benefitted from this course at all? How/ In what way?

5. How do you feel about the content of course?

6. How do you feel about the tools that were used for the delivery of this course (Google Classroom, GDrive, Gmail, Personal Email Accounts, Closed Facebook Group, Skype)?

7. How did you communicate with your fellow trainees?

8. How did you know that a new post had been uploaded?

9. Were you satisfied with how the course facilitator handled things/ with her role in the course?

10. The course claims to be based on a 'practising what you preach' approach', in other words, the techniques, methods, tools, etc. that were utilized in the course can be applied by you in your teaching context. Do you agree with this view?

11. Could you make some suggestions for the improvement of this course?

12. How would you feel about keeping this community that has been created with this course active by keeping in touch, posting things in the Facebook group or the Google Classroom and keep exchanging ideas on different things related to our teaching, even after the completion of the course?

13. Is there anything else you feel you want to say about the course or your experience with it?

Semi-structured interview questions for Stage 2

Dear ReTEESP Online participant,

First of all, I would like to thank you for your participation in the ReTEESP Online and all the work you have put into the course.

As previously mentioned, the delivery of this course is part of my PhD research in the area of ESP Teacher Education. In this context, now that the course has been completed, I would really appreciate it if you could spend some time answering a set of questions, the purpose of which is to identify the challenges and benefits of the course and provide some suggestions for improvement.

With your permission this interview will be recorded.

Please be assured that your responses will remain anonymous, and no names will be mentioned in any future report of the results of this research.

Thank you.

Elis Kakoulli Constantinou
The ReTEESP Online course designer and facilitator

Questions

1. Describe your experience in participating in the ReTEESP Online: The Sequel. How do you feel about it?

2. What challenges did you face during the course?

3. What were the elements that you liked/ enjoyed?

4. Do you feel that you have benefitted from this course at all? How/ In what way?

5. Considering that the purpose of this Sequel was to complement last year's course, how would you feel about last year's (ReTEESP Online) and this year's (ReTEESP Online: The Sequel) courses being one course? In other words, what are your views on merging the two parts into one?

6. Do you have any suggestions regarding the improvement of this course as a whole (last year's and this year's)?

7. Is there anything else you feel you want to say about the course or your experience with it?

$\mathscr{Re}$TTESP Online

CURRICULUM

Stage 1: The ReTEESP Online Curriculum

ReTEESP Online

An Online Reflective Teacher Education Course in English for Specific Purposes

COURSE OUTLINE

Course Title: ReTEESP Online (Online Reflective Teacher Education in English for Specific Purposes)

Duration: Minimum 3 Weeks – Maximum 6 Weeks (Approximately 5 hours per week)

Language of Instruction: English

Field: Teaching English for Specific Purposes
✆ **Course Website**: https://sites.google.com/site/reteesponline/

Course Designer and Facilitator: Elis Kakoulli Constantinou, ESP instructor, PhD Candidate, Cyprus University of Technology

Skype: Elis Kakoulli Constantinou
✆ **Website:** https://sites.google.com/site/eliskakoulliconstantinou/
✆ **Language Centre Website:**
https://www.cut.ac.cy/faculties/languagecentre/?languageId=1

Description of the Course:

> The Online Reflective Teacher Education course in English for Specific Purposes (ReTEESP Online) is a 3 Weeks (maximum 6 Weeks), 5 hours per week, free course intended for ESP educators representing different ESP fields or EFL educators who would like to educate themselves on issues pertaining to ESP teaching methodology or update their knowledge on the latest developments in ESP teaching practices. The aim of the course is to engage educators in hands-on activities that will enable them to develop in areas associated with ESP teaching and give them the opportunity to implement their new knowledge in their ESP practice. The ReTEESP Online was first offered in Spring 2017 with participants from Cyprus and Spain. The course is part of the course designer's PhD research in the area of ESP Teacher Education. The course is offered online and it is flexible, depending on the participants' profiles and needs. It develops in three weeks, and it evolves around topics such as ESP and its characteristics, the ESP lesson planning process, ESP students' needs analysis, resources, tools and tasks for the ESP classroom, the ESP lesson in practice and collaborative reflection on the teaching process.
>
> The ReTEESP Online is based on sociocultural teacher education models and a reflective model for professional development. It embraces a 'practising what you preach' approach, since the techniques and methods of instruction which are used in the course can be used by trainees in their language classrooms. It adopts a social constructivist perspective to teacher education taking into account the social context in which the ESP practitioners operate and being based on discussion and a constant exchange of ideas and

collaboration. Moreover, the course is also governed by principles of connectivism, which supports that knowledge is acquired through making connections and extending one's personal network.

Upon completion of the course, participants will be awarded a certificate of attendance issued by the Cyprus University of Technology Language Centre.

Learning Outcomes:

By the end of this course trainees will have gained a better understanding of the notion of ESP and its principles and how ESP can be taught if careful and structured planning occurs taking into account all of the factors involved in the decision-making process.

After completion of the course students are expected to have:
- Understood the nature of ESP
- Understood the multifaceted role of the ESP practitioner
- Understood the importance of organising your lesson to serve the learning objectives of the curriculum
- Learnt how to design well-structured lesson plans
- Learnt how to evaluate the needs of their learners
- Learnt how to establish the aims of the lesson (and the curriculum in general)
- Learnt how to design their lesson based on the needs of their learners
- Learnt how to exploit authentic material and resources
- Learnt how to design activities for the ESP classroom
- Learnt how to develop specialised knowledge on the subject matter
- Shared database of materials, links and activities in different ESP areas
- Recognised the need to integrate technology in their ESP teaching and lifelong training
- Come up with ideas of how to integrate new technologies in their ESP classroom (Google classroom, Google Docs, Facebook, Google sites, etc.)
- Learnt how to collaborate with other ESP practitioners to develop professionally
- Learnt how to reflect individually and collaboratively and critically discuss and elaborate on their teaching practices
- Understood the need for Continuous Professional Development
- Learnt about more opportunities to develop professionally
- Expanded their network of ESP practitioners

Teaching Methods/ Delivery modes:

The course will be delivered through interactive online lectures, online discussions, independent reading/ writing/ listening, independent research, individual and collaborative online work.

The tools that will be used for the delivery of the course are:

- The Google Classroom (The platform on which material for the course will be shared and where tasks will be submitted and discussed)
- Google Drive (Space where trainees and the facilitator will save and share the material for the course and collaborate)
- Google Forms (for questionnaires and quizzes)
- Gmail or participants' personal email accounts (for communication purposes)

> - Skype (for teleconferencing: webinars/ tutorials)
> - Facebook Closed Group (for sharing ideas, sharing news/ events/ articles, communicating, establishing a team spirit)
> - Doodle (to schedule webinars)
>
> Participants will be requested to base their responses on their own ESP teaching context and have a specific group of learners in mind. They are expected to actively participate in the course through being engaged in everyday online interaction with colleagues from different ESP contexts.
>
> Instructions on how to use the technology tools utilised in this course will be sent to the participants before the course starts and will be available throughout the course on the course platform

Contacting the facilitator:
During the course you are welcome to communicate with the facilitator in the following ways:
1. Gmail/ CUT mail (elis.constantinou@cut.ac.cy)
2. Facebook closed group
4. Skype tutorials, individually or in pairs or groups of maximum 4-5 trainees or group based. You may book a private/ group tutorial any time convenient to both you and the trainer in case you face any difficulties or you have any questions concerning the course. Send your request to elis.constantinou@cut.ac.cy. Please give at least 24 hours' notice.

For this course participants are required to have:

Access to high-speed Internet and basic technology skills (e.g. logging in to course, for searching the Internet, managing a Google account, taking part in online discussions using the comment feature, etc.)

Recommended Study Material:

Barcena, E., Read, T., & Arus, J. (Eds.). (2014). *Languages for Specific Purposes in the Digital Era*. Heidelberg: Springer International Publishing.

Basturkmen, H. (2009). *Ideas and Options in English for Specific Purposes*. New York: Routledge.

Basturkmen, H. (2010). *Developing Courses in English for Specific Purposes*. London: Palgrave Macmillan.

Belcher, D. D. (2006). English for Specific Purposes: Teaching to Perceived Needs and Imagined Futures in Worlds of Work, Study, and Everyday Life. *TESOL Quarterly*, *40*(1), 133. doi:10.2307/40264514

Belcher, D. (Ed.). (2009). *English for Specific Purposes in Theory and Practice*. Michigan: The Univeristy of Michigan Press.

Belcher, D., Johns, A. M., & Paltridge, B. (Eds.). (2011). *New Directions in English for Specific Purposes Research*. Michigan: The Univeristy of Michigan Press.

Dudley-Evans, T., & St John, M. J. (1998). *Developments in English for Specific Purposes: A multi-disciplinary approach.* Cambridge: Cambridge University Press.

Paltridge, B. & Starfield, S. (Eds.), *The Handbook of English for Specific Purposes*. Chichester: Wiley Blackwell.

TENTATIVE COURSE OUTLINE

WEEKS	SESSIONS	LEARNING OUTCOMES	TOPICS	DEADLINES
WEEK 1	**Session 1** **Monday 26th February**	With the completion of Session 1 participants are expected to have: ➢ become familiar with the ReTEESP Online learning environment, and all the technologies involved ➢ become familiar with each other's teaching backgrounds/ experiences and professional environments	• **Introduction to the ReTEESP Online:** - Course description and outline - The instruction tools - Tasks/ Reflections - Groups/ Group Folders - Introductions	Wednesday 28th February
	Session 2 **Thursday 1st March**	With the completion of Session 2 participants are expected to have: ➢ enriched their knowledge on the nature of ESP ➢ deepened their understanding on the role and the responsibilities of the ESP practitioner ➢ developed their knowledge on the ESP lesson planning process	• **ESP and its characteristics/ The ESP lesson planning process**	Sunday 4th March
WEEK 2	**Session 3** **Monday 5th March**	With the completion of Session 3 participants are expected to have: ➢ learnt how to analyse their ESP students' needs ➢ learnt how to set the aims, objectives/ learning outcomes of an ESP lesson based on the learners' needs and an analysis of the situation	• **ESP students' needs analysis** - Sketching the profile of your class - Analysing the ESP situation - Setting the learning outcomes	Wednesday 7th March

	Session 4 **Thursday 8th March**	With the completion of Session 4 participants are expected to have: ➢ become familiar with different resources/ material that they can use in their ESP course ➢ enriched their knowledge on tasks they can use in their ESP classroom ➢ become familiar with different technology tools that they can integrate in their ESP teaching	• **The ESP lesson** - Resources, tools, tasks, modes of classroom organisation	Sunday 11th March
WEEK 3	**Session 5** **Friday 9th March – Friday 16th March**	After the ESP lesson implementation participants are expected to have: ➢ understood the advantages of working with an ESP lesson plan ➢ understood the challenges of working with an ESP plan especially if, due to unexpected problems, things do not go according to the plan ➢ understood the merits of integrating new ideas in their ESP classroom	• **The ESP lesson in practice** Implementing your ESP lesson plan	Friday 16th March
	Session 6 **Friday 16th March**	By the end of Session 6 participants are expected to have: ➢ learnt how to reflect on and evaluate an ESP teaching experience ➢ learnt how to make decisions in order to improve the ESP teaching and learning process ➢ recalled the most important information acquired during the	**Sharing thoughts and reflecting collaboratively**	

		Online ESP Teacher Education course ➢ shared the knowledge they have gained from this experience ➢ shared the difficulties and challenges they faced ➢ identified changes that could be made in order to improve the course			

SESSION 1: Introduction to the ReTEESP Online	
Stage 1 – Desired Results	

Established goals:
By the end of Session 1 participants are expected to have:
- ➢ become familiar with the content and teaching methods of the ReTEESP Online.
- ➢ have learnt a few things about each other and have become familiar with each other's teaching experiences and teaching environments.

Essential Questions:	**Understandings:**
- What is the ReTEESP Online about? - How are we going to work during the course? - What technologies are we going to use in this course? - How do we log in to our G Suite for Education account and how do we join a Google Classroom class? - How does Google Classroom work? - Who are the colleagues participating in the course? What are their experiences with ESP?	Teachers will understand that… - The ReTEESP Online is a free online Reflective Teacher Education short course in ESP intended for ESP educators representing different ESP fields who would like to receive training on ESP teaching methodology or would like to update their knowledge on the latest developments in ESP teaching practices. - the course will utitlise different technologies in order to facilitate learning through collaboration and reflection. - their co-participants probably share common experiences and interests and that they may benefit from new ideas and practices that may be introduced through the course.
Teachers will know… - What the course is about - How to log in to Google Suite for Education - What Google Classroom is and how it works - Who the facilitator is - Who their peers are	*Teachers will be able to…* - Log in to G Suite for Education - Navigate through Google Classroom - Open attachments in GDrive - Post comments under facilitator's posts
Stage 2 – Assessment Evidence	
Performance Tasks:	**Other Evidence:**
No performance task was assigned for Unit 1.	1. Introduce yourself to your colleagues using the 'Comment' feature under Unit 1 post. Briefly describe: - where you come from - what ESP experience you have - what you are teaching at the moment - the context in which you are teaching - why you have decided to attend this course

	• the difficulties/challenges you are facing that you would like to share during this course • other activities which you are engaged in that help you develop professionally 2. Questionnaire on profile of teachers 3. Reflective Journal

Stage 3 – Learning Plan
Each entry in Stage 3 is coded with the appropriate initials of the WHERETO[2] elements.

Learning Activities:
1. The teachers join a Webinar through Skype run by the facilitator, which has been arranged beforehand and the details of which were sent to the teachers via email. **O**
2. The facilitator welcomes the participants to the course and briefly describes what the course is about and how they should work. **W, H, O**
3. The facilitator shares her screen and shows how participants can log in to their G Suite for Education account and how they can join the Google class that has been created on Google Classroom for this course. **E (1)**
4. They explore the platform and see the first post on Google Classroom. **W, O**
5. They click on the first document attached to the post to see UNIT 1 Topics, Materials and Learning Outcomes. **W**
6. The facilitator goes through the rest of the attached documents and links and explains how the teachers should work. **W, O**

    After the Webinar:
7. Teachers click on 'My Story doc with Tasks 1 and 2. They follow the instructions on the document to complete the first task which involves introducing themselves to the class using the 'Comment' feature under the post. **W, H**
8. They respond to a very brief questionnaire that aims at identifying their profile as an ESP practitioner. **T**
9. They click on the document 'Google Classroom Navigation Guide' and see how they can navigate ReTTESP Online platform. **O, E (1)**

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[2] WHERETO elements:

W = Help the students know **W**here the unit is going and **W**hat is expected. Help the teacher know **W**here the students are coming from (prior knowledge, interests).

H = **H**ook all students and **H**old their interest.

E (1) = **E**quip students, help them **E**xperience the key ideas and **E**xplore the issues.

R = Provide opportunities to **R**ethink and **R**evise their understandings and work.

E (2)= Allow students to **E**valuate their work and its implications.

T = Be **T**ailored (personalised) to the different needs, interests, and abilities of learners.

O = Be **O**rganised to maximise initial and sustained engagement as well as effective learning. (Wiggins & McTighe, 2005, p. 22)

10. Finally, they write their reflections in their Reflective Journal. To find it they go to the 'ABOUT' page of the platform and click on the 'Class Drive Folder' on the left side of their screen. They are automatically driven to their Google Drive folder. They find their Reflective Journal Folder when they click the 'Shared with me' option. It is a Folder that has their name on. **R, E (2),**

SESSION 2: ESP and its characteristics/ The ESP lesson planning process

Stage 1 – Desired Results

Established goals:
By the end of Session 2 participants are expected to have:
➤ enriched their knowledge on the nature of ESP
➤ deepened their understanding on the role and the responsibilities of the ESP practitioner
➤ developed their knowledge on the ESP lesson planning process

Essential Questions:	Understandings:
- What is ESP and what does it involve? - What are some of the branches of ESP? - What are some of the most important characteristics of ESP? - What does analysing the needs of learners involve? - Why is needs analysis important? - What are some of the sources you can elicit information from to design an ESP course? - What are authentic materials and why is it important to use them in ESP? - What are some of the challenges of using authentic materials? - What is the role of the ESP practitioner? - What are the implications for ESP teaching? - What is an ESP lesson plan? - Why is it useful? - Which are the constituent parts/ the structure of an ESP lesson plan? - What factors should one take into account when they plan an ESP lesson?	Teachers will understand that… - ESP is a 'broad and diverse field of English language teaching' that refers to 'language programmes designed for groups or individuals who are learning with an identifiable purpose and clearly specified needs.' Johnson and Johnson (1998, p.105) - ESP has different branches (e.g. EOP and EAP) - ESP has absolute and variable characteristics, and they will understand what these characteristics are. - ESP is based on needs analysis. - what needs analysis involves - needs analysis is on-going - authenticity entails genuineness of material and meaning and provision of knowledge for learners - authenticity is important in ESP, and it is essential to use authentic material - using authentic material can be challenging - using new technologies in ESP can enhance authenticity - the role of the ESP practitioner is multidimensional - all these characteristics of ESP bear implications for the ESP teaching and learning processes

	• a lesson plan is a 'map' of what to do and to do it in class
	• lesson planning is an essential component of the teaching process since it gives the opportunity to the teachers to deliver a well-thought and well-structured lesson.
	• in ESP a good lesson plan is even more important
	• an ESP lesson plan could be very detailed and for more experienced teachers it could just be a 'mental plan' which is based on the needs of students and the set learning outcomes

Teachers will know…	*Teachers will be able to…*
• What ESP is, its branches, its main characteristics and what the implications are for ESP teaching and learning • Key terms: EOP, EAP, ESAP, EGAP, absolute and variable characteristics of ESP, needs analysis, authenticity • What a lesson plan is and why it is important	• set the foundations of an ESP course • analyse their students' needs • look for authentic material • talk about their teaching practices • share ideas on authentic or authentic-like tasks they can use with their learners • talk about each different ideas on ESP lesson planning

Stage 2 – Assessment Evidence

Performance Tasks:	Other Evidence:
• Brainstorming on ESP Lesson Plan (collaborative work)	• Reflective Journal

Stage 3 – Learning Plan

Learning Activities:
1. The Teachers log in Google Classroom and they read the new post which the facilitator has uploaded for this Session (SESSION 2: ESP and its characteristics/ The ESP lesson planning process). This is done asynchronously. **W, H, O**
2. They check the Topics, Materials and Learning Outcomes for Session 2 by clicking on the relevant attachment under the post. **W**
3. Then teachers click on the Power Point Presentation titled "English for Specific Purposes (ESP) and the ESP Lesson Planning Process" and watch the presentation with audio by activating the Slideshow mode. **E (1)**
4. After the presentation, the teachers study a Lesson Plan template. They go through it and think of elements that could be integrated into an ESP lesson plan. They add their thoughts and comments in the 'Your Comments' section of this document (everyone is asked to write on the same document) and add their name underneath so that the rest of the class knows who made the suggestion. The document is shared with everyone so that teachers can see each other's comments and suggestions. **R**
5. Then teachers check out some useful material related to ESP (readings, coursebooks, ESP Journals, list of ESP associations). See if there are any coursebooks or materials

that they could use in your classes. Teachers are also invited to join an ESP Association and start expanding their horizons! **E (1), R, T**
6. The teachers write their thoughts in their Reflective Journals. **R, E (2)**

Session 3: Analysing ESP students' needs and setting learning objectives

Stage 1 – Desired Results

Established goals:
By the end of Session 3 participants are expected to have:
  ➢ learnt how to analyse their ESP students' needs
  ➢ learnt how to set the aims, objectives/ learning outcomes of an ESP lesson based on the learners' needs and an analysis of the situation

Essential Questions:	**Understandings:**
- What challenges are involved in teaching ESP? - What can I do to overcome these challenges? - How do we establish the learners' profile? - How do we set the general aim and specific objectives/ learning outcomes of a lesson?	Teachers will understand that… - ESP teaching is challenging, as the ESP practitioners may not know where to seek help to find material and learn about the discipline. - they have to find out who their learners are, study the subject, find the right resources and approach the right people who will help in the process. - learners' profiles are established through needs analysis that should involve elicitation of information concerning learners' age, origin, profession, education, work experience, current language skills, expectations, specific roles and tasks, specific language, specific themes and topics, etc. - this info could be elicited through discussions, questionnaires, interviews, observations, analysis of authentic material, samples of students' writing, etc. Learners, subject teachers, specialists, professionals, employers, stakeholders can provide this information. - Aims/ objectives/ learning outcomes can be established on the basis of needs and situation analysis and they can involve language (i.e. speaking, listening, reading and writing) and other skills (e.g. collaboration, creativity, critical thinking, using technology, etc.)

Teachers will know…	Teachers will be able to…
- How needs analysis is conducted - How to set aims/ learning objectives/ outcomes - Key terms: needs analysis, situation analysis, learning aims, learning objectives, learning outcomes	- perform a needs analysis - set the aims/ objectives/ learning outcomes

Stage 2 – Assessment Evidence	
Performance Tasks: Exchange of ideas on needs analysis and setting of learning aims and outcomes collaboratively	**Other Evidence:** Reflective Journal

Stage 3 – Learning Plan

Learning Activities:

1. The teachers log in Google Classroom and they read the new post which the facilitator has uploaded for this Session (Session 3: Analysing ESP students' needs and setting learning objectives). This is done asynchronously. **W, H, O**
2. At the beginning of the post the facilitator shares briefly her experiences and the challenges she faced when she started teaching ESP at the Cyprus University of Technology, and she also shares an article by Doug Bell, the IATEFL ESP SIG Coordinator back in 2002, who states that such challenges are very common among ESP practitioners. Then, teachers are asked to comment on the challenges they face with their ESP teaching. This serves as an introduction to the topic of this session. **W, R**
3. Then, they check the Topics, Materials and Learning Outcomes for Session 3 by clicking on the relevant attachment under the post. **W**
4. The teachers are invited to watch the presentation titled "Analysing ESP students' needs and setting learning objectives" by downloading it and switching it to the Slideshow mode. **E (1), T**
5. The teachers are organised into groups on the basis of their teaching contexts and experiences. They may see the group in which they have been allocated in the relevant document under the post. After they locate their Group, they go to the 'ABOUT' page of the platform and click on the 'Class Drive Folder' on the left side of their screen. They are automatically driven to their Google Drive folder. They find the 'Group Folders' by clicking the 'Shared with me' option. After they enter the 'Group folders', they visit the folder of their group and work together on the Worksheet named 'Analysing our ESP students' needs' in 'Session 3' Folder. They are asked to work on this collaboratively, synchronously or asynchronously. They are urged to contact each other via email or via Messenger or even by using the chat feature on the Worksheet that you will open. They may even use Skype. They are also invited to read the facilitator's experience in designing an ESP course, for reference.
   NOTE: The 'Group Folders' are shared with everyone in the group. So everyone has access to all the folders. The purpose of this is to share knowledge and experiences and give feedback to each other **E (1), R, T, O**
6. The teachers write their thoughts in their Reflective Journals. **R, E (2), T**

Session 4: The ESP Lesson
Stage 1 – Desired Results

Established goals:

By the end of Session 4 participants are expected to have:

- ➢ developed their knowledge of different theories of learning, (Objectivist theories, Constructivist theories and Connectivist theory)
- ➢ associated the learning theories with their ESP teaching practices
- ➢ become familiar with different resources/ material that they can use in their ESP course
- ➢ enriched their knowledge on tasks they can use in their ESP classroom
- ➢ become familiar with different technology tools that they can integrate in their ESP teaching
- ➢ developed and shared ideas on how to improve their teaching practices

Essential Questions:	**Understandings:**
• How do people learn? • How may an ESP lesson be constructed based on the latest theories of learning? • What kind of resources can we use in an ESP lesson? • What technology tools can we use in an ESP lesson? • What activities and tasks can we engage our ESP learners in? • What are some classroom organisation modes we can use in our lesson? • How can learners be assessed in an ESP lesson?	Teachers will understand that… • People learn best when they interact with each other and their social surroundings and through forming networks where they can find knowledge • they need to use resources that allow them to meet the needs of their learners and expose them to authentic or authentic-like use of the language (e.g. look for Magazines, Newsletters and Journals that relate to their studies, collaborate with subject specialists, look for reliable sites, organise educational visits, etc.) • they may find many ideas by joining ESP professional organisations and fora (e.g. TESOL International Association ESP Interest Section, IATEFL ESP Special Interest Group, AELFE, etc.) • new technologies can be a tool for language learning and a source of authentic ESP materials, promote learner autonomy, communication and interaction • the tasks their learners are engaged in should reflect authentic language use in the specific discipline, therefore there should always be a purposeful and meaningful scenario with roles and a clear language outcome • assessment processes should be similar to the tasks that students are

	engaged in and thus reflect real-life language use
Teachers will know… • How to decide on the resources, tools, tasks and assessment processes • Where to look for authentic or authentic-like material • How to construct the learning process • How to assess the students' performance	*Teachers will be able to…* • Design a complete lesson

Stage 2 – Assessment Evidence

Performance Tasks: • Study of the material assigned and contemplation on what teaching activities and material can be assigned in each teacher's professional context.	**Other Evidence:** Reflective Journal

Stage 3 – Learning Plan

Learning Activities:

1. A couple of days before the new session, the facilitator poses some questions on Google Classroom in order to initiate discussion and prepare the ground for Session 4. She asks the following:
   -Do you use any authentic material in your teaching?
   -How do you use them?
   -What are the challenges that you face and how do you cope with them?
   The facilitator first shares some of her own practices and invites the teachers to share their practices with everyone asynchronously. **W, H, R**
2. The teachers log in Google Classroom and they read the new post which the facilitator has uploaded for this Session (Session 4: The ESP Lesson). This is done asynchronously. **W, H, O**
3. They check the Topics, Materials and Learning Outcomes for Session 4 by clicking on the relevant attachment under the post. **W**
4. They watch a presentation titled 'ESP and the ESP lesson planning process'. **E (1)**
5. They download the presentation as a Power Point file instead of opening it in Google Drive to be able to listen to the audio as well. To do that they can follow the instructions doc underneath the PPT. **E (1), T**
6. Then, teachers study the document on the 'ESP lesson plan'. **E (1), R**
7. After that, they are invited to check out some useful material related to ESP (readings, coursebooks, ESP Journals, list of ESP associations) and see if there are any coursebooks that they could use in their classes. Finally, the facilitator urges them to join an ESP Association and start expanding their horizons.
8. The teachers write their thoughts in their Reflective Journals. **E (2), R, T**

Session 5: The ESP Lesson in Practice

Stage 1 – Desired Results

Established goals:
By the end of Session 5 participants are expected to have:
- ➢ consolidated knowledge acquired from previous sessions
- ➢ understood the advantages and challenges of working with an ESP lesson plan
- ➢ understood the advantages of reflective practice

Essential Questions:	Understandings:
- How may my next ESP lesson be constructed based on the latest theories of learning? - What would the learning outcomes be? - What kind of resources can we use in an ESP lesson? - What technology tools can we use in an ESP lesson? - What activities and tasks can we engage our ESP learners in? - What are some classroom organisation modes we can use in our lesson? - How can learners be assessed in an ESP lesson?	Teachers will understand that… - An ESP lesson could be based on the theories of social constructivism and connectivism - All the previously acquired knowledge in this course can now be used into practice, in order to improve our ESP teaching practices
Teachers will know…	*Teachers will be able to…*
- How to set learning outcomes based on your students' needs - How to decide on the resources, tools, tasks and assessment processes - Where to look for authentic or authentic-like material - How to construct the learning process - How to assess the students' performance	Design a complete lesson

Stage 2 – Assessment Evidence

Performance Tasks:	Other Evidence:
Teachers prepare their next ESP lesson and they share it with everyone in the group	Reflective Journal

Stage 3 – Learning Plan

Learning Activities:
1. The teachers log in Google Classroom and they read the new post which the facilitator has uploaded for this Session (Session 5: The ESP Lesson in Practice). This is done asynchronously. **W, H, O**

2. They check the Topics, Materials and Learning Outcomes for Session 5 by clicking on the relevant attachment under the post. **W**
3. Teachers are invited to prepare for their next ESP class, by thinking about what they saw in this course and try to adapt it to fit in their syllabus. The teachers who are currently teaching General English are urged to think of some specific language skills that your students should acquire e.g. how to write emails or how to advertise a product that they created to raise money for their school, etc., and create a lesson plan which will help their students acquire such skills. **R, T**
4. Then the teachers are asked to click on the document under the post which bears their name, plan their ESP Lesson and then add their Lesson Plan under this post. To be able to do all these, they are asked to follow the instructions on the 'Instructions on how to open, edit and add a doc on G Classroom' document under this post. **O**
5. The teachers then open the document 'A Sample ESP Lesson Plan for an ESAP Course' and go through it for more ideas. **E (1)**
6. Finally, the teachers are asked to implement/ teach the lesson they have planned (or some aspects of it) in their ESP class as soon as possible and reflect on this experience in their Reflective Journal. **R, E (2), T**

SESSION 6 – Sharing thoughts and reflecting collaboratively

Stage 1 – Desired Results

Established goals:
By the end of Session 6 participants are expected to have:
- ➢ learnt how to reflect on and evaluate an ESP teaching experience
- ➢ learnt how to make decisions in order to improve the ESP teaching and learning process
- ➢ recalled the most important information acquired during the ReTEESP Online
- ➢ shared the knowledge they have gained from this experience
- ➢ shared the difficulties and challenges they faced
- ➢ identified changes that could be made in order to improve the course

Essential Questions:	**Understandings:**
• What have I learnt from this course? • What new ideas can I incorporate in my teaching practices? • What were the challenges faced in this course? • In what ways can this course improve?	Teachers will understand… • the knowledge acquired from the course • the ideas that they can incorporate in their ESP teaching practices • the challenges they faced during the course • ways the course can be made better
Teachers will know… • how they can enrich their ESP teaching practices • how an online course is like • where to look for advice should they need it, as they will be part of a network of ESP professionals	*Teachers will be able to…* • apply new ideas, new technologies and material in their ESP teaching practices • participate more confidently in other online courses in the future

Stage 2 – Assessment Evidence

Performance Tasks:	Other Evidence:
• Providing feedback on each other's lesson plans	Reflective Journal

Stage 3 – Learning Plan

Learning Activities:
1. The teachers log in Google Classroom, and they read the new post which the facilitator has uploaded for this Session (Session 9: Sharing thoughts and reflecting collaboratively). This is done asynchronously. **W, H, O**
2. They check the Topics, Materials and Learning Outcomes for Session 6 by clicking on the relevant attachment under the post and the facilitator gives them more information on the final Webinar which will consist of two parts:
A. The first part of the Webinar involves talking about our experience with the implementation of the ESP lesson plan that was designed in Session 5 and giving feedback to each other collaboratively;
B. The second part of the Webinar involves recapitulation on what was covered in this course and drawing of the final conclusions. Finally, teachers are asked to comment on the course. **W, H, O**
3. The teachers write their thoughts in their Reflective Journals. **R, E (2), T**

Stage 2: The ReTEESP Online: The Sequel curriculum

ℛℯTEESP Online: The Sequel

The Sequel of an Online Reflective Teacher Education Course in English for Specific Purposes

COURSE OUTLINE

Course Title: ReTEESP Online: The Sequel

Duration: 2 Weeks

Language of Instruction: English

Field: Teaching English for Specific Purposes
⌨ **Course Website**: https://sites.google.com/site/reteesponline/

Course Designer and Facilitator: Elis Kakoulli Constantinou, ESP instructor, PhD Candidate, Cyprus University of Technology

Skype: Elis Kakoulli Constantinou
⌨ **Website:** https://sites.google.com/site/eliskakoulliconstantinou/
⌨ **Language Centre Website:**
https://www.cut.ac.cy/faculties/languagecentre/?languageId=1

Description of the Course:

> The Reflective Teacher Education in English for Specific Purposes Online (ReTEESP Online): The Sequel constitutes a continuation of ReTEESP Online. It is a 2-Week, 5 hours per week, free course intended for ESP educators representing different ESP fields or EFL educators who would like to educate themselves on issues pertaining to ESP teaching methodology or update their knowledge on the latest developments in ESP teaching practices. The course is based on ReTEESP Online, and it aims at complementing it.
>
> The course is offered online and it is flexible, depending on the participants' profiles and needs. It evolves around topics such as the latest developments in ESP, action research in ESP, the use of new technology tools in teaching ESP and ideas for future action and possible collaborations between the participants.
>
> The ReTEESP Online: The Sequel, as the previous version of the course, is based on a reflective model for professional development and a 'practising what you preach' approach, since the techniques and methods of instruction which are used in the course can be used by trainees in their language classrooms. It adopts a social constructivist perspective to teacher training taking into account the social context in which the ESP practitioners operate and being based on discussion and a constant exchange of ideas and collaboration. Moreover, the course is also governed by principles of connectivism, which supports that knowledge is acquired through making connections and extending one's personal network.

Learning Outcomes:

After completion of the course students are expected to have achieved the following:

- become familiar with the latest developments in ESP
- become familiar with notions such as teacher empowerment, telecollaboration, cloud computing, etc.
- learnt what Action Research is and what it involves
- become familiar with examples of Action Research used in ESP contexts
- thought of ways to implement Action Research in their own teaching environments
- become familiar with examples of different technology tools used in ESP contexts
- thought of ways of integrating these tools in their own teaching contexts
- thought of ways in which they can collaborate with other colleagues participating in the course in order to continue developing professionally

Teaching Methods:

The course will be delivered through interactive online webinars, online discussions, independent reading/ writing/ listening, independent research, individual and collaborative online work.

The tools that will be used for the delivery of the course are:

- The Google Classroom (The platform on which material for the course will be shared and where tasks will be submitted and discussed)
- Google Drive (Space where trainees and the facilitator will save and share the material for the course and collaborate)
- Google Forms (for questionnaires and quizzes)
- Gmail or participants' personal email accounts (for communication purposes)
- Zoom (for teleconferencing: webinars/ tutorials)
- Google Calendar (for arranging webinars)
- Facebook Group (for sharing ideas, sharing news/ events/ articles, communicating, establishing a team spirit)
- Facebook Messenger Group (for group chatting)

Participants will be requested to base their responses on their own ESP teaching context and have a specific group of learners in mind. They are expected to actively participate in the course through being engaged in everyday online interaction with colleagues from different ESP contexts.

Instructions on how to use the technology tools utilised in this course will be sent to the participants before the course starts and will be available throughout the course on the course platform

Contacting the facilitator:
During the course you are welcome to communicate with the facilitator in the following ways:
1. Gmail/ CUT mail (elis.constantinou@cut.ac.cy)
2. Facebook group
4. Skype tutorials, individually or in pairs or groups of maximum 4-5 trainees or group based. You may book a private/ group tutorial any time convenient to both you and the trainer in case you face any difficulties or you have any questions concerning the course. Send your request to elis.constantinou@cut.ac.cy. Please give at least 24 hours' notice.

For this course participants are required to have:

Access to high-speed Internet and basic technology skills (e.g., logging in to course, for searching the Internet, managing a Google account, taking part in online discussions using the comment feature, etc.)

Recommended Study Material:

Barcena, E., Read, T., & Arus, J. (Eds.). (2014). *Languages for Specific Purposes in the Digital Era*. Heidelberg: Springer International Publishing.

Basturkmen, H. (2009). *Ideas and Options in English for Specific Purposes*. New York: Routledge.

Basturkmen, H. (2010). *Developing Courses in English for Specific Purposes*. London: Palgrave Macmillan.

Belcher, D. D. (2006). English for Specific Purposes: Teaching to Perceived Needs and Imagined Futures in Worlds of Work, Study, and Everyday Life. *TESOL Quarterly*, *40*(1), 133. doi:10.2307/40264514

Belcher, D. (Ed.). (2009). *English for Specific Purposes in Theory and Practice*. Michigan: The Univeristy of Michigan Press.

Belcher, D., Johns, A. M., & Paltridge, B. (Eds.). (2011). *New Directions in English for Specific Purposes Research*. Michigan: The Univeristy of Michigan Press.

Dudley-Evans, T., & St John, M. J. (1998). *Developments in English for Specific Purposes: A multi-disciplinary approach.* Cambridge: Cambridge University Press.

McNiff, J. (2010). *Action Research for Professional Development: Concise advice for new and experienced action researchers*. Dorset: September Books.

Paltridge, B. & Starfield, S. (Eds.), *The Handbook of English for Specific Purposes*. Chichester: Wiley Blackwell.

Papadima-Sophocleous, S., Kakoulli Constantinou, E. & Giannikas, C. N. (2019). *ESP teaching and teacher education: current theories and practices.* Research-publishing.net. https://research-publishing.net/book?10.14705/rpnet.2019.33.9782490057450

Potocka, D. & Sierocka, H. (2013). The ESP Teacher as Researcher. *Studies in Logic, Grammar and Rhetoric, 34*(47), 175-188. https://www.degruyter.com/downloadpdf/j/slgr.2013.34.issue-1/slgr-2013-0029/slgr-2013-0029.pdf

Rebolledo, P., Smith, R., & Bullock, D. (Eds.) (2016). *Champion Teachers: stories of*

exploratory action research. British Council, Teaching English. https://englishagenda.britishcouncil.org/sites/default/files/attachments/british_council_champion_teachers_1.pdf

Sarré, Cédric; Whyte, Shona (Eds). (2017). *New developments in ESP teaching and learning research*. Research-publishing.net. https://doi.org/10.14705/rpnet.2017.cssw2017.9782490057016

TENTATIVE COURSE OUTLINE

WEEKS	SESSIONS	LEARNING OUTCOMES	TOPICS	DEADLINES
WEEK 1	**Session 1: Webinar 1** **Monday 20th May 2019**	With the completion of Session 1 participants are expected to have: ➢become familiar with the latest developments in ESP ➢become familiar with notions such as teacher empowerment, telecollaboration, cloud computing, etc.	• **ESP Revisited: The latest developments**	Thursday 23rd May 2019
	Session 2: Webinar 2 **Thursday 23rd May 2019**	With the completion of Session 2 participants are expected to have: ➢ learnt what Action Research is and what it involves ➢ become familiar with examples of Action Research used in ESP contexts ➢ thought of ways to implement Action Research in their own teaching environments	• **Acting, changing, improving: Action research in ESP**	Monday 27th May 2019
WEEK 2	**Session 3: Webinar 3** **Monday 27th May 2019**	With the completion of Session 3 participants are expected to have: ➢ become familiar with examples of different technology tools used in ESP contexts	• **The use of new technology tools in teaching ESP: Show and tell**	Thursday 30th May 2019

		➢ thought of ways of integrating these tools in their own teaching contexts		
	Session 4: Webinar 4 **Thursday 30th May 2019**	With the completion of Session 4 participants are expected to have: ➢ thought of ways in which they can collaborate with other colleagues participating in the course in order to continue developing professionally	• **Where to now? Ideas for future action and possible collaborations**	

SESSION 1: Webinar 1 - ESP Revisited: The latest developments

Stage 1 – Desired Results

Established goals:

By the end of Session 1 participants are expected to have:
- ➢ become familiar with the latest developments in ESP
- ➢ become familiar with notions such as teacher empowerment, telecollaboration, cloud computing, etc.

Essential Questions:	**Understandings:**
- What is the purpose of the ReTEESP Online: The Sequel? - What are some of the latest developments in the ESP field?	Teachers will understand that… - the ReTEESP Online: The Sequel aims at complementing the ReTEESP Online and provide the teachers with the opportunity to study issues in ESP that they did not have the chance to study in the previous course. The idea is to enrich and expand the previous course with new ideas and new material. - ESP was concerned with teaching materials and discourse analytic procedures rather than teaching methods all these years - ESP nowadays revolves around issues of teacher empowerment, students' engagement and motivation enhancement, the view of students as global citizens and the use of technology in teaching and learning
Teachers will know…	*Teachers will be able to…*
- What the course is about - What the latest trends in ESP are - Some of the latest reading materials that successfully describe these trends - Key terms: teacher empowerment, teacher research, TELL, employability skills, EMI, CLIL, telecollaboration, Virtual Reality, Serious Gaming, Cloud computing	- Have access to new ESP material - Watch the Webinar whenever they wish - Be engaged in discussions on ESP developments

Stage 2 – Assessment Evidence

Performance Tasks:	**Other Evidence:**
No performance task was assigned for Session 1	Reflective Journal

Stage 3 – Learning Plan

Each entry in Stage 3 is coded with the appropriate initials of the WHERETO[3] elements.

Learning Activities:

1. The teachers log in Google Classroom and they read the new post which the facilitator has uploaded for this Session (SESSION 1: Webinar 1 - ESP Revisited: The latest developments). This is done asynchronously. **W, H, O**
2. They check the Topics, Materials and Learning Outcomes for Session 1 by clicking on the relevant attachment under the post. **W, H**
3. The teachers join a Webinar through Zoom, run by the facilitator, which has been arranged beforehand and the details of which were sent to the teachers via email. **O**
4. The facilitator welcomes the participants to the sequel course and briefly describes what the course is about and how they should work. **W, H, O**
5. The facilitator shares her screen and delivers a 25-minute presentation titled: ESP Revisited: The Latest Developments. Microsoft Office Power Point was used for the preparation of slides. **H, E (1)**
6. After the presentation she invites a 15-minute discussion on innovations teachers had the chance to implement in their teaching during the last year. **R, E (1), E (2), T**
7. After the Webinar the discussion continues asynchronously in the ReTEESP Online: The Sequel Chat Room on Facebook Messenger. **R, E (1), E (2), T**
8. Teachers are urged to study the readings on the Useful Readings list the facilitator has shared with the teachers. **E (1)**
9. Finally, they write their reflections in their Reflective Journal. To find it they visit the 'Class Drive Folder' on the top left-hand corner of their screen in the Classwork page. The Journal they use is the same as the one they used in the first version of the course **R, E (2).**

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[3] WHERETO elements:

W = Help the students know **W**here the unit is going and **W**hat is expected. Help the teacher know **W**here the students are coming from (prior knowledge, interests).

H = **H**ook all students and **H**old their interest.

E (1) = **E**quip students, help them **E**xperience the key ideas and **E**xplore the issues.

R = Provide opportunities to **R**ethink and **R**evise their understandings and work.

E (2) = Allow students to **E**valuate their work and its implications.

T = Be **T**ailored (personalised) to the different needs, interests, and abilities of learners.

O = Be **O**rganised to maximise initial and sustained engagement as well as effective learning. (Wiggins & McTighe, 2005, p. 22)

SESSION 2: Webinar 2 – Acting, changing, improving: Action Research in ESP

Stage 1 – Desired Results

Established goals:
By the end of Session 2 participants are expected to have:
  ➢ Learnt what Action Research (AR) is and what it involves
  ➢ Become familiar with examples of AR used in ESP contexts
  ➢ Thought of ways to implement AR in their own teaching environments

Essential Questions:	**Understandings:**
• What is AR and what does it involve? • What types of AR are there? • What are the benefits of AR and what are the limitations? • What are some examples of AR in language education? • How can you use AR to improve your teaching practices?	Teachers will understand that… • AR involves identifying a problematic issue, imagining a possible solution, trying it out, evaluating it, and changing practice in the light of the evaluation. • AR: -Is practical and applied -Aims at changing/ improving things -Is small in scale/ Change at a micro level/ aims at changing things in a specific context. -Is based on systematic reflection -Leads to professional self-development -Is participatory/ Practitioners participate in the research/ Partners in the research -Follows a cyclical pattern/ Evolves in a series of spirals, each of which contain certain steps -Allows the use of different data collection tools (questionnaires, interviews, focus groups interviews, reflective journals, observation, etc.) -There are three types of AR: Technical, Practical and Emancipatory • AR has lots of benefits • The limitations of AR are less than its benefits • Potentially all teachers are eligible of applying AR in their practices
Teachers will know… • What AR is, its origins, its main characteristics, its different types, its benefits and limitations and what its implications are for ESP teaching and learning • Key terms: AR, research cycles, triangulation, self-reflective enquiry,	*Teachers will be able to…* • Understand what AR involves • Think of ways they can employ AR in their ESP practices

improvement of teaching practices, applied research, participatory research, technical, practical and emancipatory AR, generalisability.	

Stage 2 – Assessment Evidence	
Performance Tasks:	**Other Evidence:**
• Read AR scenarios from research paper abstracts and locate the problem identified and the action taken by the researcher. • Prepare for Webinar 3 by completing a Google doc with ideas on different technology tools that can be used in an ESP class.	• Reflective Journal

Stage 3 – Learning Plan

Learning Activities:
1. The Teachers log in Google Classroom and they read the new post which the facilitator has uploaded for this Session (SESSION 2: Webinar 2: Acting, changing, improving: Action Research in ESP). This is done asynchronously. **W, H, O**
2. They check the Topics, Materials and Learning Outcomes for Session 2 by clicking on the relevant attachment under the post. **W**
3. The teachers join the Webinar through Zoom, run by the facilitator, which has been arranged beforehand and the details of which were sent to the teachers via email. **O**
7. The facilitator shares her screen and delivers a 25-minute presentation titled: Acting, changing, improving: Action Research in ESP. Microsoft Office Power Point was used for the preparation of slides. **H, E (1)**
8. During the presentation the facilitator shares some examples of AR and invites the participants to discuss the problem identified in each case, the action the ESP practitioners took and the tools they used to collect data. **E (1)**
9. After the presentation she invites a 15-minute discussion on things they wished to improve in their classes and how this could be achieved. **R, E (1), E (2), T**
10. After the Webinar the discussion continues asynchronously in the ReTEESP Online: The Sequel Chat Room on Facebook Messenger. **R, E (1), E (2), T**
11. Teachers are urged to study the readings on the Useful Readings list the facilitator has shared with the teachers. **E (1)**
12. Teachers prepare for Webinar 3, dedicated to the use of technology in ESP, by providing information on a shared Google doc regarding a tool that they used or they wished to use in their ESP teaching. Webinar 3 would involve presentation of this tool by the participants. **R, E (1), E (2)**
13. The teachers write their thoughts in their Reflective Journals. **R, E (2)**

SESSION 3: Webinar 3 – The use of technology tools in teaching ESP: Show and tell

Stage 1 – Desired Results

Established goals:
By the end of Session 2 participants are expected to have:
  ➢ Become familiar with examples of different technology tools used in ESP contexts
  ➢ Thought of ways of integrating these tools in their own teaching contexts

Essential Questions:	**Understandings:**
• What is the value of using new technologies in our ESP class? • What are some of the latest and the most popular tools used in an ESP class? • What is cloud computing and the G Suite for Education and what does it involve? • What is VR, Mind Mup2, Quizlet, Kahoot, Expeditions, Timetoast, Prezi and Padlet? • How can these tools be used in an ESP class?	Teachers will understand that… • Nowadays, using technology in ESP is of paramount importance • There is different software available, which should be utilised having pedagogy in mind.
Teachers will know… • What cloud computing is and they will also become familiar with different other technology tools they can use in their ESP teaching	*Teachers will be able to…* • Explore various technology tools in order to enhance their teaching practices

Stage 2 – Assessment Evidence

Performance Tasks:	**Other Evidence:**
• Teachers should present a technology tool that could be used in an ESP class. They should describe it and share ideas on how it can be used in the class.	• Reflective Journal

Stage 3 – Learning Plan

Learning Activities:
1. The Teachers log in Google Classroom and they read the new post which the facilitator has uploaded for this Session (SESSION 3: Webinar 3: The use of technology tools in teaching ESP: Show and tell). This is done asynchronously. **W, H, O**
2. They check the Topics, Materials and Learning Outcomes for Session 3 by clicking on the relevant attachment under the post. **W**
3. The teachers join the Webinar through Zoom, run by the facilitator, which has been arranged beforehand and the details of which were sent to the teachers via email. **O**
4. The facilitator shares her screen and delivers a brief presentation on cloud computing, specifically the G Suite for Education, and how it can be used in ESP. Then

participants present different technology tools that they can be used in ESP. **R, E (1), E (2), T**
5. During the Webinar teachers are engaged in interaction, exchanging ideas on their practices. **E (1), E (2), T**
6. After the Webinar the discussion continues asynchronously in the ReTEESP Online: The Sequel Chat Room on Facebook Messenger. **R, E (1), E (2), T**
7. The teachers write their thoughts in their Reflective Journals. **R, E (2)**

SESSION 4: Webinar 4 – Where to now? Ideas for future action and possible collaborations

Stage 1 – Desired Results

Established goals:
By the end of Session 2 participants are expected to have:
  ➢ Thought of ways in which they can collaborate with other colleagues participating in the course in order to continue developing professionally

Essential Questions:	**Understandings:**
• What was the purpose of this sequel course? • What topics did the course deal with? • How can this community of practice be maintained?	Teachers will understand that… • This sequel course was designed to complement ReTEESP Online, help the participants explore other topics that they did not have the chance to explore and build on opportunities for future collaborations.
Teachers will know…	*Teachers will be able to…*
• They can continue collaborating with each other through keeping the Facebook and the Messenger groups active, through staff exchange visits, students' educational visits, co-teaching some classes, telecollaboration projects, collaboration on research projects.	• Continue to sustain this professional community of practice

Stage 2 – Assessment Evidence

Performance Tasks:	**Other Evidence:**
• There was no performance task in this last session.	• Reflective Journal

Stage 3 – Learning Plan

Learning Activities:
1. The Teachers log in Google Classroom and they read the new post which the facilitator has uploaded for this Session (SESSION 4: Webinar 4: Where to now? Ideas for future action and possible collaborations). This is done asynchronously. **W, H, O**
2. They check the Topics, Materials and Learning Outcomes for Session 4 by clicking on the relevant attachment under the post. **W**

3. The teachers join the Webinar through Zoom, run by the facilitator, which has been arranged beforehand and the details of which were sent to the teachers via email. **O**
4. The facilitator shares her screen and delivers a brief presentation on some ways this community of practice could be sustained. **R, E (1), E (2), T**
5. Then she invites a discussion and exchange of ideas on other actions that could be taken to achieve this. **H, E (1), O**
6. After the Webinar the discussion continues asynchronously in the ReTEESP Online: The Sequel Chat Room on Facebook Messenger. **H, E (1), O**
7. The teachers write their thoughts in their Reflective Journals. **R, E (2)**

APPENDIX D: The ReTEESP Online Sample Course Material

The post on Google Classroom:

SESSION 5 – The ESP Lesson in practice

Elis Kakoulli Constantinou Mar 14, 2018 (Edited Mar 14, 2018)

Hello everyone!
Session 4 was dedicated to the ESP lesson and more specifically to the different resources and tools that can be used in the lesson as well as the tasks and the different modes of classroom organisation. As we are approaching the end of this course, the issues that remain to be investigated are the actual implementation of an ESP lesson in a real classroom environment and reflection on this practice. These are going to be the issues examined in the two remaining Sessions, Sessions 5 and 6.

Here are the tasks for Session 5:
1. First of all, open this post in order to be able to see all the material under this post. To do that click on the OPEN icon on the top right-hand corner on this post.

2. Have a look at the Topics, Materials and Learning Outcomes for this session by clicking on the first document under this post.

3. Prepare for your next ESP class! What are you going to teach your students next time? Think about what you saw in this course and try to adapt it to fit in your syllabus. Those of you who are currently teaching General English, think of some specific language skills that your students should acquire e.g. how to write emails or how to advertise a product that they created to raise money for their school, etc., create a lesson plan which will help your students acquire such skills.
Click on the document under this post which bears your name. It's going to help you in this process. Plan your ESP Lesson and then add your Lesson Plan under this post. To be able to do all these, follow the instructions on the 'Instructions on how to open, edit and add a doc on GClassroom' document under this post.

4. Open the document 'A Sample ESP Lesson Plan for an ESAP Course'. Check it out for more ideas.

5. Implement/ teach the lesson you have planned (or some aspects of it) in your ESP class as soon as possible and reflect on this experience in your Reflective Journal. To find your Reflective Journal go to the 'ABOUT' page of the platform and click on the 'Class Drive Folder' on the left side of your screen. You will automatically be driven to your Google Drive folder. You will find your Reflective Journal Folder when you click the 'Shared with me' option. Remember, it is a Folder that has your name on.
Deadline: It would be really great if you could finish preparing your lesson plans this week by Friday 1th March, 2018 so that you implemented/ taught the lesson early next week, if this is possible. Session 6, the last session, will take place next week after you finish with implementing your ESP lesson. It involves the last Webinar which will include collaborative reflection on the teaching experience and final conclusions. Time slots for the final Webinar will be released soon! Stay tuned! ;)

Topics:

✓ The ESP lesson in practice

Materials:

1. 'Topics, Materials and Learning Outcomes' doc (attached on Google Classroom platform)
2. 'An ESP Lesson Plan Template' doc (attached on Google Classroom)
3. 'Instructions on how to edit docs on GClassroom and how to save them in GDrive' doc (attached on Google Classroom)
4. Your Reflective Journal (in your Reflective Journal Folder in G Drive)

Learning outcomes:

By the end of Session 5, trainees are expected to have…

➢ consolidated knowledge acquired from previous sessions
➢ understood the advantages and challenges of working with an ESP lesson plan
➢ understood the advantages of reflective practice

On this document you may find a sample ESP Lesson Plan designed in the context of an English for Specific Academic Purposes course for first-year students of Agricultural Sciences, Biotechnology and Food Science at the Cyprus University of Technology.

A SAMPLE ESP LESSON PLAN

Name of Instructor: Elis Kakoulli Constantinou

Topic/ Theme of Session: Genetically Modified Food / Expressing arguments in favour of and against GMOs (Genetically Modified Organisms) and producing an argumentative article.

Course: LCE 102 (English for Specific Academic Purposes)

Department: Agricultural Sciences, Biotechnology and Food Science

Date: ………………..

Time: ……………….

1. **Class Description and Background Information**

The students:

The class is comprised of 20 Greek-Cypriot first-year students studying Agricultural Sciences, Biotechnology and Food Science. 8 of them are male and 12 are female and their ages range from 18-21. The students have already passed an English for Academic Purposes course, LCE 101, of B1-B2 level of the Common European Framework of Reference (CEFR) for languages. They are very cooperative and enthusiastic most of the times. The class is a mixed-ability one, with some students being more fluent and more talkative than others and contributing more to the lesson. All of the students have graduated from public secondary education in Cyprus. Most of the students are familiar with the use of technology, since they use computers, tablets and smartphones in their everyday life for personal purposes.

The classroom:

The classroom is very spacious and desks are organized following a circular pattern. The classroom is equipped with computers for all the students. There is also a computer for the instructor as well as projector facilities.

The course:

LCE 102 is a three-hour per week, 4-credit (European Credits Transfer and Accumulation System) required degree level course that concentrates on the learning of English for Specific Academic Purposes (ESAP). LCE 102 is particularly

designed to meet the needs of university students studying in the field of Agricultural Sciences, Biotechnology and Food Science and to develop their English language to an academic level equivalent to the Common European Framework of Reference (CEFR) for languages level B2. The course follows a blended approach to language learning that focuses on authentic language use that students may experience in their lives as students and as professionals in the field. Language competence is acquired through relevant genre, scenarios and roles that learners perform in order to produce and understand oral and written language related to the specific field. The course is based on the latest learning theories such as constructivism and social constructivism and learner-centered methodologies aiming at developing language skills as well as 21st century skills such as communication, use of new technologies, collaboration, creativity and innovation, critical thinking, intercultural competence and autonomous and lifelong learning. This particular course develops around three thematic units: Agriculture, Biotechnology and Food Science.

Assumptions on what students already know:

Students have completed the first thematic unit of the syllabus, which was on Agriculture, and have already been introduced to the second thematic unit, that of Biotechnology. Thus, they are familiar with the basic vocabulary related with the practices of Biotechnology such as *genetic engineering, genetically modified organisms, genetically modified food, genes, cells* etc. More specifically, they have already studied the process of **Mitosis**, that is the reproduction of cells, through reading related texts and watching a video showing the procedure. They have also investigated the notion of **Genetic Engineering** and the ethical and moral issues which arise through its implementation. They are in a position to spot and talk about the advantages and disadvantages of scientific practices such as genetic engineering. Therefore, it is assumed that they can cope with the tasks of this session. It is also assumed that the students have been familiarised with the basic structure of an article and they are aware of how well-organised pieces of writing with unity and coherence are produced. Hence, they are in a position to deal with the homework assigned to them at the end of the class. Moreover, students are already familiar with the tools used in this course such as Google classroom, Google Drive, email account, YouTube, Google search, etc.

The Previous Session:

During the previous session the class analysed an extract from Mauseth's *Botany: An Introduction to Plant Biology* with the title *Genetic Engineering-Benefits and Risks.* The text was accompanied by reading comprehension activities and all the newly acquired vocabulary (i.e. *genetic engineering, microbes, modified, herbicide, pollinated* etc.) was explained and included in the students' Word Journals.

The Next Session:

In the next session students will write an argumentative article on the topic of Genetic Engineering to be published in the Student Union quarterly Journal. They

Anticipated Problems:	Proposed solutions
! There are some weak students since the class is a mixed-ability one. ! Students may come across unknown words since the reading material is authentic.	☼ When arranging groups, the instructor organizes them in a way so as to have groups of the same level. ☼ Students have access to online English to English dictionaries in case they cannot understand the meaning of basic terms.

2. The Aims of the Lesson

General Aim:

To learn how to form arguments in favour and against Genetically Modified Organisms (GMOs) and to learn how to write an argumentative article on the same topic. Finally, to consolidate vocabulary related to the field of Genetic Engineering (e.g., *genetic modification, genetic pollution* etc.)

Specific Objectives:
- ◎ to learn how to use technical language along with transition signals to form arguments in favour or against the existence of GMOs
- ◎ to practise reading on the issue of Genetic engineering and GMOs
- ◎ to learn how to write argumentative articles on this topic
- ◎ to revise vocabulary related to the topic such as *genetically modified, contamination, environmental impact,* etc.
- ◎ to learn how to use critical thinking and organization skills to construct their arguments
- ◎ to investigate in depth the issue of Genetic Modification and its impacts on today's world and human health.
- ◎ to practise ICT skills through the use of Internet searching, Google classroom, and GDrive

3. The Resources, Tools and the Process of the lesson

Resources:

- Greenpeace International website Forum
- Electronic article *Say no to Genetic Engineering* (Source: Greenpeace)
- Electronic article *Can GM the World?* (Source: BBC News)
- Chart with useful transition signals
- Electronic reference materials (dictionaries)

Tools

The instructor's computer and projector

- Students' computers
- Google Classroom
- GDrive
- The Internet

Procedure: (1.15')

Activities/ Tasks	Modes of Classroom Organisation	Procedure	Time (Approximately)
1. Summarising what was done in the previous session.	Whole-class work	Today's session is linked to the previous one and students are introduced to the basic notions of todays' class (i.e., *GMOs, forum etc.*).	3'
2. Participating in a class Forum on the issue of Genetic Engineering.	Whole-class work/ Individual work	Students are requested to log in Google Classroom and visit the link to Greenpeace International website Forum to read other people's comments on the issue of GMOs. Finally, they write their own personal comments on the issue using the comment feature of Google classroom and share them with their classmates.	20'
3. Reading two articles and getting prepared to take part in a radio debate on the issue of **Genetically Modified Food.**	Group work	The instructor organises the class into groups. The students read the 2 articles provided by the instructor on Google Classroom and collaborate in order to spot and note down the advantages of GMOs and their disadvantages. After reading the texts, the members of each group exchange ideas on the topic Finally, students form their arguments in favour or against GMOs using useful	25'

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		Transition Signals, and they take notes on the document provided.	
4. Participating in a CUT radio programme on the issue of Genetically Modified Food.	Whole-class work	Students imagine they have been invited to participate in a radio programme broadcasted by the Cyrus University of Technology on the issue of Genetically Modified Food where they will present arguments for and against having Genetically Modified Food. The host of the show is their English instructor. All students are involved in the debate in an effort to convince the public about the benefits or drawbacks of GMOs. (Note: The students may actually present this debate via CUT radio if it is arranged with the radio producers).	20'
5. Preparing to write an article for the Students' Union newsletter next time in class entitled: *Genetically Modified Food. A blessing or a curse?*	Whole-class work	Students visit Google Classroom to see the instructions for homework. The instructor answers any questions students may have.	7'

An Online Reflective Teacher Education Course in English for Specific Purposes

How to open a document on Google Classroom, edit it and add it on Google Classroom

Here are the steps you need to follow to open a document on Google Classroom, edit it and add it on Google Classroom:
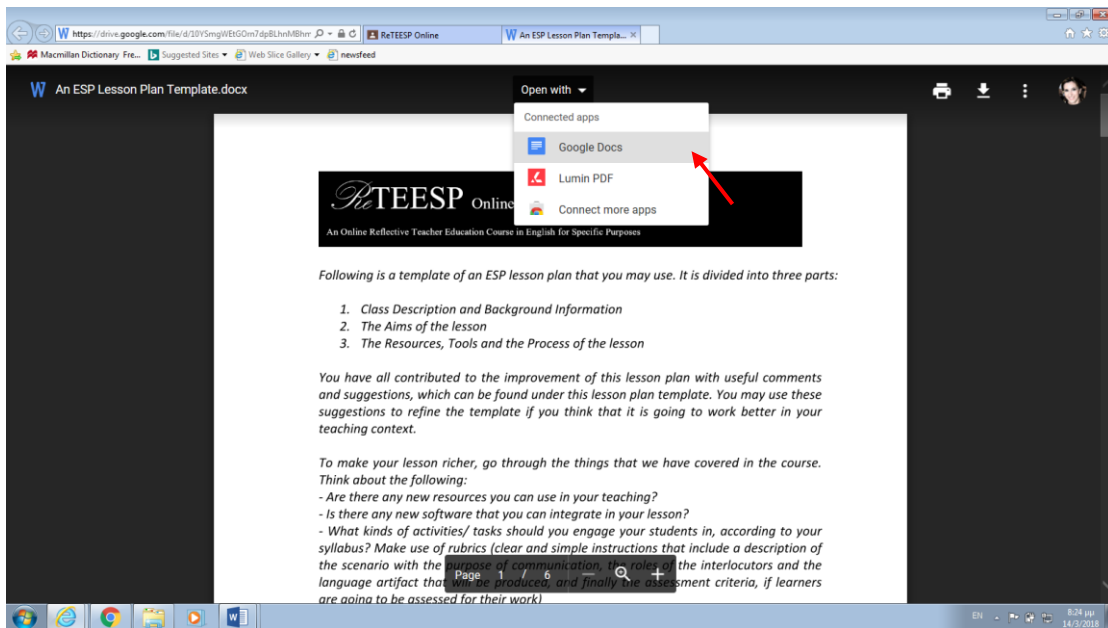
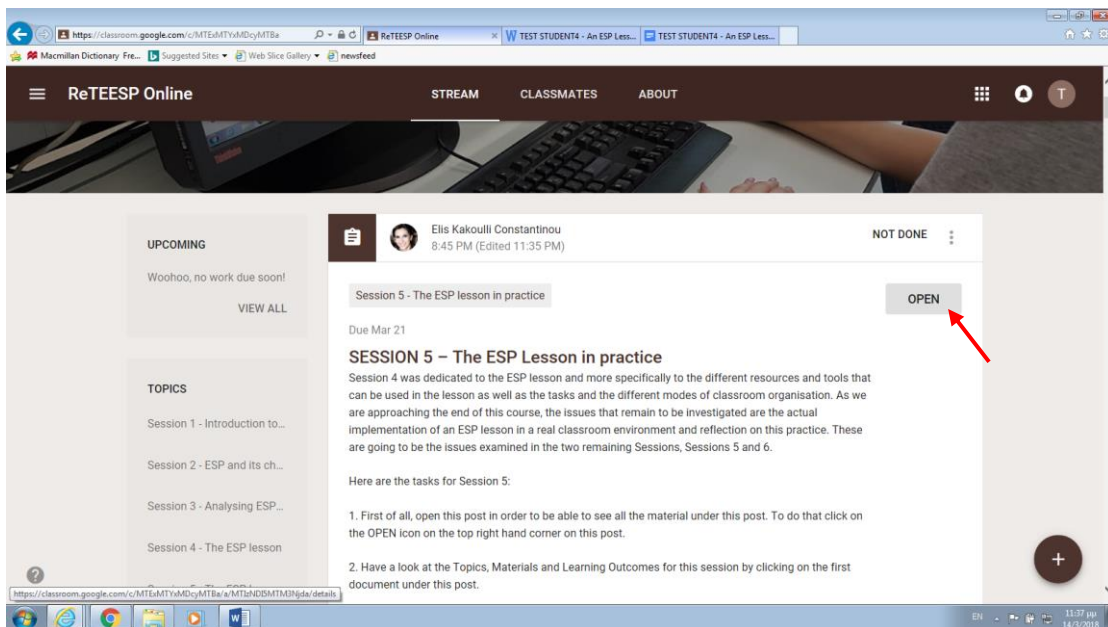1. Click on the document you wish to open on the Google Classroom platform.
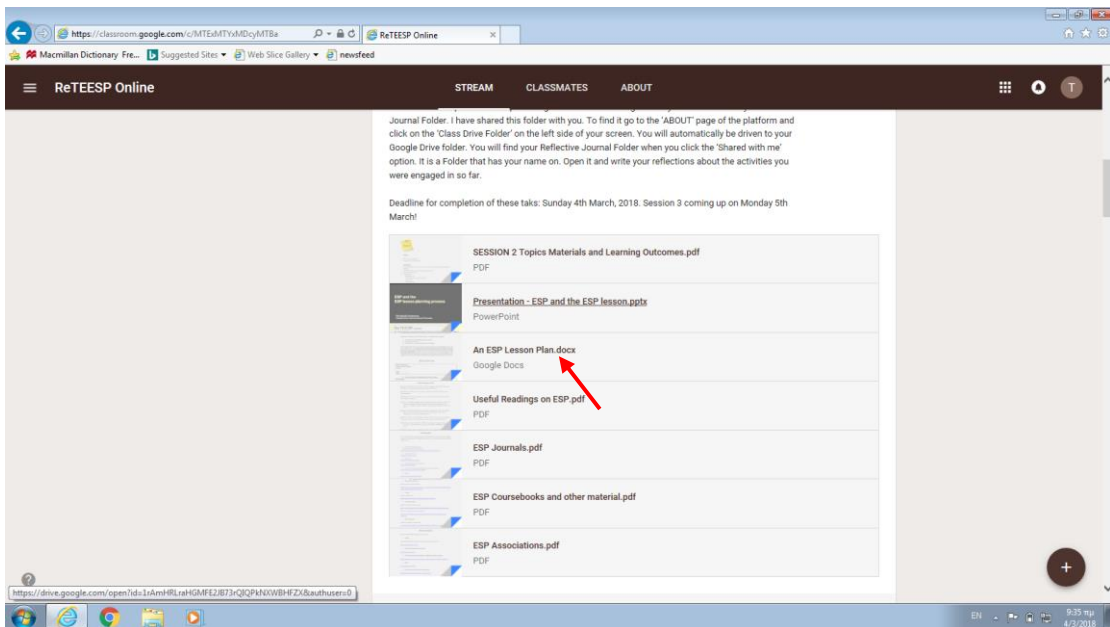
2. Click on the three vertical dots on the top right corner of your screen and then select Open in new window.
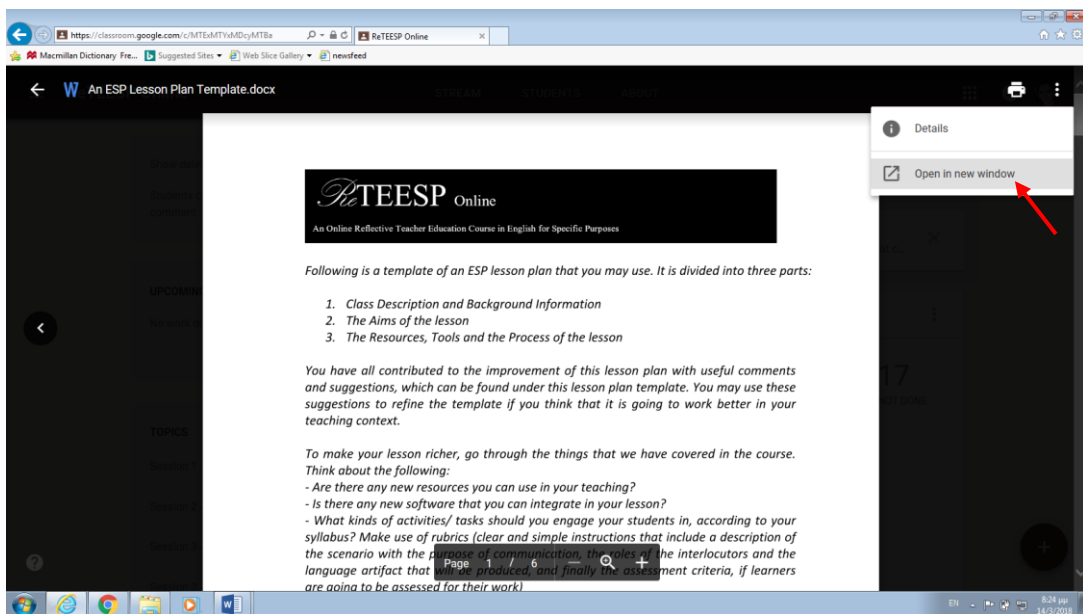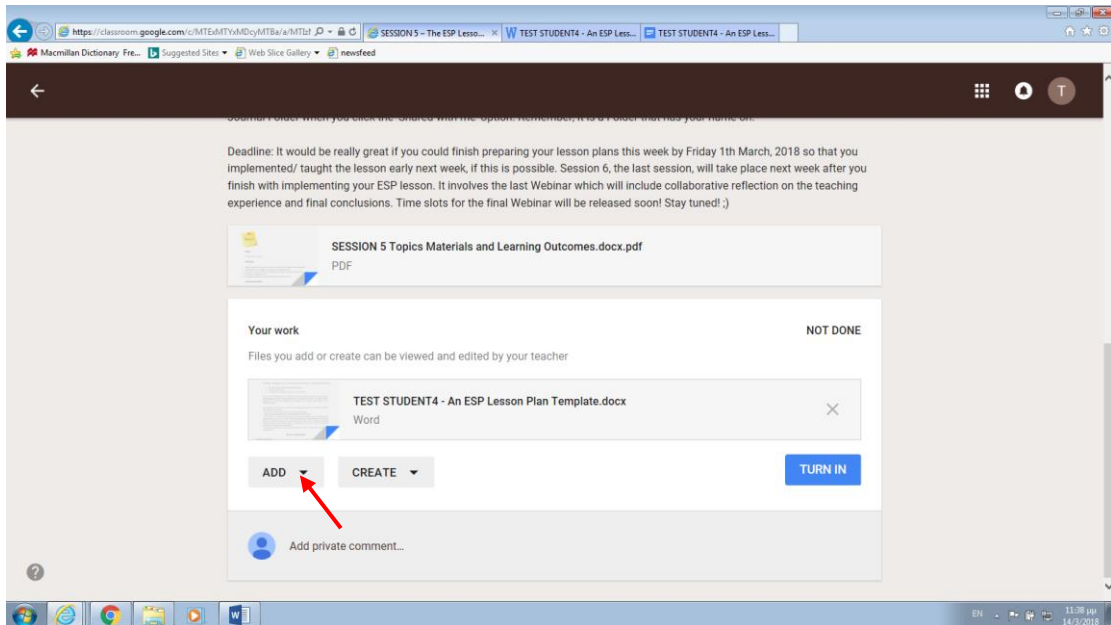
3.Click on the 'Open with' icon and select Google docs. You have now opened the document as a Google document and whatever you write on it is automatically saved in your G Drive.


4. After you finish editing the document, go to the Google Classroom platform and open Session 5 again.
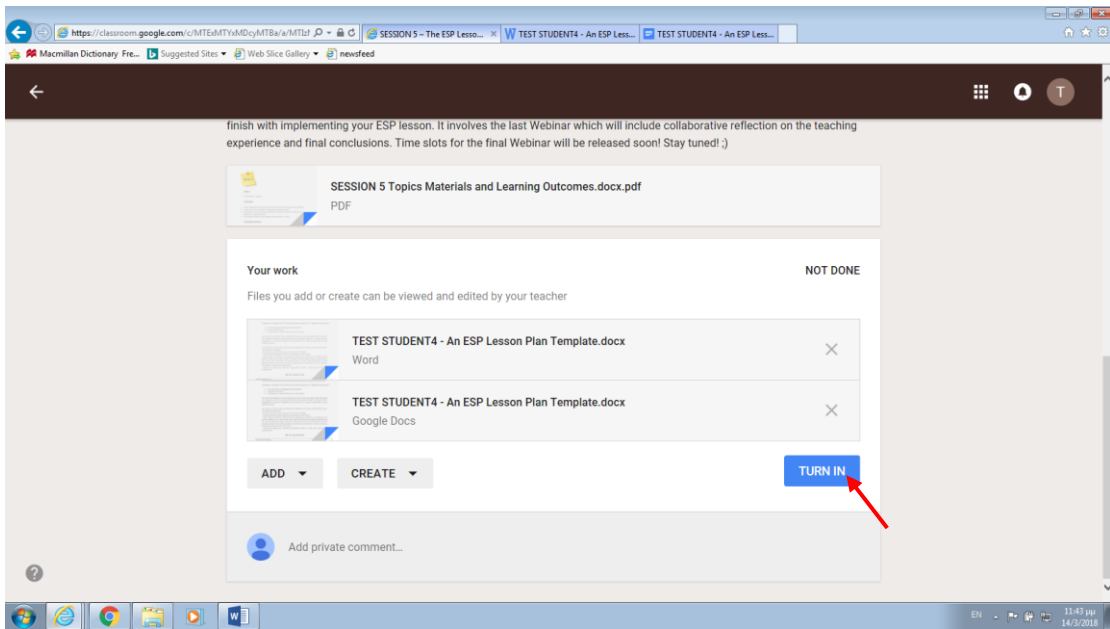
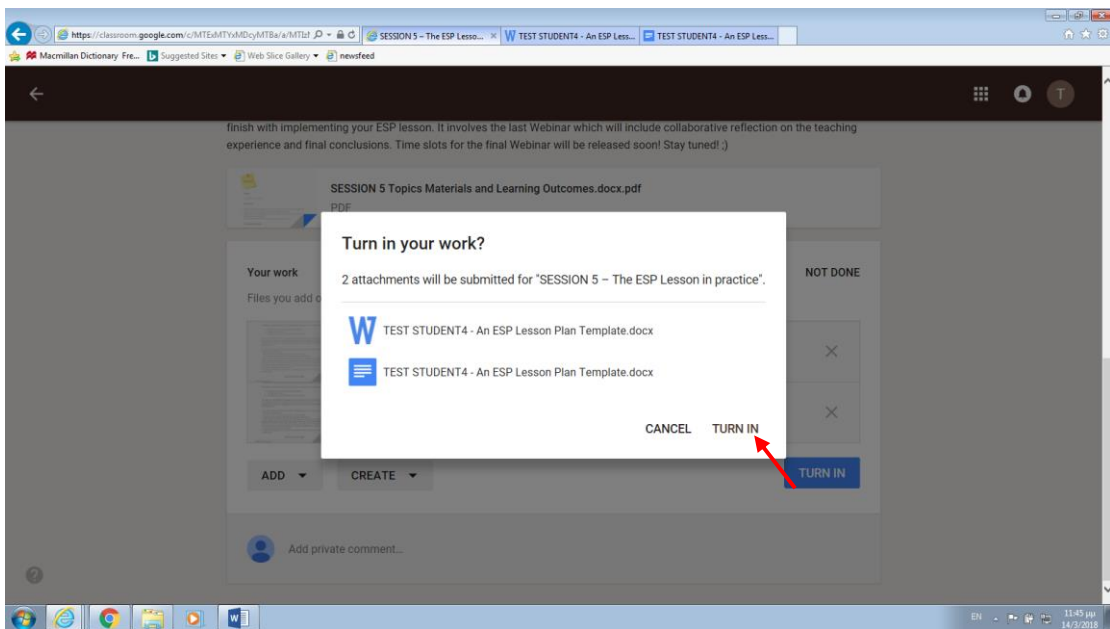5. Click on 'ADD' at the bottom of your screen and choose Google Drive.

6. Select the document you wish to upload on the platform. It is usually the first one on the list, since it is the most recently used one. Double click on it and it will be uploaded on the platform (or click on it one time and then click on 'Add').
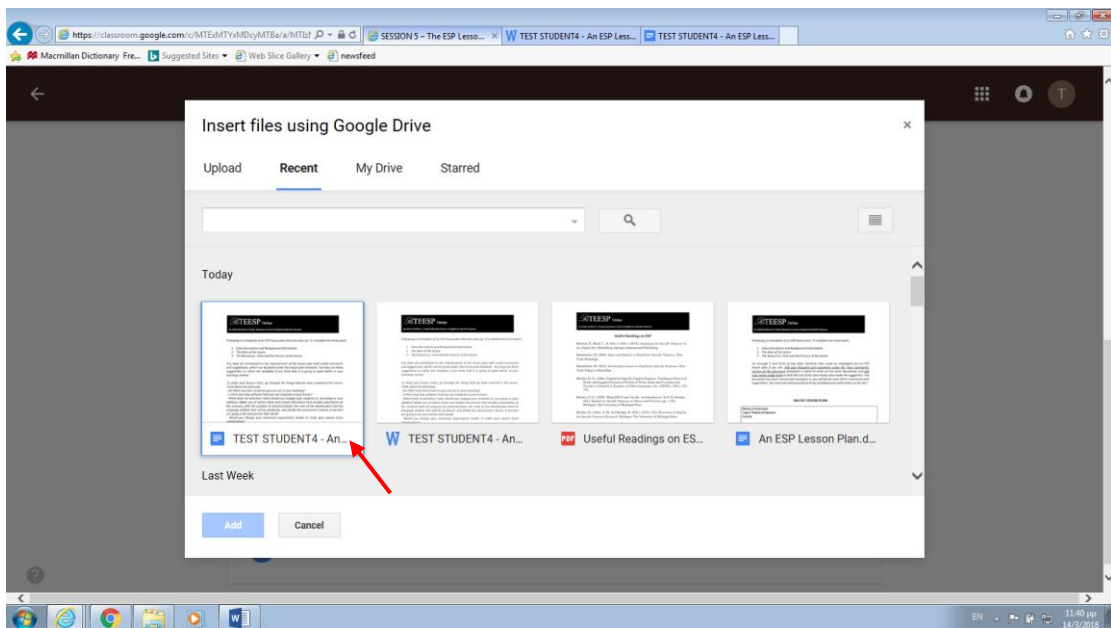
7.   After the document has been added on the platform, click on 'TURN IN' icon.

8.   Click on 'TURN IN' again.

9. If the green indication 'DONE' appears on your screen then the document was successfully uploaded on the platform. ☺

Your ESP Lesson Plan will be saved in your Group Folder under Session 5. This way you will all have access to each other's lesson plans. We will need this for Session 6, the last session of this course!

APPENDIX E: Publications, presentations and workshops resulting from this thesis

The following publications and presentations derived from the research conducted for this thesis during my years as a PhD candidate:

Journal articles

Kakoulli Constantinou, E., & Papadima-Sophocleous, S. (2020). The Use of Digital Technology in ESP: Current Practices and Suggestions for ESP Teacher Education. *The Journal of Teaching English for Specific and Academic Purposes, 8*(1), Special Issue, 17–29. Retrieved from http://espeap.junis.ni.ac.rs/index.php/espeap/article/view/1030

Kakoulli Constantinou, E. (2018). Teaching In Clouds: Using the G Suite for Education for the Delivery of Two English for Academic Purposes Courses. *The Journal of Teaching English for Specific and Academic Purposes. 6*(2), Special Issue, pp. 305-317. http://espeap.junis.ni.ac.rs/index.php/espeap/article/view/699

Edited Volumes

Papadima-Sophocleous, S. Kakoulli Constantinou, E. & Giannikas, C. N. (Eds) (in press). *Tertiary Education Language Learning: a collection of research.* Research-publishing.net.

Papadima-Sophocleous, S., Kakoulli Constantinou, E. & Giannikas, C. N. (Eds.) (2019). *ESP Teaching and Teacher Education: Current Theories and Practices*. Research-publishing.net. https://research-publishing.net/book?10.14705/rpnet.2019.33.9782490057450

Chapters

Kakoulli Constantinou, E. & Papadima-Sophocleous, S. (in press). Professional Development in English for Specific Purposes: Designing the curriculum of an online ESP Teacher Education course. In S. In S. Papadima-Sophocleous, E. Kakoulli Constantinou, & C. N. Giannikas (Eds.) *Tertiary Education Language Learning: a collection of research.* Research-publishing.net.

Kakoulli Constantinou, E. & Papadima-Sophocleous, S. (in press). ESP Teacher Education: Examining the needs of English for Specific Purposes practitioners. In M. Vránová (Ed.) *New to the LSP Classroom? A Selection of Monographs on Successful Practices.* Vernon Press.

Kakoulli Constantinou, E., Papadima-Sophocleous, S. & Souleles, N. (2019). Finding the way through the ESP maze: Designing an ESP Teacher Education programme. In S. Papadima-Sophocleous, E. Kakoulli Constantinou, & C. N. Giannikas (Eds.) *ESP Teaching and Teacher Education: Current Theories and Practices* (pp. 27-46). Research-publishing.net. https://research-publishing.net/manuscript?10.14705/rpnet.2019.33.924

Kakoulli Constantinou, E. (2019). Revisiting the cloud: reintegrating the G Suite for Education in English for Specific Purposes teaching. In C. N. Giannikas, E. Kakoulli Constantinou, & S. Papadima-Sophocleous (Eds.), *Professional development in CALL: a selection of papers* (pp. 55-69). Research-publishing.net. https://research-publishing.net/manuscript?10.14705/rpnet.2019.28.870

Conference Proceedings

Kakoulli Constantinou, E. & Papadima-Sophocleous, S. (2017). ESP teacher education: an online, in-service, ESP teacher training course. In Pattison, T. (Ed) *IATEFL 2016 Birmingham Conference Selections, 50th International Conference*, Birmingham, 13-16 April 2016, Kent: Pilgrims.

Invited Conference Presentations

Kakoulli Constantinou, E. (2019). 'Use of G Suite for Education in ELT'. Paper presented at the 'ELT for a Day: Current Trends' UCY LC annual event, University of Cyprus, 15th June, 2019.

Presentations

Kakoulli Constantinou, E. (2019). 'English for Specific Purposes Teacher Education: A Technical Action Research Study'. Cyprus Rectors Conference – 1st Doctoral Colloquium, University of Nicosia, 7th December 2019.

Kakoulli Constantinou, E. (2019). 'ESP Teacher Education: A Reflective 'Practise What You Preach' Approach'. Department of Multimedia and Graphic Arts, PhD Students' Seminar, 29th May 2019, Limassol, Cyprus.

Kakoulli Constantinou, E. (2018). 'Action Research: Acting, Changing, Improving'. Research Colloquium, Language Centre, Cyprus University of Technology, 11th December, 2018.

Kakoulli Constantinou, E. (2018). 'ESP Teacher Education: A Reflective 'Practise What You Preach' Approach'. 3rd UCY –LC International Forum of Young Researchers, 7th June 2018, Nicosia, Cyprus.

Kakoulli Constantinou, E. (2018). 'ESP Teacher Education: A Reflective 'Practise What You Preach' Approach'. Department of Multimedia and Graphic Arts, PhD Students' Seminar, 30th May 2018, Limassol, Cyprus.

Kakoulli Constantinou, E. & Papadima-Sophocleous, S. (2017). 'Teaching English for Specific Purposes: Developing ESP practitioners' literacy'. Paper presented at the 2nd International Conference: Literacy and Contemporary Society: Spaces, Discourses, Practices, 28-29 November 2017, Nicosia, Cyprus.

Kakoulli Constantinou, E. (2017). 'ESP Teacher Education: An online, in-service, ESP Teacher Training Course'. Department of Multimedia and Graphic Arts, PhD Students' Seminar, 24th May, Limassol, Cyprus.

Kakoulli Constantinou, E. (2016). 'Technology and ESP: The Cypriot and Greek Tertiary Education Case'. Paper presented at the IATEFL ESP SIG Conference, 1-2 October 2016, Athens, Greece.

Kakoulli Constantinou, E. (2016). ''Practise what you preach': Addressing the need for ESP teacher training in Cypriot and Greek tertiary education'. Paper presented at the 23rd EuroCALL Conference, 24-27 August 2016, Limassol, Cyprus.

Kakoulli Constantinou, E. (2016). 'ESP Teacher Education: An online, in-service, ESP Teacher Training Course'. Department of Multimedia and Graphic Arts, PhD Students' Seminar, 26th May, Limassol, Cyprus.

Kakoulli Constantinou, E. & Papadima-Sophocleous, S. (2016). 'ESP Teacher Education: An online, in-service, ESP teacher training course'. Paper presented at

the Language Fair of the 50th Annual International IATEFL Conference and Exhibition, 13-16 April, 2016, Birmingham, UK.

Kakoulli Constantinou, E. & Papadima-Sophocleous, S. (2016). 'ESP teacher training: ESP practitioners' profiles in Cyprus and Greece'. Paper presented at the 37th TESOL Greece Annual International Convention, 19-20 March, 2016, Athens, Greece.

Workshops

Kakoulli Constantinou, E. (2019). 'Teaching in clouds: Empowering teachers in the use of the G Suite for Education', 10th December, Xylotympou Gymnasium, Larnaca, Cyprus.

Kakoulli Constantinou, E. (2019). 'Teaching in clouds: Empowering teachers in the use of the G Suite for Education', 3-6 September, Ayii Anargyri Primary School, Larnaca,Cyprus.

Kakoulli Constantinou, E. (2019). 'Teaching in clouds: Empowering teachers in the use of the G Suite for Education', 7th March, Kykkos Lyceum, Paphos, Cyprus.

Kakoulli Constantinou, E. (2017). 'Teaching in clouds: The Google Classroom Experience'. Workshop delivered at the Research Colloquium on 21st Century Language Practices, 9 December, CUT Language Centre, Limassol, Cyprus.

Kakoulli Constantinou, E. (2017). 'Teaching in clouds: Integrating G Suite for Education in the teaching process'. Workshop delivered at the EuroCALL Teacher Education SIG Workshop in the context of the EuroCALL 2017 Conference, 23-26 August, 2017, Southampton, UK.

Poster Presentations:

Kakoulli Constantinou, E. & Papadima-Sophocleous (2019). 'English for Specific Purposes Teacher Education: Glimpses of a Technical Action Research Study'. Poster Presented at the IATEFL Research SIG Pre Conference Event, 1 April 2019, Liverpool, UK.