Collaborative learning integration in the ESP classroom and curriculum: teachers’ and students’ perceptions and practices.

Constantinos A. Tsouris

Ed D

Department of Education

September, 2013

**Abstract**

The main purpose of this thesis was to study university students’ and teachers’ perceptions and practices of a collaborative pedagogy in an English for Specific Purposes (ESP) context at the University of Cyprus. The ensuing case study employed a qualitative research design, using group and individual interviews, questionnaires and a reflective journal. Inductive thematic analysis was used for data analysis.

Anumber of advantages and disadvantages pertaining to collaborative learning (CL) and collaborative technologies (CT) integration in the ESP context have been documented, with various links to teaching and learning practices and curriculum development. Similarly, numerous implications have been discussed, regarding Vygotsky’s Zones of Proximal Development and scaffolding, assessment in collaborative contexts, group dynamics, how CL can effectively cater to the specific ESP needs, and how student and teacher perceptions compare. The study is not without limitations, mainly regarding coding, analysis and interpretation subjectivity.

This research has an original scope and viewpoint. The components under study have not been researched before in tandem, either internationally or in the Cypriot context. Directly comparing student and teacher perceptions on ESP curricular and pedagogical issues is also an innovation. The thesis has provided a deeper understanding and insight into the workings of a collaborative pedagogy within a specific tertiary ESP context. It does not make generalizability claims but does offer advanced empirical knowledge on practices. Additionally, the implications drawn can inform policymakers, teachers and curriculum developers and form the basis for further research.

The thesis has also contributed to theory by exploring the application of a collaborative pedagogy in a tertiary ESP context within a social constructivist framework, providing a novel theoretical perspective within that framework by relating the ZPD construct to tertiary ESP. Overall, this study has value in and of itself and has made valuable contribution in the related research literature.

**Acknowledgments**

I would like to extend my thanks to

* Jesus Christ for the strength He gave me to pursue this;
* my supervisor, Dr Terry Lamb, for his insightful comments, exemplary guidance and encouraging attitude throughout;
* my parents, for providing me with the zeal to educate myself ever since I can remember;
* the late Dr Xenaki Christodoulides, whose challenge to achieve this doctorate drove me on;
* my students and colleagues who participated in this study;
* my lovely wife Vicky for her patience throughout my career, my two boys, Emmanuel, Max, and the soon-to-arrive baby girl, for they never cease to amaze me, before and after birth.

Table of Contents

Abstract ii

Acknowledgments iii

Table of Contents iv

Abbreviations viii

Chapter 1 - Introduction 1

Section 1.1 Defining and contextualizing my research 1

Section 1.2 Overall aims 2

Section 1.3 Why perceptions and practices 3

Section 1.4 Importance of research topic 5

Section 1.5 Positionality 5

Section 1.6 Outline of the thesis 6

Chapter 2 - Literature Review – Introduction 7

Section 2.1 English for Specific Purposes in Higher Education 7

2.1.1 Why is ESP important? 8

2.1.2 ESP traits 8

2.1.3 Pedagogical and methodological trends and developments in ESP 9

2.1.4 The higher education ESP curriculum 12

2.1.5 The ESP teacher 15

2.1.6 My thesis in the ESP context 17

Section 2.2 Constructivism and Social Constructivism 18

2.2.1 Ontology, epistemology, and theories of learning 19

2.2.2 Constructivism 21

2.2.3 Social Constructivism 23

2.2.4 Criticisms 28

2.2.5 Summary and Conclusion 30

Section 2.3 Collaborative Learning and Collaborative Technologies 30

2.3.1 Many names, single entity 32

2.3.2 Conditions for CL 33

2.3.3 CL features and related considerations 34

2.3.4 Collaborative technologies 41

2.3.5 Features of collaborative technologies and existing research 43

2.3.6 Linking CL, CTs and social constructivism 47

2.3.7 Summary 48

Chapter 3 - Research Design50

Section 3.1 Methodologies and Methods 50

3.1.1 Doing case study 52

3.1.2 Types of case study 54

3.1.3 Why case study? 55

3.1.4 Strengths and criticisms of case study research 56

3.1.5 Study background 61

3.1.6 Chapter structure 62

Section 3.2 Ethics 63

3.2.1 Insider (endogenous) research 65

3.2.2 Problematizing content 68

3.2.3 Researcher values, subjectivity and bias 71

3.2.4 Conclusion 72

Section 3.3 Triangulation 72

Section 3.4 Semi-structured interviews 74

3.4.1 In-depth semi-structured individual and group interviews 74

3.4.2 Using semi-structured interviews 78

Section 3.5 Qualitative questionnaire 80

3.5.1 Questionnaire structure 80

3.5.2 Questionnaire items – Closed questions 81

3.5.3 Questionnaire items – Open-ended questions 83

3.5.4 Other issues, strengths and limitations 83

Section 3.6 Reflective journal 86

Section 3.7 Sampling and Piloting 88

3.7.1 Sampling 89

3.7.2 Piloting 91

Section 3.8 Data Collection 94

3.8.1 Student interviews 94

3.8.2 Teacher questionnaire 96

3.8.3 Teacher follow-up interviews 97

3.8.4 Reflective journal 98

Section 3.9 Interview transcription and translation 99

3.9.1 Transcription 99

3.9.2 Translation 101

Section 3.10 Thematic analysis 101

Chapter 4 - Results and Discussion 110

Section 4.1 Results and discussion by research question 110

Student sample – Research Question 1 110

Student sample – Research Question 2 123

Student sample – Research Question 3 127

Teacher sample – Research Question 1 128

Teacher sample – Research Question 2 139

Teacher sample – Research Question 3 144

Section 4.2 Implications 147

Chapter 5 - Conclusion 152

Section 5.1 Research outcomes and initial aims 152

Section 5.2 Research evaluation 154

Section 5.3 Issues beyond the scope of the study and future research 157

Section 5.4 Limitations and criticisms 160

Section 5.5 Final reflections 161

Section 5.6 Rounding off 162

References 164

Appendices

Appendix 1a – Ethics review application 212

Appendix 1b – Ethics infosheet 218

Appendix 1c – Ethical review application approval 224

Appendix 2 – Permission by Dean to conduct interviews 225

Appendix 3a – Call for participation for pilot student interviews 226

Appendix 3b – Call for participation for pilot teacher interviews/questionnaires 227

Appendix 4a – Revisions on student interview guide following piloting 228

Appendix 4b – Revisions on teacher questionnaire following piloting 230

Appendix 5a – Call for participation for students 235

Appendix 5b – Call for participation for teachers 236

Appendix 6a – Informed consent (students) 237

Appendix 6b – Informed consent (teachers) 238

Appendix 7a – Conversation guide (student interviews) 239

Appendix 7b – Conversation guide (reflective journals) 246

Appendix 7c – Qualitative questionnaire 248

Appendix 7d – Conversation guide (teacher interviews) 253

Appendix 8a – Sample transcription of student interviews 254

Appendix 8b – Sample transcription of teacher interviews 258

Appendix 8c – Sample completed questionnaire 261

Appendix 8d – Sample reflective journal – student entries 265

Appendix 8e – Sample reflective journal – researcher entries 269

Appendix 9a – Initial coding and thematization for student sample 272

Appendix 9b – Initial coding and thematization for teacher sample 279

Appendix 10 – Tables with tentative themes/subthemes for the two samples 285

Appendix 11 – Theme definition and labeling tables 287

**List of Tables**

Table 1: pilot study and main study samples 91

**List of Figures**

Figure 1: Sample data extract, with codes applied 105

Figure 2: Final thematic map for student sample 107

Figure 3: Final thematic map for teacher sample 107

**Abbreviations**

CL Collaborative Learning

CTs Collaborative Technologies

ELT English Language Teaching

ESP English for Specific Purposes

PBL Problem-Based Learning

TBL Task-Based Learning

ZPD Zone of Proximal Development

**Chapter 1 - Introduction**

*Educational research should be “for teaching”, not simply “on teaching”* (Noddings, 1986, p. 506).

The general assumption underlying this research is that a collaborative pedagogy, along with its social constructivist roots, is compatible with, and can serve the tertiary English for Specific Purposes (ESP) curriculum well. To maximize the benefits of such a marriage though, the perceptions and practices of teachers and students on its application need to be examined, something which has not been done extensively so far. Such an examination can lead to a redefining of the roles teachers and students can play in the ESP context. The purpose then, by considering the views of students and teachers, is to build more effective and efficient curricula, and also improve teaching and learning experiences.

As a social constructivist pedagogy, collaborative learning (CL) shifts the focus of the learning process from teacher- to student-centered and from passive to active, placing emphasis on self-regulation. This shift, as shall be seen, brings multiple benefits to the tertiary ESP classroom. Those benefits have been supplemented and enhanced by instructional technologies. Although not a recent phenomenon, these have proliferated in recent years with the advent of the Internet and its second generation of applications (Web 2.0). Because of their potentially collaborative nature, such applications can promote interaction among users, cater to idiosyncratic learning styles and facilitate CL. In the ESP classroom, CL and collaborative technologies (CTs) can blend and further facilitate the curriculum objectives of this specialized language learning domain.

* 1. Defining and contextualizing my research

This qualitative case study is located within a social constructivist framework and looks at the perceptions and practices of university students and foreign language teachers with regard to the integration of CL and CTs in ESP. More specifically, the study looks to address three main areas, as exemplified by the following research questions:

- What are the perceptions and practices of University students regarding the integration of CL in their ESP course(s) and the use of CTs to support CL in their ESP?

* Which benefits/drawbacks do they perceive CL and CTs to carry?
* How has the integration of CL and CTs in the ESP course students attended affected how they would normally go about studying?

- What are the perceptions and practices of University language teachers regarding the integration of CL and of CTs in ESP teaching and curriculum?

* Do they embed CL/CTs in their ESP teaching or not and why? What benefits/drawbacks do they see in such integration?
* Have their related perceptions and practices shifted during the past 5 years or so? If yes, in what ways and because of which factors?
* Would they embed a collaborative pedagogy in a new ESP course?
* Do they think that students’ perceptions with regard to CL and CTs should be taken into consideration when developing or reviewing ESP curricula?

- How do the aforementioned perceptions/practices of students and teachers compare?

* What are the ramifications of this comparison for the ESP context?

The study focuses on ESP and not General or Academic English, because in my professional opinion, ESP is the one field in tertiary language learning that is probably the most demanding in terms of effort needed from students and teachers; I also believe it to be a hugely significant one in terms of the specific, practical, vocational-oriented skills it provides students with.

The study is to take place at my home university. Third-year students from the School of Humanities, taking a compulsory, advanced ESP course (B2.1-B2.2 level on the CEFR; Council of Europe, 2001) and fellow teachers from the same institution will be participating.

1.2 Overall aims

There are certain gaps in the literature that the current thesis aims at exploring. These specifically relate to the tertiary ESP context and concern (a) a shortage of comparative research exploring student and teacher perceptions and practices of a collaborative pedagogy, (b) an absence of research looking at the interplay between CL and CTs, and (c) a lack of related research in Cyprus.

Other aims, within the micro- and macro-ESP environment, include informing policymaking and pedagogies, informing my community on related curricular and pedagogical issues, linking such courses to CL, improving students’ and teachers’ classroom experiences, better catering for the learning needs of contemporary students, and rendering teaching and learning more efficient and more effective.

1.3 Why perceptions and practices?

There is scant literature looking at students’ and teachers’ perceptions of, and practices relating to CL and CTs in the tertiary ESP context. This scarcity leaves many questions unanswered regarding the dynamics of this combination, its efficacy and overall pedagogical appeal. Here, it is necessary to define the notions of perception and practice. In the literature, perceptions can be taken together with, entailed by or even used synonymously with beliefs (Trinder, 2013; Horwitz 1999). Richardson (1996) labelled perceptions, attitudes and beliefs as constructs that “name, define, and describe the structure and content of mental states thought to drive a person’s actions” (p. 102). In the context of this research, I classify perceptions under beliefs, and take them to mean the ways in which participants experience, understand and interpret the ESP teaching and learning environment and the ways in which they situate and conduct themselves as agents within that environment, as teachers or as students. Moreover, perceptions can be seen as shaping people’s “expectations of, commitment to, success in, and satisfaction with” a teaching and learning environment (Horwitz, 1988, p. 283). By definition, perceptions are subjective and multifaceted and may be influenced by a number of internal and external factors such as prior or current experiences, cognitive and affective views, incentives, cultural preferences, age, gender, academic ability, institutional agendas, individual teaching and learning styles and course quality (Trinder, 2013; Tagoe, 2012; Sharan, 2010; Peterson & Miller, 2004; Keller & Cernerud, 2002; Peacock, 2001). Practices, on their part, are viewed here as the ways in which participants practically apply themselves within the aforementioned environment. The complex nature of perceptions, in conjunction with the particular range within which practices are examined, renders the empirical findings emanating from this case study largely context-specific.

Looking at both practices and perceptions is important. Just as perceptions have been shown to affect behavior (Cillessen & Lafontana, 2002; Atweh, Bleicker, & Cooper, 1998), it can be argued that practices also depend upon perceptions (Horwitz, 1999, p. 558; Williams & Burden, 1997, p. 48; Richardson, 1996, p. 102). Trinder (2013, p. 1) and Ginns and Ellis (2007, p. 55) argued that how students theorize L2 learning greatly affects their related experiences and performance levels. Moreover, students’ perceptions, by providing a different viewpoint, can enrich policymakers’ and teachers’ information banks, hence aiding in planning and teaching (Sharan, 2010, p. 302). As such, student perceptions are regarded as significant contributors in education’s stride towards excellence (Griffin, Coates, McInnis, & James, 2003, p. 259). Horwitz (1999) argued that accessing student perceptions (a notion she seems to be using interchangeably with beliefs) on language learning can lead to more appropriate teaching (p. 557); perceptions, therefore, acquire a central role in the L2 classroom (Brown, 2009, p. 47). Regarding CT integration in particular, Sagarra and Zapata (2008) argued that student perceptions are important assessors and pointers of how successful a course can be, especially when implementing technology (p. 209). Furthermore, the uses of CTs inside and outside classrooms do not always match, rendering the examination of related student perceptions important (Hartshorne & Ajjan, 2009, p. 184).

Gaining insights into teacher[[1]](#footnote-1) perceptions is equally significant. For example, perceptions of CL’s efficacy can render the implementation of new pedagogies more effective (Gillies & Boyle, 2008, p. 1335). Teaching practices have been found to be heavily influenced by the teachers’ set of perceptions (Eley, 2006). To this end, the social constructivist framework calls for teachers to identify those perceptions to be able to make informed decisions (Williams & Burden, 1997, p. 48). Moreover, the use or not of educational innovations such as CL integration, have been found to be influenced mainly by teacher perceptions towards those innovations (Abrami, Poulsen, & Chambers, 2004). Regarding technology integration, researchers have argued that how teachers perceive technologies, is what essentially shapes whether/how technologies are used in the classroom (e.g., Kim, 2008; Pedersen & Liu, 2003; Miller & Olson, 1994).

While numerous studies have looked at the perceptions and practices of either students or teachers in language learning settings, there is limited literature looking at and directly comparing such perceptions and practices between these two groups.[[2]](#footnote-2) If studying either of the two populations carries all the above-mentioned benefits, then it would be fair to argue that the overall quality of learning and teaching is also dependent upon how the two sets of perceptions and practices intersect; this is what the current thesis partially aims to shed more light at.

1.4 Importance of research topic

By conducting this research, I do not claim generalizability, as this is a case study looking at a particular context. However, I believe that examining perceptions of CL and CTs can provide an additional dimension to ESP teaching and learning. Overall, my research topic is worth studying because of four factors:

(1) *Pragmatic value*: as a language teacher myself, the study will have practical significance and value once it is completed, as findings can be taken into account in reviewing or in developing ESP curricula at my workplace.

(2) *Contribution to the field*: the study will aim to fill a literature gap, that is, a limited research corpus on comparative studies in this particular context, therefore building new knowledge.

(3) *Originality in scope and viewpoint*: to the best of my knowledge, to date no study has looked at how students and teachers perceive of CL and CTs in a tertiary ESP context and at how those perceptions shape their teaching and learning practices.

(4) *Potential for publishable outcomes*: my study’s originality and rigor, evident throughout, render my study publishable.

Taken together, all the above mean that the current study can add to existing knowledge in the fields of language learning, ESP and curriculum design in a novel way.

1.5 Positionality

Before moving on, a few words are needed on my ontological and epistemological positions as a researcher. I believe that educational research is not, cannot be and should not be considered as value-free. The ethical considerations that result from one’s positionality clearly have a bearing on the overall course of a research, from the initial conceptualizations, to theorizing, to how findings are interpreted. As a researcher, I carry certain preconceptions about the area of investigation, shaped by my theoretical and experiential “frames of reference” (Davis, 1995, p. 437), and also shaped by my teaching experience. Hence, determining and acknowledging those preconceptions, values and biases lends transparency, rigor and integrity to the research process. These quality criteria can be further enhanced by moral responsibility, self-reflexivity and by an acknowledgment of study limitations. Positionality and its constituents are comprehensively addressed in Chapter 3.

1.6 Outline of the thesis

The thesis is structured as follows: Chapter 2 is a literature review, introducing readers to the three main pillars of the study: ESP in Higher Education, Constructivism and Social Constructivism, and CL/CTs. Next, Chapter 3 details the research design, with sections on Ethics, Methodological Triangulation and the Research Tools employed. Sampling and Piloting, Data Collection, Transcription, Coding and Thematic Analysis procedures are also addressed thoroughly. Chapter 4 presents and discusses the research findings and implications while Chapter 5 assesses the study and presents its conclusions.

**Chapter 2 - Literature Review – Introduction**

The opening chapter has introduced readers to this study. The current chapter further contextualizes the study by looking at its main theoretical pillars: ESP in Higher Education (2.1), constructivism/social constructivism (2.2), and CL/CTs (2.3). The purpose of this review is twofold: to critically discuss and assess the current directions and main debates in these fields and to identify possible gaps in the literature and show how my thesis fits into these. By pursuing these purposes, I also manage to draw some links between the three aforementioned theoretical underpinnings. The literature available in those areas is vast, hence I limited myself to what relates directly to my study.

Readers should bear in mind that the bulk of the reviewed literature resides in, but is not restricted to this chapter.

**2.1 English for Specific Purposes in Higher Education**

Situated within Applied Linguistics, ESP is intended to accommodate the particular needs of students in their studies and current or future career paths; however minimalistic, Harding’s (2007) suggestion that ESP “teaches the language for getting things done” (p. 6) captures the prototypical nature of ESP.

There has been much debate as to where exactly on the English Language Teaching (ELT) tree ESP sits and which its subordinate branches are. Hutchinson and Waters (1987) regarded ESP as an overarching category subsuming English for Academic Purposes (i.e. as a study subject) and English for Occupational Purposes (i.e. vocationally-oriented), with those categories further leading into various sub-divisions (p. 16).[[3]](#footnote-3) This view extended to the teaching of ESP in general (Widdowson, 1983, p. 1). The development of new academic disciplines and the proliferation in professional fields brought about an expansion of the area ESP covers (McDonough, 2010, p. 471). This has given rise to an alternative conceptualization of the ELT scheme, where ESP and EAP are seen as separate categories (Harding, 2007, p. 6). Others yet regard EAP as a traditional base for ESP (e.g., Song, 2006, p. 420).

By drawing links between ESP and CL, this section situates ESP within the thesis, discusses developments and debates in the field and addresses existing gaps in the literature.

2.1.1 Why is ESP important?

English has acquired unprecedented importance due to its status as one of the most widely used languages for communication worldwide (Rogerson-Revell, 2007, p. 103). Centuries-long colonization aside, its rise to a *lingua franca* owes as much to the contemporary globalization of markets as to the nonstop development of fields such as technology, science and the media (Brutt-Griffler, 2002).[[4]](#footnote-4) This development has led to a spread of vocational degrees with a language component and as an extension, to a more application-oriented education, today accounting for the prominence gained by ESP (Harding, 2007, pp. 6-7; Dudley-Evans & St John, 1998, p. 1). Evidence suggests that ESP, a movement originating in the 1960s (McDonough, 2010, p. 471), is now increasingly dominating the Western foreign language curricula, both at higher education and at secondary education (Hüttner, Smit, & Mehlmauer-Larcher, 2009, p. 99), as markets are on the lookout for employees with professional skills (Harding, 2007, p. 7). Consequently, ESP seems to be gaining “equal status even within degrees” (Fanning, 1993, p. 160).

2.1.2 ESP traits

Thereare two axioms invariably pervading ESP definitions, namely purpose and vocation, showing that the practical nature of language learning overrides other aspects of language learning and that the specific purpose affords ESP an immediacy and relevance probably not found elsewhere in ELT (Harding, 2007, p. 6). The implications are that the ESP methodological framework should differ to that of General English and that, because of its value in itself, ESP has the capacity to be particularly motivating and challenging for students and teachers alike.

Overall, definitions of ESP distinguish between “absolute” and “variable” traits (Basturkmen, 2003, p. 48). The former characterize ESP as a whole. Dudley-Evans and St John (1998) regarded meeting specific student needs and centering on the underlying methodology, activities, language and skills required by the content of particular disciplines or occupations as the absolute traits of ESP. In a similar vein, Robinson (1991) suggested that ESP is goal-directed and is based on needs analysis (pp. 2-3). Variable traits, on the other hand, are those characteristics that may sometimes apply to sub-branches of ESP (Fanning, 1993, p. 159), including, for example, a specified course timeframe, a targeted audience (Robinson, 1991, p. 3) and a different methodology to that of General English (Dudley-Evans & St John, 1998, p. 5).

2.1.3 Pedagogical and methodological trends and developments in ESP

Historically, four methodological trends have appeared within ESP, diachronically affecting syllabus formation. Hence, based on lexicostatistics(Swales, 1988), *register analysis* (Ewer & Hughes-Davies, 1971; Barber, 1962) would identify lexical and grammatical features which would appear with higher frequency in ESP compared to General English. Computer-based corpora brought this trend into prominence (Biber, 1988). *Rhetorical and* *discourse analysis* (Lackstrom, Selinker, & Trimble, 1973), a trend whose doctrines were mainly realized in written speech, attempted to explain *why* certain grammatical patterns appeared more frequently in ESP registers and how discourse resulted out of sentence formation (Dudley-Evans & St John, 1998, p. 22). Following Allen and Widdowson’s *Focus Series* writings from 1974 onwards, Trible (1985) also related language form to language use, an approach which was then the major ESP movement. A third trend, *needs analysis* (Munby, 1978; Strevens, 1971) focused on the examination of the target situation in which students would use the language and identified which of its four basic skills they would need most in a given situation. This was a step toward an approach centering on students’ needs (Riley, 1989, p. 70). Hutchinson and Water’s 1987 book on a learning-centered approach is regarded as a seminal work in the ESP literature; CL as a pedagogical tool in ESP begins to be meaningful, since learning-centeredness has been claimed to consider the different ways in which different students learn (Dudley-Evans & St John, 1998, p. 27) (for more on needs analysis, see below). Finally, *cognitive process* (or *study skills*) *analysis* (Holland & Quinn, 1987) was based on the idea that language and the mastering of some or all of the four skills were not by themselves sufficient for students to perform specific tasks, as thought processes underpinning language use also needed to be addressed (Dudley-Evans & St John, 1998, p. 24; Riley, 1989, p. 70) (for detailed discussions on all four trends, see Dudley-Evans & St John, 1998; Riley, 1989).

Regarding pedagogies[[5]](#footnote-5), a wide number is employed in ESP. Similarly with language learning and teaching in general, these shape the development of teaching materials. Such pedagogies include, but are not limited to: (1) *the lexical approach* (Lewis, 1993); centering on teaching collocations, it distinguishes between vocabulary and lexis. Making use of corpus linguistics, concordances and computerized text analysis, this approach has been claimed to help ESP students understand word usage in the real world and also expand their word banks (McEnery & Wilson, 2001; Sinclair, 1991). However, question marks exist as to whether this approach can form the pedagogical basis in an ESP curriculum, since it focuses mostly on vocabulary usage.

(2) *Task-based learning* (TBL) (Skehan, 1996; Willis, 1996): favoring a student-centered approach and arising out of calls for a greater emphasis on communicative activities (Yule, Powers, & MacDonald, 1992, p. 251), TBL focuses on the use of authentic language with students being asked to perform various real-life tasks, explicitly related to their professional practice, therefore meaningful (Van Weert & Pilot, 2003, p. 178). Attention is paid to completion rather than to language accuracy, hence placing tasks at the center of curricular planning (Robinson, 2011, p. 4). TBL favors flexibility and CL (Van Weert & Pilot, 2003). At the same time, activities encourage students to develop their language skills and promote the natural language learning process more readily (Foster, 1999), leading to better understanding and transfer (Jonassen, 1997). Given the above, TBL is rendered an appealing method for ESP. However, with emphasis being on task completion, students may be led to use language inaccurately, as long as their task is performed meaningfully (Foster, 1999). A side-issue with TLB is whether it is within the responsibility of ESP to teach the four main language skills. A common assumption is that ESP does not deal directly with those (McDonough, 2010, p. 473); furthermore, Dudley-Evans and St John (1998) suggest that grammar should be taught in ESP only when students face related difficulties which affect ESP skills (p. 74). Since there is no universal agreement to this, my view is that, for task-based ESP curricula also focusing on language skills, TBL could borrow activities from other pedagogies, which would cater for those skills that it does not.

(3) *The communicative approach* (Swales, 2000): viewing language as a tool for communication and interaction, this approach employs authentic material, task-based, meaningful activities and constant interaction among students (Kanselaar, 1993, p. 254). ESP is seen as rooted in the communicative approach: Nunan (1988) and Hutchinson & Waters (1981) argued that ESP was developed as a result of the communicative movement while Widdowson (1983) and Strevens (1977) regarded ESP as arising out of a combination between the communicative movement and the increasing demand for English. Complemented by elements from other pedagogies, the communicative approach can be traced in a significant percentage of the ESP curricula I have reviewed and taught during this past decade.

(4) *Content-based instruction* (e.g., Robinson, 1991): also widely adopted in ESP curricula today, this pedagogy sees language taught through the use of discipline-specific content. By rendering content meaningful, the students’ pragmatic study- or vocational-related needs are met (Yogman & Kaylani, 1996, pp. 312-3). Psychological and pedagogical benefits have been documented, including a notional linkage between language and content, higher motivation and reduced anxiety (Song, 2006, p. 422). Such benefits can be traced to Krashen’slanguage acquisition theories (1981). Despite its advantages, content-based instruction may be seen as placing excessive demands on ESP teachers, with voices advocating that knowledge of subject-specific content (e.g., specialist terminology) should not lie within their responsibilities (Zhang, 2011, p. 145; McDonough, 2010, p. 474; Dudley-Evans & St John, 1998, pp. 80-1) (also see further below).

(5) *Problem-based learning* (PBL) (Barrows & Tamblyn, 1980): a student-centered, context-based approach where groups discuss problems and try to reach solutions (Wood & Head, 2004, p. 5). CL is heavily involved (Savery, 2006, p. 13), as are self- and peer-assessment (Tynjala, 1999, p. 427). A benefit for ESP is that tasks work regardless of the teachers’ or students’ knowledge or expertise level (Hutchinson & Waters, 1987). PBL has been found to enhance motivation since students deal with problems related to their chosen careers (Race, 2000, p. 335). Τhis pedagogy has been frequently applied in fields such as medical studies, law and information technology. In all, it can lend a number of its components to the ESP curriculum.

(6) *The* *collaborative approach*: this, being a focal point in the current thesis, is extensively addressed in Section 2.3. Suffice to say here that, paired with constructivism, it allows students to assume responsibility for their learning, interact with peers and socially construct knowledge (Austin, Smyth, Rickard, Quirk-Bolt, & Metcalfe, 2010, p. 328), rendering it an attractive proposition for student-centered ESP curricula.

By definition, ESP should cater for the students’ professional-oriented, language-related needs (Belcher, 2004, p. 166). It is not within the scope of this thesis to assess whether the aforementioned pedagogies manage to do that. One thing that becomes obvious though is that the boundaries between these pedagogies can be blurry, with features such as use of authentic materials, use of tasks, and CL, appearing in more than one. Having said that, on the whole, there is currently no single dominating pedagogical trend in ESP. Curricula are increasingly characterized by an acceptance of the numerous different approaches and a willingness to mix materials and methodologies (Dudley-Evans & St John, 1998, p. 30), taking into account differentiators such as context, learning targets, students’ level and particular course purposes. A varied approach, implementing features from different pedagogies that would most help teachers and students achieve their learning goals (Hutchinson & Waters, 1987, p. 89) is hence a practice I endorse. Indeed, such an approach has been followed in designing the ESP syllabus for the case study course in the present thesis. Underlined by a constructivist epistemology, the syllabus was mainly based on a collaborative pedagogy, but also incorporated, to greater or smaller degrees, elements coming from other pedagogies (e.g., it employed TLB, through using authentic material).[[6]](#footnote-6)

2.1.4 The higher education ESP curriculum

Tertiary ESP curricula should consider the socio-cultural contexts English will be employed in. Depending on the particular situation and the audience’s exact educational purpose and professional orientation, as stated above, a combination of pedagogical applications may be employed to teach content and various language skills or skills requiring knowledge of the language needed in a professional setting. Authentic material is extensively used to replicate that setting (Dudley-Evans & St John, 1998, p. 28). Problematizing material authenticity, Hutchinson and Waters (1987) argued that no text removed from its original place can ever be regarded as “authentic” (p. 159). Questions here arise as to how this type of material is selected and as to the way it is employed in the ESP classroom (Robinson, 1991, p. 54). On the plus side, it has been claimed that, pertaining to highly specific courses and, given the relevance of the knowledge gathered in ESP to the students’ needs, motivation on the students’ part is heightened, leading to more effective and faster learning, in alignment with a psychological perspective of learning (Celani, 2008, p. 414; Basturkmen, 2003, p. 49).[[7]](#footnote-7)

Although it is contested whether it should (as already mentioned), by and large the ESP curriculum focuses – to varying degrees – on the 4 basic skills, in conjunction with the students’ subject of interest. Essentially, it is built on the language-pedagogy-content axis (Robinson, 1991, p. 35). Which of the three should be afforded priority and how far they combine depends on the context in which teaching happens. In any case, course designers have endless choices, although in deciding how to design a course, other factors also come into play (e.g., personal preferences, institutional practices and demands) (Robinson, 1991, p. 44). However, the fact that ESP’s main purpose is to accommodate students’ particular needs, places *needs analysis* at the forefront of this decision-making and curriculum designing process. The development of a thorough needs analysis is considered to be one of ESP’s main contributions to the wider ELT field (Harding, 2007, p. 17). That a needs analysis is what should primarily determine curriculum content (Widdowson, 1981, p. 1) leads us to where ESP curriculum design meets with a social constructivist view of language; social constructivism respectively maintains that it is through discursive practices that the various study fields and professions are constructed (Basturkmen, 2003, pp. 54-5; more on social constructivism and its links to ESP, in Section 2.2).

Needs analysis however, can be problematic: different groups of analysts working with the same group of students may identify different needs, depending on their ideology and view on teaching and learning. There is also the matter of what *needs* amount to: are they mainly learning, or educational needs (i.e. what students need to do to learn), or should they be defined depending on target, or training needs (i.e. what students need to do in the target situation) (Hutchinson & Waters, 1987, p. 54)? Can the teaching institution accommodate such needs in the first place? Are such needs, as students perceive them to be, compatible with what teachers deem to be beneficial for them (Robinson, 1991, pp. 7-8)?

There is also debate as to whether ESP deals with student groups carrying almost identical needs and with broad study fields or professions (resulting in narrow-angled ESP courses) or with student groups carrying only somewhat similar needs and with specialized study fields (resulting in wide-angled ESP courses) (Basturkmen, 2003, p. 49; also see Widdowson, 1983, pp. 10-1). Based on my experience in designing and teaching ESP at my home university, I tend to lean toward the latter view, without discounting the possibility that the former may occasionally be the case. Moreover, I believe that, as mentioned above, to be of real significance and benefit to students, ESP courses should primarily be based on the occupation- or study-oriented needs of students. Hence, the curriculum should make specific pedagogical arrangements (e.g., specific register, relevant skills and materials taught), and contextualize the language to be taught so as to accommodate thestudents’specific needs, taking into consideration the heterogeneity inherent in those needs.

So far, I have talked of the importance of needs analysis, of authentic materials and of using an amalgam of pedagogies in ESP. Given that the focus of the thesis is on CL, a number of questions relating it to the ESP curriculum need to be addressed: how exactly does a collaborative pedagogy fit into the ESP curriculum and how would it affect existing curricula? Would it replace existing pedagogies or complement them? How could it be meaningfully applied and would this lead to an improvement on the pedagogies it would replace? What are the implications for existing marking criteria? And what are the implications for students and teachers? Section 2.3 provides a more comprehensive coverage of such issues. Before concluding this section though, I need to discuss some of the issues ESP teachers currently face. This is an important part of the discussion because the questions above are intermingled with some of the following issues.

2.1.5 The ESP teacher

It is difficult to pinpoint a universal role description for ESP teachers, given the variation between different ESP programs (Jackson, 1998, p. 151). Even so, a number of traits have been deemed as critical in the successful negotiation of ESP teaching (e.g., adaptability, resourcefulness, flexibility, good communication skills) (Jackson, 1998, p. 152). Given this multi-dimensional character, Dudley-Evans and St John (1998, pp. 13-7; also see Harding, 2007; Swales, 1985), use the term “practitioner”, to reflect the wide scope of functions executed (i.e. teaching, course designing, collaborating, researching, evaluating). For consistency purposes, this thesis employs the more familiar and widely-used term of “teacher” which, in the current context, encompasses all the aforementioned features.

The heavy demands placed on teachers by ESP (e.g., to conduct needs analysis, to build and adapt materials to fit those needs, and to cope with largely unfamiliar subjects; Belcher, 2004, p. 166)generate numerous issues. The main one, I think, is the obvious chasm between the teachers’ knowledge of content and context. That the EFL-trained ESP teacher is, in all probability, not an expert in the students’ subject area has a bearing on the methodologies employed, increasingly so as the teaching becomes more specific (Dudley-Evans & St John, 1998, p. 13). This lack of expertise means that ESP teachers may struggle to master the subject-related knowledge (Wu & Badger, 2009, p. 20; Hutchinson & Waters, 1987, p. 160), much like students may struggle in the language components of their course. The problem is amplified by the continuous technological advancements, and by a rising interest in interdisciplinary studies, which result in newly emerging genres that ESP teachers are to teach (Hüttner *et al*., 2009, p. 100). Swales (2000) argued that such issues have implications on teacher training and on pedagogy effectiveness (p. 66). Pedagogical solutions to this problem depend on the students’ expertise level, on the teacher’s background, training received and instructional preferences, and on the amount of support teaching materials provide ESP teachers with (McDonough, 2010, pp. 475-6).

This last point raises the issue of textbook availability and practicability. Based on personal experience, the more specialized a curriculum is, the harder it is to find applicable coursebooks. Teachers usually mix and match materials from various sources. Even so, the question of practicability remains: textbooks with background explanations and more in-depth information on the subject area are rare. ESP teachers receive little support from publishers and authors with regard to teaching subjects they are not experts in. It hence falls to those teachers to pursue advanced subject knowledge via other avenues, such as collaboration, self-study and research. Chien and Hsu (2010) suggest a collaborative teaching approach, where ESP teachers collaborate with subject teachers (p. 1885), presumably to develop a better understanding of the subject area and build curricula accordingly (also see Northcott & Brown, 2006, pp. 359-360). Such aid can result in the creation and/or choice of more appropriate materials; however, I fail to see how this would work long-term amid the hectic reality of tertiary institutions. Further proposals for teachers to develop their expertise include engaging with new technologies more and collecting authentic language to use in the classroom (Brown & Lewis, 2003, p. 93). The use of new technologies in particular provides teachers with limitless sources of authentic materials (Fernandez, 2000, p. 258). Of course, despite the teacher’s preparation, unanticipated events may occur during class (Wu & Badger, 2009, p. 20); thus, teachers need to develop coping strategies. However, this is not always possible since students, in so many ways better-placed regarding the content area, may come up with questions that non-experts would find difficult to answer.

Related to the above is the challenge of choosing and adopting material to meet the students’ level, a challenge that is even greater in mixed-ability classes or in classes with students from diverse backgrounds (Aiguo, 2007, p. 172; Jarvis, 1983, p. 47). The choice of material has less to do with finding materials and more with properly evaluating and previewing them (Dudley-Evans & St John, 1998, p. 185).

Next is the challenge ESP teachers face in bridging the gap between what is taught in the classroom and the reality of the workplace. ESP is about providing students with their subject- and career-related linguistic skills. Hence, a need for authentic material is apparent. For example, Bremner (2010) asserted that this discrepancy is particularly evident in written collaborative activities. Analyzing eight business communication textbooks, he concluded that the differences between the classroom and the workplace contexts are rarely addressed and that few activities prepare students for whatever tasks they will encounter at work (p. 121).

Relating to my discussion on pedagogical trends in ESP, there is a twofold challenge facing ESP teachers: first, there is the challenge of using the appropriate pedagogy, or the appropriate combination of pedagogies. Any choice should meet the students’ needs and also assist them in overcoming the language problems they may encounter (Krickova & Polackova, 2010, p. 225), at least those problems that may hinder their capacity to grasp the ESP skills taught. Second, when adopting new approaches, the resulting challenge is to adapt one’s role accordingly (Savery, 2006, p. 15); in today’s pedagogically – and methodologically – varied ESP classroom, this may be a recurrent need. ESP teachers therefore, need to be adept under different guises.

In light of the discussion in this section then, it is important to examine the integration of CL and of CTs in ESP, how such integration may affect ESP teachers and what issues it may give rise to.

2.1.6 My thesis in the ESP context

It should be clear by now that ESP is context-dependent and context-specific; hence, no single pedagogy or methodology can fit all its purposes (Dudley-Evans & St John, 1998, p. 187). Having said that, the amount of existing research that looks into CTs in ESP and into CL in ESP is disproportionate. Back in 1998, at a time when the Internet was still at its embryonic stages, Widdowson acknowledged that the rapid technological advancement would drastically affect communication and stated that ESP needed to take note (1998, p. 10). Researchers seem to have heeded the message. During these past years, research in this particular area has flourished. The downside of today’s rapid advancement of CTs is that research on particular CT applications in ELT pedagogy can quickly become outdated.[[8]](#footnote-8) Hence there is a constant need for new research. Moreover, the challenge is not so much to research for new materials – there are ample out there – but rather to find ways to realize the potential of this vast learning environment (Peterson, 1999, S80). Section 2.3 discusses the relation between ESP and CTs in more detail.

In contrast, CL’s application in contemporary tertiary ESP is under-researched. As this section shows, various other pedagogies integrate CL elements. However, with an apparent shift away from employing a single pedagogy and toward using more varied approaches, it is surprising that CL-related research is rather scarce. Consequently, I believe that CL’s capacity as a multifaceted pedagogy in the ESP environment, needs further, more intensive researching, in order to examine whether such integration carries any benefits for the specialized aims of tertiary ESP courses (more on this in Section 2.3). Moreover, the perceptions of those directly affected by the integration of CL (and of CTs) in ESP (viz. teachers and students) should be closely examined. In light of the numerous issues facing ESP as a field, the views of those two groups should be taken into consideration by policymakers and by curriculum designers.

Having taken a rounded look at ESP and its links to CL and CTs, I now move on to discuss the theoretical underpinnings of this study.

**2.2 Constructivism and Social Constructivism**

The research process is guided by questions on the nature and role of theory. Establishing its theoretical underpinnings then, is necessary to lend transparency to it. Furthermore, the ontologies and epistemologies researchers espouse shape authenticity and legitimacy as well as how reflexivity is adopted in one’s research (Brannick & Coghlan, 2007, p. 62). Interpretivism, the ontological framework behind the qualitative research design I employ, is extensively addressed in Chapter 3. Prior to that, the current section focuses on (social) constructivism – which serves as the broad epistemological framework for the integration of CL and CTs in ESP – and on what I believe to be its two key pedagogical constructs, namely the *zone of proximal development* and *scaffolding*. There is a vast literature on constructivism and selectivity was a necessity. Therefore, I have not extensively visited areas such as autonomy, self-regulation or distance education, which relate to constructivism but are outside the immediate scope of this thesis.

2.2.1 Ontology, epistemology, and theories of learning

Epistemology, the systematic consideration of knowing, i.e. how we arrive to knowing something, what counts as truth and when knowledge is deemed to be valid or not (Packer & Goicoechea, 2000, p. 227), has been an archetypal issue for debate across disciplines, resulting in the genesis of numerous philosophical traditions, research paradigms and theories. These are characterized by several typologies, different labels and, admittedly, little consistency. Research suggests that such schemata used to be two-sided (qualitative vs. quantitative, positivist vs. humanistic, positivist vs. idealistic, positivist-empiricist vs. relativist-constructionist). Since the early 21st century, dualism appears to have given way to a wider range of competing paradigms, dominated by positivism, hermeneutics, and critical realism (Brannick & Coghlan, 2007). An alternative distinction was suggested between positivism, postpositivism, critical theory and constructivism (Guba & Lincoln, 1994).

Apart from their epistemology, such paradigms differ, to various degrees, in their other philosophical foundations, namely theory, reflexivity, researcher role and ontology (i.e. “the consideration of being: what is, what exists, what it means for something – or somebody – to be”; Packer & Goicoechea, 2000, p. 227). Although it is outside the scope of the current thesis to investigate the various paradigms, a basic comparison between positivism and hermeneutics makes this difference clear. The former adheres to objectivist ontology and epistemology, and maintains that language can be theory-neutral, therefore the external world can be accessed objectively, with reality being independent of human cognition; that reality can be examined by value-free researchers. In contrast, the latter adheres to subjectivist ontology and epistemology, denies the existence of neutrality, and argues that reality is an artifact of cognition, therefore neither objective nor singular. For the hermeneutic tradition, researchers are integral to the research process (Johnson & Duberley, 2000; MacIntyre, 1982). Certainly, history suggests that paradigms do not always see eye-to-eye and do tend to upstage one another at times.[[9]](#footnote-9)

Change, however, does not occur only in research paradigms: a number of pedagogic philosophies and learning and cognition theories have influenced approaches to learning (including language learning) and the way knowledge is constructed. Long periods of the seemingly now outdated behaviorist model (with teachers as the main sources of knowledge controlling the learning process and students as passive receivers of highly structured knowledge) gave way to the more student-centered cognitivism (where students mentally represent reality on a continuous basis) (Rosell-Aguilar, 2007, p. 484; Rüschoff & Ritter, 2001, p. 221; Tenenbaum, Naidu, Jegede, & Austin, 2001, p. 88). Additionally, constructivism – a *par excellence* subjectivist, therefore hermeneutic approach – has entered the frame as an inter-disciplinary theory, focusing on knowledge construction rather than transmission; students are active learners and construct new meanings based both on their past experiences and the influences of their environment (Dalgarno, 2001, p. 184; Scott, 1987, p. 4).

As an educational researcher, I share the subjectivist viewpoints briefly addressed above. Consequently, I believe the purposes of this research to be better catered for by the hermeneutic paradigm, and more specifically by social constructivism. To better contextualize this approach, I feel it is worth introducing a few important traits of the wider hermeneutic tradition. A basic tenet of hermeneutics is that nothing can be interpreted free of some perspective (Patton, 2002, p. 129), thus rendering all interpretations subjective. That researchers should enter research with few or no preconceptions is untenable. To counterbalance the inevitable projection of personal beliefs on one’s research, the hermeneutic tradition encourages researchers to allow empirical evidence to produce the key themes and concepts upon which theory will be built; in other words, theory should follow from evidence rather than be preconceived. Researchers, on their part, in attempting to interpret meanings, enter into a culture as critical and analytic participants/observers, to gain an understanding of its values and practices (Brannick & Coghlan, 2007, p. 64). A major, value-laden component of social life and social reality out of which researchers gather empirical evidence and via which they externalize their findings, is language (Howe & Moses, 1999, p.32). The value-laden nature of language (as shall be seen later on) has significant repercussions on the current study’s quality parameters. It also carries obvious implications on both the semantic realization of one’s ideas and research as well as on the different ways that research is interpreted.

With the above in mind, I turn my attention first to constructivism and then to social constructivism, as the epistemological backdrops of this study.

2.2.2 Constructivism

Rooted in cognitive psychology, constructivism places students at the center of learning and maintains that they actively construct knowledge, as they process information based on maturation or on experiences and interaction with the environment (Rovai, 2004, p. 80; Rüschoff & Ritter, 2001, pp. 221-3; Reagan, 1999, p. 414). To address the issue of students attributing different meanings to the same things because of individual experiences (Tenenbaum *et al*., 2001, p. 89; Tynjala, 1999, p. 365), constructivism emphasizes understanding, and relies on collaboration, reflection, social negotiation and interaction to lead to *intersubjectivity* (i.e. common meanings) (Nyikos & Hashimoto, 1997, p. 508). However, since meaning is socially negotiated, constructivism accepts that different yet equally valid knowledge representations are still possible to exist (Dalgarno, 2001, p. 184). The implication of the above is that, in direct contrast to positivist doctrines, there is no absolute rightness and that knowledge veracity, truth, and in consequence “reality”, are judged based on the consensus between individuals (Adams, 2006, p. 246).

According to Fox (2001), constructivism appears to be the dominant view of learning in the educational literature in Europe and the States (p. 23). As a learning philosophy, it departs from instructivist schemata (behaviorism, cognitivism): it favors curricula customized to the students’ existing knowledge, teaching tailored to their backgrounds and needs through authentic tasks, rich learning environments and dialogue promoted to construct new knowledge (Rovai, 2004, p. 81; Windschitl, 2002, p. 137). Learning is a process of information gathering and knowledge processing; the interaction between the two leads to acquisition and, circumstances permitting, to production of new knowledge (Rüschoff & Ritter, 2001, p. 224). All this means that the knowledge learned is not abstract but genuine and applicable (De Simone, Schmid, & McEwen, 2001, pp. 266-7). Moreover, since experiences – a knowledge building block – differ between students, curricula need to be designed in a way so as to cater for different backgrounds and learning styles (Dalgarno, 2001, p. 184).

Pedagogically, all the above translate into a shift in the role of teachers from lecturers to facilitators, tutors, mentors and observers (Porcaro, 2011, p. 42; Adams, 2006, p. 249; Rovai, 2004, p. 81). The relationship between teachers and students also shifts, from the traditional didactic to a more interactive and unpredictable one (Windschitl, 2002, p. 143). Within constructivism, teachers need to explore the distance between what students can do on their own and what they can do when aided by more knowledgeable others (their *Zone of Proximal Development*) (Shawer, 2010, p. 175) and accordingly provide students with flexible learning tools and with the necessary supports that will facilitate progress (*scaffolding*) (De Simone *et al*., 2001, p. 267; Labour, 2001, p. 35). Students, on their part, movefrom being merely passive knowledge consumers to active knowledge creators, co-constructors and collaborators (Barr & Tagg, 1995; Freire, 1994).

The literature on constructivism is vast and not particularly easy to navigate, because (a) as a theoretical framework, constructivism is not limited to a single field, inviting psychological, philosophical, educational and sociological perspectives and, (b) its proponents and critics abound in equal measure. Focusing on education, from the radical views of von Glasersfeld and Kant, of students being placed within the environment they are learning about, a highly individualistic sense of reality and construction of mental models and limited support by teachers (*radical constructivism*; Tobin, 2007; von Glasersfeld, 2001; Steffe & Thompson, 2000; Hardy & Taylor, 1997; Olssen, 1996), to the Piagetian view of a participant-centered learning process with cognition occurring in the individual’s head again leading to a construction of their own model of knowledge (*cognitive constructivism*; Wadsworth, 2003; Derry, 1996; Cobb, 1994; Garrison, 1993; Piaget, 1985), to the *social* (*socio-cultural*) *constructivism* of Vygotsky and Dewey which places emphasis on the social context and on the construction of knowledge following interaction and collaboration between students, their peers and the context (Adams, 2006; Watson, 2001; Palincsar, 1998; Vygotsky, 1978), the literature is afloat with a plethora of intermingled, sometimes contrasting and invariably complex views surrounding this essentially philosophical paradigm (Porcaro, 2011, p. 40; Phillips, 1995, p. 5). A marked area of variance between the different views for example, is a lack of agreement on how students, teachers and the environment are linked. However, despite their differences, some claim that there is neither fundamental contradiction nor incompatibility among the different views (Ernest, 1995). What is more, integrative approaches have emerged, combining elements coming from more than one such views (Tynjala, 1999, p. 364), even joining elements with instructivist frameworks,[[10]](#footnote-10) in order to meet the particular needs of the context they are being applied into.

It is time now to visit social constructivism, which is the particular epistemology I adhere to. This epistemology is built on two tenets which are afforded various degrees of importance, depending on where on the continuum a constructivist may be situated. The first is an outright rejection of the idea of the passive construction of knowledge; instead, what is championed is the epistemology of an *active* construction of knowledge (Gordon, 2008, p. 324; Tynjala, 1999, p. 364). The second is the crucial role of the *social nature* of knowledge in the learning process (Phillips, 1995, p. 11).

2.2.3 Social Constructivism

Social constructivism is grounded on the belief that we are active agents in knowledge construction and acquisition. Moreover, social interaction is viewed as the driving force – prerequisite even according to Vygotsky – behind learning and cognitive development.[[11]](#footnote-11) Additionally, knowledge is co-constructed, that is, learning is mediated and occurs through collaboration rather than individually (van Compernolle & Williams, 2012, p. 41; Samaras & Gismondi, 1998, p. 716; Nyikos & Hashimoto, 1997, p. 507). Both Dewey and Vygotsky, probably the two leading exponents of the movement, viewed learning as a constant reinterpretation of meaning (Russell, 1993, p. 179). Epistemologically, students may make meaning empirically (through their experiences), rationally (through their reasoning) and collaboratively (through their contact with their peers) (Porcaro, 2011, pp. 41-5; Gordon, 2008, p. 324; So & Brush, 2008, p. 320); more often than not, meaning results from a combination of these modes.

Social constructivism is characterized by social, dialogical, collaborative processes and emphasizes the mediational role of language and discourse (Tynjala, 1999, p. 364). Language assumes center stage principally in two constructs that have become fundamental in social constructivist theory, namely the *Zone of Proximal Development* (ZPD) and *scaffolding* (Porcaro, 2011, p. 41; So & Brush, 2008, p. 320; Dunn & Lantolf, 1998, p. 420). As I shall argue, both find ample room to operate in ESP settings; as such, I consider them as crucial pedagogical constituents in constructivist-based ESP curricula.

Originating in developmental psychology, the two constructs mirror the idea that learning is a collective, socially-driven endeavor. A ZPD is defined as the distance between students’ actual developmental level as determined by what they can do independently and potential developmental level as determined by what they can do under assistance by, or in collaboration with experts or more knowledgeable peers (Vygotsky, 1978, p. 86).[[12]](#footnote-12) It is a highly influential construct in a number of fields (not least education and psychology), albeit with a lack of agreement regarding how scholars interpret it. In relation to foreign language education for example, Kinginger (2002) discusses three different interpretations (utilitarian, progressive and holistic). Ohta (1995) provides us with a useful adaptation of the original definition, tailored to L2 learning and teaching: she interpreted ZPD as the difference between an L2 student’s level of development when independently using language and the student’s higher level of potential development when using language in collaboration with more able peers (p. 96). Such variation owes much to one’s dialectic or dialogic needs and processes and to the various, and sometimes not so faithful translations of Vygotsky’s works. In any case, theories do not exist in a vacuum. The immediate socio-political context social constructivism was born into, that of the post-revolutionary Soviet Union,[[13]](#footnote-13) gave rise to interpretations different to the ones that resulted from its possible applications long after that period in time and in quite diverse settings.[[14]](#footnote-14)

Engaging in a ZPD – a process inextricably linked to joint activity (Dunn & Lantolf, 1998, p. 419) – can be mutually beneficial for all involved. The less capable ones can learn and become more independent, and the more capable ones can uncover information previously undetected, gain new understandings and reach new knowledge (Nyikos & Hashimoto, 1997, p. 507). Peer assessment is rendered more possible within a ZPD (Adams, 2006, p. 253). Crucially, it has been suggested that a ZPD can be constructed even when no group member is an expert (Lantolf & Pavlenko, 1995; Newman & Holzman, 1993), with students collaborating and contributing their bits to build new knowledge (Li, 2012, p. 128). The implication is that a ZPD is possible in any given teaching scenario. However, irrespective of the above, there are two preconditions that need to be met for a ZPD to emerge: the (social) interaction between the student and peers or experts needs to be meaningful; also, there should be joint effort and collaborative scaffolding (Vandergriff, 2006, p. 111).

Providing a link to ZPD’s latter developmental stage (see Vygotsky’s 1978 definition from above), *scaffolding* can be seen as its instructional application. It refers to the supporting mechanisms that peers or experts employ to assist students in achieving their learning goals (Murphy, 2008, p. 84). Called the “quintessential Vygotskian act of pedagogy” (Nassaji & Cumming, 2000, pp. 104-5), *scaffolding* was introduced by Wood, Bruner, and Ross (1976) to signify the process that enables children or novices to solve problems, carry out tasks, or achieve goals beyond their unassisted efforts (p. 90). Consistent with the wider constructivist tradition, scaffolding acknowledges the important role of language in its various modes (e.g., dialogue, written speech) as the mediational tool that facilitates collaboration between students, aids in the negotiation of meaning and supports learning (Many, Dewberry, Taylor, & Coady, 2009, p. 150;Sharpe, 2006, pp. 212-3; Palincsar, 1986, p. 95). Similarly to a ZPD, scaffolding may operate even without the presence of experts; collaborative work between a group of non-expert students working on a common task can still produce knowledge unlikely to have arisen had students worked individually (Walqui, 2006, p. 167). This would result in a form of cognitive apprenticeship, where responsibility for learning primarily rests on the novice student (Nyikos & Hashimoto, 1997, p. 508; also see Collins, Brown, & Newman, 1989).

The problem with scaffolding, as with ZPD and constructivism in general, is that the concept has become so broad in its meaning that its significance has suffered (Pea, 2004, p. 423). This however, should not hinder the fact that, when realized as mediated assistance complementing social interaction and leading to development (De Guerrero & Villamil, 2000, p. 52), it can be a vital cog of contemporary pedagogies. Doubts remain as to whether it can realistically lead to full competence.[[15]](#footnote-15) Jelfs, Nathan, and Barrett (2004) argue that probably it cannot; it can rather be envisioned as leading to elevated levels of competence instead (p. 87).

Scaffolding operates at a macro and a micro level; the former (designed-in scaffolding) is a broad instructional frame, informed by contextual factors (e.g., students’ level, teachers’ goals). It contains an inclusive teaching plan targeting specific learning outcomes and is an overview of the particular tasks and the scaffolds to be employed. The latter (interactional or instructional scaffolding) includes the mechanisms operating during actual instructional time. It is hence shaped by the students’ needs and their movements through their ZPD (Maloch, 2002; Many, 2002; Dansie, 2001; van Lier, 1996, Wells, 1995; Bruner, 1986). Scaffolding mechanisms include examples, reference sources, visual aids (Clark, 2005), guided tutorials and tips on how to proceed with a task (Collins, 2006), models and ways to reduce task complexity (Bruner, 1978), non-verbal cues (Mccafferty, 2002), language (Kinginger, 2001), guidance, joint reflection, positive feedback, criticism, motivation, empathy and involvement in tasks (Calvani, Solzio, & Varisco, 1997), non-assessable activities (Bennett & Lockyer, 2004), research and peer and teacher conversations (Wass, Harland, & Mercer, 2011) and instructional technology tools (Stevenson & Liu, 2010; Cole, 2009; Steffens, 2008; Skehan, 2003). By definition, scaffolds are temporary (Walqui, 2006, p. 169), engaging in an active, dynamic process which caters for students at a particular time (Sharpe, 2006, pp. 212-3). Once students achieve some competence of the target skill, scaffolds are gradually withdrawn (Collins *et al*., 1989, p. 456).

Because of its multi-layered nature, scaffolding is a complex process and one that is not easily translated into classroom practice. It continuously calls for a shift in the perspective of both students and teachers concerning the task at hand. Students need to restructure their notions of the teacher-student relation. At the same time, teachers need to make scaffolding as effective as possible, by eliminating ambiguities and providing proper focus (Collis & Moonen, 2008, p. 99;Sharpe, 2006, p. 212;Towndrow, 2004, p. 180). In the current study, students’ prior experience with CL and the kinds of different relationships between themselves and their teacher had a bearing on how effectively scaffolding worked.

Both ZPD and scaffolding were initially conceived to address younger ages and their sociopsychological development. Nonetheless, they have since been extended to education in general and have proved to be sound pedagogical practices with students of any age, as they are applicable to a multitude of learning situations (De Leon, 2012, p. 147). I see them similarly suitable to be adopted in language learning settings. Their application carries a couple of implications. The higher the quality of scaffolding, the more effective collaboration is between students (Larusson & Alterman, 2009, p. 378). Also, in a ZPD – a framework theoretically bringing together all learning agents (i.e. teachers, students, their sociocultural history, their drives, targets, and the available resources) (Aljaafreh & Lantolf, 1994, p. 468)[[16]](#footnote-16) – successful scaffolding helps students gradually move from reliance on others to higher regulation levels, ideally reaching complete self-regulation and autonomy (van Compernolle & Williams, 2012, p. 42; Muukonen, Hakkarainen, & Lakkala, 2004, p. 43; Aljaafreh & Lantolf, 1994, p. 480; Foley, 1994, p. 101). Autonomy and self-regulation have become buzz words in education; however, they are outside the immediate scope of this study, hence they will not be extended further here.[[17]](#footnote-17)

In the present case study, a ZPD was realized since (a) collaboration was favored via group formation, (b) groups were mixed-ability ones, thus facilitating comprehensible input (Kitade, 2000, p. 146),[[18]](#footnote-18) (c) students needed to attain a number of new skills, and (d) those skills were beyond most students when working individually, but achievable, as it proved to be the case, when working collaboratively and when receiving scaffolds by more knowledgeable peers or the teacher, hence within their ZPD (Dalgarno, 2001, p. 191). Scaffolding was used throughout the case study course, ideally with the purpose of allowing students to move from assisted to independent learning (e.g., Hawkey, 2003, p. 168). It was hence extensively employed when new skills on the syllabus were first introduced, fading as student competence increased (Azevedo, Cromley, & Seibert, 2004, p. 346; Foley, 1994, p. 101; Collins *et al*., 1989, p. 456). Scaffolding was provided by collaborative work (which allowed for meaning negotiation between peers) and through the use of CTs (both CL and the use of CTs provide opportunities for scaffolding; more on this in Section 2.3).[[19]](#footnote-19) This being an advanced ESP class with mature students, there was less linguistic scaffolding or recurrence to the native language (Luke, 2006, p. 83) and more skills-oriented scaffolding, in order to meet the specific syllabus targets (i.e. communicative competence, skills acquisition etc.).

2.2.4 Criticisms

Criticisms have been raised regarding a number of constructivism’s views. For instance, Fox (2001) branded constructivism’s tenets naïve, bemoaned its various guises and considered the idea of an active construction of meaning “vague, misleading and incomplete” (p. 24). Many criticisms interpret constructivism misguidedly, in a way that its main proponents rejected (Gordon, 2008, p. 325). Fear for a loss of teacher control in the classroom (Hung, Bailey, & Jonassen, 2003), fear that students will fail to regulate their own learning (Jonassen, 1991), an alleged inability to produce meaningful results (Fox, 2006), excessive demands leading to counterproductive outcomes (Kirschner, Sweller, & Clark, 2006), difficulties for students brought up in instructivist-oriented settings (Schank, 2006), a lack of empirical evidence to exhibit its effectiveness as a teaching practice (Matthews, 2003) and an attack on “lazy” teachers who do not really teach but merely facilitate things (Baines & Stanley, 2000) are all simplistic criticisms, based on misinterpretations of constructivism, looking at extreme or rare cases whereas in fact constructivism was never built on such grounds. Such criticisms miss the essence of constructivism as a theoretical framework and as a pedagogical paradigm, and do disservice to its merits, as these have been discussed above and are exemplified throughout this thesis. Many of these criticisms result from the apparent confusion surrounding the exact nature of constructivism: is it essentially an epistemology, an educational philosophy, a learning theory, a pedagogical approach or an instructional theory (Tobias & Duffy, 2009; Kaufman & Grennon Brooks, 1996)? For example, Jonassen, Cernussa, and Ionas (2007) argue that it is only an epistemology; Lave and Wenger (1991) and Bandura (1977) consider it to be first and foremost an instructional theory (cf. Fosnot, 1993); Reagan (1999) precludes if from being a pedagogical approach; and Windschitl (2002) suggests it is both a theory and a philosophy of learning.

This is not the place to try and counteract those accusations; in any case, many of these are addressed practically through this study. I have already suggested that I consider constructivism to be primarily an epistemology. Having said that, I do not argue that one can only find value in constructivism, if contrasted to objectivist, cognitivist or behaviorist theories; every theory has value in its own right and can serve teaching and learning environments (e.g., see Mayer, 2004; Ertmer & Newby, 1993; Jonassen, 1991; Vygotsky, 1978). Constructivism has neither promised effortless learning, nor has it maintained that it can make all of education’s troubles disappear. However, many of the criticisms against it could in fact be directed toward any learning theory or paradigm. In considering these criticisms, we should bear in mind that (a) constructivism should not be considered out of context but be situated within a wider sociocultural frame, (b) it should not be vilified for its failure in sustaining learning or development in certain environments without a proper consideration of the way it is applied and of the various parameters that accompany it, and (c) when applied correctly, it has the potential to succeed in areas where behaviorism to a larger, and cognitivism to a lesser extent have not. Pertinently to this study, and given technology’s integration in curricula, I believe constructivism to be a pedagogical framework that can cater for the possibilities technology offers. Many of the criticisms aimed at constructivism preceded the technological blooming and the integration of interactive technologies in education. I doubt that those same criticisms would surface in 2012 with the same ease. In today’s globalized educational setting with technology rendering learning a truly boundary-less experience, it is naïve to suggest that constructivism may fail or should not be employed because, for example, students may have difficulty engaging in CL. More recent empirical evidence speaks louder than words (e.g., see Hung, 2011; Shawer, 2010).

2.2.5 Summary and Conclusion

Drawing a link to the discussion in Section 2.1 on ESP pedagogies, as a learning theory and as a pedagogical framework, constructivism has been closely linked to the communicative approach (Reagan, 1999), TBL (Brooks & Brooks, 1999), PBL (Westwood, 2006; Harland, 2003), and the collaborative approach (Hanson & Sinclair, 2008). A rich, dynamic environment together with task authenticity, both hallmarks of constructivist theorizing, can lead language students to better grasp grammatical structures, develop proficiency and become more linguistically aware (Rüschoff & Ritter, 2001, p. 224). Based on the preceding discussion, it is my belief that constructivism – and social constructivism in particular – is sensitive to ESP’s conceptual framework and pedagogical realities.[[20]](#footnote-20) Linking this to the criticisms above, this study is a step toward filling in the gap in the research literature that sees the ESP setting, CL and technologies within a constructivist framework being under-researched and a source of further criticisms.

This section has introduced constructivism and focused on social constructivism as the particular epistemology and learning philosophy this thesis embraces. The key concepts of ZPD and scaffolding have been presented and discussed within the field of education and language learning. Finally, an effort was made to re-contextualize criticisms directed at constructivism. In what follows, CL and CTs are introduced and the multiple and substantive links between those and social constructivism are visited.

**2.3 Collaborative Learning and Collaborative Technologies**

Research indicates that CL is now one of the leading instructional pedagogies, practiced at all levels of education, by teachers of different subjects and diverse backgrounds and traditions (Lopata, Miller, & Miller, 2003; Smith & MacGregor, 1992). Regarding L2 teaching, CL has been a major movement ever since the communicative approach started expanding (Roskams, 1999, p. 79), which is probably not surprising given the common elements between the two, namely situated learning, authenticity and meaningful tasks for students (Widdowson, 1998). Despite its value being widely recognized in L2 settings, it is suggested that there are no CL-related models specifically designed for the L2 classroom (Allen, 2006, p. 20). As a student-centered pedagogy, CL, as is also the case with constructivism, flies in the face of a centuries-long tradition, one that has been viewing teachers as focal points in the learning process (Smith & MacGregor, 1992).

The research literature on CL increasingly supports its use in higher education (e.g., McKeachie, 1999; Astin, 1993; Johnson, Johnson, & Smith, 1991).In fact,CL is being extensively applied both in classroom and in distance/online learning settings (Stevens, 2007; Bernard, Rubalcava, & St-Pierre, 2000). The context of this thesis means that I only consider CL (in conjunction with CTs), within the traditional classroom environment.

Simply put, CL is a learning and teaching pedagogy where students apply joint intellectual effort to achieve learning outcomes (Austin *et al*., 2010, p. 327; Ruys, Van Keer, & Aelterman, 2010, p. 537).[[21]](#footnote-21) It is a practice based on group work and peer interaction, highly dependent on *positive interdependence* and *individual accountability*, thus shifting the initiative for the learning process from teachers to students (Koppenhaver & Shrader, 2003; Ravenscroft, Buckless, & Hassall, 1999; Johnson *et al*., 1991; Slavin, 1988). CL is meant to be a constructive process, one in which students build on prior knowledge and experiences and create meaning through collaboration, research, dialogue, exercise of higher-order reasoning, and problem-solving skills (Lehtonen & Tuomainen, 2003; Smith & MacGregor, 1992). Collaboration between group members has been found to yield numerous learning benefits (see below), ultimately leading to knowledge construction (Weinberger, Stegmann, & Fischer, 2007, pp. 416-7; MacDonald, 2003, p. 386). Such collaboration could result in insights that individual students would find impossible to attain (Bradley, Lindström, & Rystedt, 2010, p. 250). Hence, direct links to ZPD can be drawn. Of course, as it shall become obvious from the ensuing discussion, the quality of CL is dependent on the conditions that surround its application; in CL too, as is the case with a number of emerging themes in this thesis, context plays a crucial role (Strijbos & Fischer, 2007, p. 392).

2.3.1 Many names, single entity

The literature is rich with notions primarily based on group work: peer learning, reciprocal learning, team learning and, most commonly, cooperative learning and CL. Particularly in connection with the last two, there is a lack of agreement as to their definition, implementation and spectrum (Bacon, 2005, p. 250; Beatty & Nunan 2004, p. 166; Kreijns, Kirschner, & Jochems, 2003, p. 336). Some authors use them interchangeably, arguing that the common features between them, such as active learning, students taking responsibility for their learning, students’ reflective processes, development of social skills, and the teacher’s facilitative role, render them one and the same (MacInnerney & Roberts, 2004; Kirschner, 2001). Others consider them as governed by different principles, stemming from diverse theoretical backgrounds and traditions, and leading to different uses. While CL’s emphasis is on joint, coordinated activity throughout a task so that members may reach a shared conception, cooperative learning promotes a more structured distribution of task parts to members working individually until a late stage in the process (Geer & Barnes, 2007; Beatty & Nunan, 2004; Donato, 2004; Dillenbourg, Baker, Blaye, & O’Malley, 1996; Rochelle & Teasley, 1995). Moreover, the two have been separated based on how collaborative a task really is and on whether group members are allowed to provide peer feedback, or review and revise all parts in a common task (e.g., Arnold, Ducate, & Kost, 2012).

Having closely looked at the intrinsic properties that these various guises are purported to have, I argue that any differences in their features and applications are outnumbered by the similarities between the two. Essentially, we deal with a single approach under different names (Hunter, 2006, p. 76; Kreijns *et al.*, 2003, pp. 336-7), with CL probably being more collaborative in nature than cooperative learning. Having said that, throughout the thesis, I will be using CL as an umbrella term; this is consistent with a large chunk of the literature that employs “CL” to embrace a multitude of group learning strategies, including cooperative learning (Rose 2004; Palinscar 2002; Meloth & Deering 1999; Millis & Cottell 1998; Smith & MacGregor, 1992).

2.3.2 Conditions for CL

Collaboration and CL are not simply the result of grouping students to work together on a task. Collaborative work needs to be planned and designed in such a way so as to stimulate proper collaboration and result in CL (Austin *et al*., 2010, p. 329; So & Brush, 2008, p. 320). At the same time, teachers should be careful in how systematic and prescriptive they choose to be in designing and regulating CL, as such choices will directly impact on group dynamics and on the potential quality of collaboration (Dillenbourg, 2002). CL is a complex, multidimensional strategy and requires preparation in terms of students, teachers, context and structure (Blatchford, Kutnick, Baines, & Galton, 2003). We should also keep in mind that CL may not be the most suitable option for every classroom; considerations such as student and teacher experiences and skills in using CL, time available and task complexity need to be considered before deciding whether to use CL or not (Smith, 1996, p. 76).

Once deciding that CL is suitable and applicable, a number of conditions need to be met so that effective collaboration, learning and higher achievement can occur (Johnson, Johnson, & Smith, 1995, p. 30). Of those essential principles, *positive interdependence* and *individual accountability* lie at the heart of CL (Sachs, Candlin, Rose, & Shum, 2003; Slavin, 1988). *Positive interdependence* suggests that the success of each group member is highly dependent on the efforts of all group members; students are only successful in fully reaching a target if all their peers are successful in doing so, too (Brush, 1998).Consequently, learning outcomes are maximized for everyone when there is interaction, resource sharing and mutual support among group members than when members work individually (Johnson & Johnson, 2009; Veenman, van Benthum, Bootsma, van Dieren, & van der Kemp, 2002). In this sense, each and every member is indispensable for the group’s success.[[22]](#footnote-22)

In the same vein, group outcomes directly result from each member’s actions (Janssen, Erkens, Kanselaar, & Jaspers, 2007; Johnson & Johnson 1999a). Holding each member accountable for their contribution leads to an assessment of each member’s performance, with the group being made aware of the results. Furthermore, distributing a task among members equally so that each member’s actions are integral to task completion, ensures that each member has contributed properly to group work (Slavin, 1996),guarding against loafing and other forms of indifference (see below) (Veenman *et al*., 2002, p. 89). In all, *individual accountability* equals each member’s responsibility to aid substantially and proportionately in achieving the group’s goals (Johnson *et al*., 1995).[[23]](#footnote-23)

Other conditions cited in the literature include coordination and communication (ensuring that interdependent group actions take place in the right order and time, maximizing the success of communication among members) (Gutwin & Greenberg, 2004); group self-evaluation (having peers evaluating peers) (Johnson & Johnson, 1994); equal participation (calling for active involvement of group members in the learning process); simultaneous/face-to-face interaction (sustaining mutual support between members); group processing (reflecting on individual decisions and actions collectively, deciding what to change and what not to) (Johnson *et al*., 1995; Kagan, 1992); interpersonal and small group skills (students getting involved in their group task concurrently, employing social skills such as leadership, decision-making, conflict-management and trust-building) (Harvey, 2001); and finally, joint rewards (students receiving the same reward or penalty based on the collaborative outcome) (Zagal, Rik, & Hsi, 2006). A number of these conditions are problematized in this study (e.g., joint rewards).

The above render it evident that CL favors the collective over the individual, hence deviating from the competitive nature of the traditional classroom (Sachs *et al*., 2003, p. 339). This however, as we shall see later on, comes at a price.

2.3.3 CL features and related considerations

CL in education has been amply researched, even though higher education still lags behind the primary and secondary levels.[[24]](#footnote-24) Moreover, teachers’ role during CL and their perceptions relating to its pedagogical trends have received less attention compared to its effects on students (Ruys *et al*., 2010, p. 538; also see Austin *et al*., 2010). Despite such shortcomings, research focusing on CL’s learning outcomes and value as a pedagogical tool in the L2 classroom has resulted in a wide-ranging list of features characterizing it.

A basic tenet of CL is that each student in a group possesses a repository of knowledge and information, part of which is probably not known by other group members (Weinberger *et al*., 2007, pp. 416-7). Because of this, and because of its collective nature, CL has been found to carry numerous pedagogical benefits and facilitate L2 development (McGroarty, 1993, p. 20): it allows for increased language production and interaction opportunities in a (supposedly) low-anxiety context, hence elevating proficiency levels in the target language (Pascarella & Terenzini, 2005; Swain, 2001; Swain & Lapkin, 1989)as well asimproving learning(Ravenscroft *et al*., 1999); it exposes students to more cognitively complex ideas in the target language (Sachs *et al*., 2003); it grants students multiple outlets to seek clarifications and allows them to develop their problem-solving skills as they interact (Austin *et al*., 2010; Johnson & Johnson, 1994; Pica, Young, & Doughty, 1987); at the same time, the arising need to explain content to others provides the chance to elaborate to a measure not obtainable in non-CL environments (McKeachie, Pintrich, Lin, Smith, & Sharma, 1990).

As an educational strategy in general, CL has been claimed to enrich learning experiences in an increasingly interactive and collective context, to turn students into active agents, responsible for their own learning and considerate for the opinions of others, to call for debating and critical reasoning (Austin *et al*., 2010; Hunter, 2006; Hakkarainen, Lipponen, & Jarvela, 2002; Quarstein & Peterson, 2001; Alavi, 1994), to allow for constructive self- and peer-reviewing,[[25]](#footnote-25) and to increase students’ self-confidence and intrinsic motivation to learn and succeed, due to the feelings that classroom community, mutual support and comfort working in a group yield, hence increasing active participation and leading to greater potential for independent learning (Summers & Svinicki, 2007; Quarstein & Peterson, 2001;English & Yazdani, 1999; Williams, Beard, & Rymer, 1991). Working with others allows students to measure their progress and identify their limits; it also provides them with the chance to share their own knowledge and skills while they can benefit from their peers’ knowledge and skills (Brown & Palinscar, 1989).

In addition to the above, CL has been found to positively affect students’ social development, group cohesion and self-assurance (Veenman *et al*., 2002; Cooper, 1999;Johnson & Johnson, 1999a; Hodgson & McConnell, 1995). Furthermore, CL can lead to deep learning and better understanding of learned material as well as to greater retention of new information (Ramsden 2003; Garrison, Anderson, & Archer, 2001; Quarstein & Peterson, 2001;Alavi, 1994;Meloth & Deering, 1992; Smith & MacGregor, 1992). Pertaining to ESP, CL can provide opportunities for integrating language with content learning (McGroarty, 1992); pertinently to this study, it may also serve as a form of experiential learning, where students can see first-hand what working in a group is like (Kahn, 1995). Altogether, a CL environment has been claimed to have a positive impact on students’ intrinsic motivation and overall attitudes toward learning, by building their interpersonal and higher level thinking skills (Allen, 2006, p. 20).

Despite the long list of benefits, the CL classroom is not problem-free. In fact, the current study has encountered many of the issues below. CL implementation is proving challenging (Blumenfeld, Marx, Soloway, & Krajcik, 1996), and critics have been quick to point out that the classroom cannot really replicate experimental,[[26]](#footnote-26) carefully planned CL (Jacob, Rottenberg, Patrick, & Wheeler, 1996), that CL’s effectiveness in content understanding is debatable (Kirschner *et al*., 2006) andthat learning outcomes are not always achieved (Khosa & Volet, 2011). Further criticisms such as its excessive demands on curriculum planning, its challenge to teachers’ control mechanisms and an increased workload (Kohn, 1992), a lack of know-how concerning its actual application (Gillies & Boyle, 2010) and a lack of mutual trust and respect among group members (English & Yazdani, 1999) can dent the aspirations of teachers who wish to implement CL.

Relating to the above, group formation and management, as well as group dynamics are major issues in CL and carry their own perils. Arguing between group members and power struggles (Johnson & Johnson, 1994) can often inhibit collaboration and learning. Hence, in working with others, students need to develop skills such as task management, group decision making and negotiation skills (MacDonald, 2003, p. 378). Group cohesion, the extent to which group members are attracted to each other (Meirink, Imants, Meijer, & Verloop, 2010, p. 165), is a condition directly related to the effectiveness of collaboration and to the ability of a group to function as one (Pennington, 2002). Cohesion is linked to the way the group was formed initially: sometimes students can form their own groups while at other times, groups are formed by teachers. Self-selection may be an appealing option to students but carries a number of risks, as it normally results in friends picking friends. Ultra-high cohesion, indiscipline and a lack of diversity in experiences and abilities may be possible hindrances to a healthy group composition (Lejk, Wyvill, & Farrow, 1999). Groups may be formed that are very strong as opposed to very weak groups (Gibbs, 1995). Also, high cohesion can lead to a lack of criticality between members (Little, 2003).

On the other hand, when teachers form groups based on criteria such as student attributes and background, a more balanced cohesion may be achieved, but again, the danger lurks of higher non-compatibility among members on a personal level – especially if teachers do not know students well – leading to a diverse array of member types. Students can range from active, more proficient to passive, more shy and reluctant ones (e.g., because of a lack of motivation or because of low academic performance and ability), and from dominant, not allowing others to express opinions, to completely docile ones. Some of these trends may result in isolation from the group (Marjanovic, 1999) and *will* impact on group dynamics. The inequity that often characterizes student interactions affects the quality of learning experiences within a group; more active members tend to learn more, compared to those who are more passive (Cohen, Lotan, Scarloss, & Arellano, 1999). Interpersonal relationships and peer connectedness are considered vital for the students’ psychological well-being (Sheldon & Bettencourt, 2002; Ryan & Powelson, 1991); when students perceive the context to be controlling, negative interpersonal experiences ensue (Ciani, Summers, Easter, & Sheldon, 2008, p. 629). Additionally, more controlling contexts can have adverse effects on the students’ intrinsic motivation (Reynolds & Symons, 2001; Cordova & Lepper, 1996; Flink, Boggiano, & Barrett, 1990). Teachers should hence avoid being authoritarian or highly influential in implementing CL (Ballantine & McCourt Larres, 2007, p. 130), that is, teachers must strike a balance between moderating/regulating CL and facilitating the process if and when needed.

Following group formation, the teacher’s role as a facilitator becomes vital in managing groups and instilling them with the skills necessary for CL to occur (e.g., communication, social skills, conflict resolution, small-group and time management skills). Also, teachers should ensure continuity in the interaction between members, so that classroom community and good working relationships are realized. As previously mentioned, grouping students does not guarantee CL. Ineffective management leads to dysfunctional groups, resulting in far from optimal learning conditions (Ballantine & McCourt Larres, 2007, p. 129).

Such optimal conditions are also related to group size; this is another issue meriting consideration as it has been found to significantly affect students’ performance in, and gains from collaborative activities (Johnson & Johnson, 1994). It is widely suggested in the literature that groups should be relatively small, with four often mentioned as the maximum number (Gillies, 2003; Hammond, 2000). Bacon (2005) argues that two members are enough to materialize CL benefits, provided that positive interdependence and individual accountability are honored (p. 252). In any case, small numbers render groups more easily manageable, safeguard fairly adequate – even if minimal – diversity in backgrounds and opinions and allow even the more introvert students to contribute (Oakley, Felder, Brent, & Elhaji, 2004). In contrast, larger groups are more easily susceptible to social loafing, i.e. as group size increases, decreased motivation to contribute to the group leads to decreased effort at the expense of others (Marjanovic, 1999; Jacobs, 1998). Decreased effort by some also arises when students perceive the group to be doing more than enough, reaping the benefits of what the rest achieve with virtually no effort (the free rider effect; Hall & Buzwell, 2013; Morris & Hayes, 1997; Strong & Anderson, 1990). Upon realizing that there are free riders within the group, those students doing most of the work in turn may decrease their efforts, refusing to assist the former (the sucker effect; Veenman *et al*., 2002;Kerr, 1983)**.** Additionally to the above, the larger the group, the fewer opportunities students have in participating, and the more difficult it can be for the less proficient ones to express themselves or contribute meaningfully (Bacon, 2005). As a teacher/researcher, I think that the one advantage larger groups have compared to smaller ones, i.e. greater resources emanating from a larger pool of participants (Bacon, 2005, p. 252), does not atone for the multiple benefits smaller groups offer (e.g., see Bacon, Stewart, & Stewart-Belle, 1998).

The aforementioned complications add to the concerns leading many teachers to giving up on CL or being more reluctant in employing it. Such concerns range from the organizational demands of designing syllabi extensively integrating CL, to the sustained effort required and to the challenges their control mechanisms are subjected to (Marjanovic, 1999; Kohn, 1992). Moreover, covering course content, allocating time effectively (Smith & MacGregor, 1992), a lack of training and a resulting lack of understanding how CL is to be employed (Gillies & Boyle, 2010; Gillies, 2008) and finding ways to manage and assess collaborative work as well as to motivate students who are accustomed to more individualistic modes of learning are also proving problematic. Also, those who were themselves educated in individualistic environments find it more difficult to opt for a different teaching style (Lunenberg & Korthagen, 2005).

Assessment, in particular, is a main area of concern in CL. Being students’ major extrinsic motivator, assessment is challenging for both them and teachers, no matter how well-designed a course is (Quarstein & Peterson, 2001, p. 62; Bostock, 1998, p. 226). The nature of education is such that individuals are awarded degrees based on grades and on the successful completion of coursework; teachers, therefore, need to mark individuals, not groups (Hunter, 2006, pp. 76-9). The ensuing problem with CL is that teachers need to be fair in assessing the group and in assessing each of its members (Brown, Bull, & Pendlebury, 1997). In collaborative tasks, assessment typically revolves around (a) the quality of the group task and, (b) the contribution of individual members (Bacon, 2005, p. 250; MacDonald, 2003, p. 386). However, while *what* to assess may initially seem straightforward, things get more complicated regarding *how* to assess and *who* to assess. Should there be a common group grade and individual member grades or should only one of the two be graded? If both group and individuals are graded, what percentage should amount to each and how can teachers know who did what? It has been argued that to support group ethos and mutual respect, there should only be a single grade for the group (Lejk *et al*., 1999). This, however, would increase the incidence of loafers or free riders.[[27]](#footnote-27) Others suggest that individual accountability, one of CL’s core elements, is possible only if members are graded individually (Slavin, 1996; Cooper, Robinson, & McKinney, 1994).

In the case of (also) assessing individuals, fair means of determining each person’s contribution need to be adopted (Roskams, 1999, p. 82). This would probably not have been brought up in classrooms thirty years ago. However, teachers’ and students’ roles have since changed, and especially in CL settings, the latter are now substantially more accountable for assuming responsibility for their own learning and for evaluating each other (Bradley *et al*., 2010, pp. 250-1). Hence, peer assessment is one way suggested in the literature, as a generator of ideas and aspects of content that teacher assessment cannot provide (Rollinson, 2005;Heywood, 2000, p. 374; Brown *et al*., 1997, p. 174), with concerns voiced however over its propensity to yield largely similar grades, as well as over the actual willingness of students to either criticize their peers (Wiliams, 1992) or to rely on them for their grades (MacDonald, 2003, p. 386). In short, the competitive, individually rewarding nature of higher education learning can conceivably turn students against collaborative work (Naismith, Lee, & Pilkington, 2011, p. 229). There are of course also those who propose that assessment should be commonly executed by peers *and* teachers as the two are regarded as being complementary. Teachers can hence assess linguistic features whereas peers can complement that with content-based feedback (Rollinson, 2005; Falchikov, 1993); this last solution may be worth applying in ESP settings, where, as previously mentioned, teachers often lag behind their students regarding content knowledge. Others have dismissed the idea of peer assessment altogether, instead suggesting that groups should merely “fire” those members who are violating group protocols (e.g., free-riders) (Bacon, Stewart, &Silver, 1999; Kahn, 1995).[[28]](#footnote-28) Finally, technology has been employed as another way of determining how much effort individuals have put into a shared task.

Picking up from this last point, the next part focuses on CTs and their classroom application. Given that this thesis looks into students’ and teachers’ perceptions and practices of CL in their ESP, with technology and Web 2.0 being key means of implementing it, what follows is an overview of *how* these means can assist in embedding CL in the ESP classroom.

2.3.4 Collaborative technologies

Technology in education is not a recent phenomenon, having had a profound effect for decades now (Butrime, Marciulyniene, & Valteryte, 2010, pp. 161; Beatty & Nunan, 2004, p. 165). Consequently, through the years, a vast body of research has been amassed on numerous technological innovations and their instructional use (e.g., Wang & Vasquez, 2012; Kim, 2011**;** Stevenson & Liu, 2010; Cole, 2009; Larusson & Alterman, 2009; Ranalli, 2008; Sanders, 2006). Of course, as technology progresses and many of the tools are no longer around, such research can quickly become outdated, although not necessarily insignificant, as knowledge of past practices can be an important benchmark for current and future ones.

In recent years, with the advent of the Internet and its second, currently ruling, generation of applications (Web 2.0),[[29]](#footnote-29) instructional technology has proliferated and moved on to a different level altogether. This type of technology has brought about a shift from learning consumption to learning production (Halverson, 2011, p. 63). The use of this technology is particularly attractive to those students who use social software and Web 2.0 in general for purposes beyond their education (“digital natives”; Gillespie, 2008, p. 122). Where I teach, this applies for the vast majority of students and I would assume this holds true globally – at least in the developed world – thus rendering technology’s integration into their learning one of contemporary education’s main issues (Kemp, 2011; Bradley *et al*., 2010).

Before moving on, I should note two things: first, besides the traditional setting of the classroom, technology is increasingly used in distance/online learning modes.[[30]](#footnote-30) However, this thesis only focuses on the former. Second, I should also note that technology comes in many guises in the literature. Notions such as computer-assisted language learning (CALL), computer-supported CL (CSCL) and computer-mediated communication (CMC) are all employed to address the various facets of 21st century instructional technology. Rather than limiting myself to a single notion, throughout the thesis, I use the term *collaborative technologies* (CTs) tospecifically refer to those types of digital technologies with the capacity of fostering CL in educational settings.

This capacity of fostering collaboration is remarkable in its range, given that the technological innovation caused by Web 2.0 has been around for no more than fifteen years and that teaching and learning were not the main reasons behind its original appearance (O’Reilly, 2005). Its inherent capabilities though have resulted in the designing of countless instructional tools (Blin, 2004, p. 380). As a largely unchartered area to date, especially in higher education, it provides fruitful grounds for research.

A note here is needed regarding what the idea of ‘collaborative technologies’ entails notionally. By terming these digital technologies ‘collaborative’, I refer to their *potential* to afford users opportunities for collaboration rather than to them being collaborative by default. The implication emanating is that what essentially render these technologies collaborative or not are the actual uses teachers and students put them to. This point raises the stakes for teachers who, in wishing to implement a collaborative pedagogy scaffolded by such technologies, should be employing these in ways that actually promote collaboration (as touched upon elsewhere in the thesis). The danger looming though, is that these technologies can also be used in ways which could unsettle the classroom and eventually harm the efforts of implementing related collaborative pedagogies; for example, implementing technologies students are unfamiliar with and asking them to engage with them without fully explaining their function can ‘disrupt the activity and change its object’ (Blin, 2004, p. 385). Another example would be using synchronous tools (e.g CollPad) where all members of groups need to wait for everyone in all groups to finish their bit before moving on (Nussbaum, Alvarez, McFarlane *et al*., 2009, p. 152); allowing students time doing nothing can prove disruptive for the entire classroom. Finally, once a specific technology is integrated into the curriculum for whatever learning objective with the purpose of being employed collaboratively, teachers should make sure it is employed as such by students, avoiding incidents where some students use the technology collaboratively and some use it individually, or even worse, do not use it at all.

Having cleared the air regarding what ‘collaborative technologies’ stands for in this thesis, it is now time to address their features and look at related existing research.

2.3.5 Features of collaborative technologies and existing research

There are two striking similarities between CL and CT classroom integration: here, too, research has shown that the use of CTs calls for careful planning and neat pedagogical integration (Tsuei, 2011). Also, employing technologies supporting collaboration does not automatically lead to successful CL (Krejins *et al*. 2003; Lipponen *et al*., 2003).

Web 2.0 embraces a vast array of Internet applications and tools (e.g., blogs, wikis, social networks, podcasts) (Minocha, 2009; O’Reilly, 2005). Such applications are increasingly being integrated in higher education curricula as they have been found to have positive effects for learning, with their results on a par, if not higher, to those of more conventional instruction (e.g., Christmann & Badgett, 2003; Schacter & Fagnano, 1999). Even though technology allows for both independent and group learning (Solimeno, Mebane, Tomai, & Francescato, 2008, pp. 109-110), its inherent collaborative framework renders it a perfect fit for the CL-based classroom (Francescato, Porcelli, Mebane, Cuddetta, Klobas, & Renzi, 2006, p. 165) and I would suggest this also applies for the ESP classroom. As a supplement to other teaching and learning methods and as a mediational tool, Web 2.0 can be put to a plethora of uses to support peer learning, and further facilitate teachers and students (Koschmann, 1996).

Regarding language learning in particular, CTs provide enhanced semantic and morphosyntactic understanding by fostering negotiation in the target language (Lee, 2002; Loschky, 1994). Although writing is CL’s main medium – and Web 2.0 tools have been found to improve writing by allowing users more opportunities to practice and assume ownership (Tsuei, 2011; Storch, 2005) – there are features offering ample practice in the four main skills (speaking, listening, reading, writing) (Wang, 2008, p. 190). In fact, intensely collaborative tools such as wikis and blogs (Godwin-Jones, 2003; Leuf & Cunningham, 2001) allow users to edit audio, written and visual content, publish content and form social networks; they also steer language students toward authenticity by communicating with other speakers, thus leading to collective intelligence (Ashraft, 2009; Warschauer, 1996b). These tools call for users to become participants (Hung, 2011), encourage feedback and promote critical thinking (Godwin-Jones, 2006), facilitate peer-review (Xiao & Lucking, 2008) and can act as monitoring devices (Huang & Hung, 2009; Trentin, 2008), hence offering a solution to the aforementioned problem of assessment. However, their implementation in higher education language learning contexts remains limited (Bradley *et al*., 2010, p. 249). At the same time, being collaborative tools means that less proficient users can benefit from more advanced users, in terms of guidance, encouragement and feedback (Hung, 2011, p. 737), rendering such tools compatible with constructivist models of learning.

With regard to ESP, what I have seen first-hand in designing and implementing curricula with heavy CL and CT components for the past six years, is that CTs possess a remarkable capacity to expand the spatiotemporal boundaries of the classroom (see Del Puerto & Gamboa, 2009, p. 139; Belcher, 2004, p. 173). The Internet and its technologies can provide rich online and offline resources (Wang, 2008, p. 191); in short, they can be seen as a limitless pit of authentic material for any content area conceivable. This is important given that ESP teachers (as noted in Section 2.1) often need to prepare their own material due to a lack of adequate books and limitations in familiarity with subject-specific content, and also given their students’ considerable diversity in backgrounds and knowledge (Fernandez, 2000, p. 258).

Consistent with constructivism, one of the most notable changes CTs have triggered is a shift in teachers’ and students’ traditional roles. Regarding students, CTs have shifted their role into active, more independent learning agents (Wang, 2008, pp. 189-90), leading them toward assuming control for their learning and consequently, toward autonomy (Benson, 2001, p. 139). Whether students are ready for autonomy, independence, or for the innovation, merits a whole new discussion (Raya & Fernandez, 2002, p. 62). Here, it suffices to say that, despite the benefits mentioned above, not all students favor embracing an inherently student-centered approach like the one CTs promote (Marjanovic, 1999, p. 130). The introduction of CTs has also altered teachers’ role and the amount of control they used to exercise (Raya & Fernandez, 2002, p. 62). Importantly, rather than considering that technology has substituted teachers, a large chunk of the literature regards teachers as an indispensable component of this innovation, as they are the ones in charge of educating and supervising students on using those technologies effectively (e.g., Austin *et al*., 2010; Webb & Cox, 2004).In terms of role shift, from being lecturers, in employing CTs, teachers become mediators, guides, coordinators, facilitators, and moderators (Persico, Pozzi, & Sarti, 2010; Son, 2002). Such role changes, render students’ and teachers’ perceptions of CL and CTs crucial; these perceptions, along with their overall ability and experience of using technologies, directly affect the degree, quality and way of their involvement in CL (e.g., Prinsen, Volman, & Terwel, 2007; Kagan, 1994).

As with technology in education in general, research into the use of technology in tertiary language learning is not a new phenomenon. However, research linking CTs with CL in such contexts is still relatively young and limited, usually focusing on one of the two, which is understandable given that CT tools have only been around roughly since the turn of the century (Baker, Bernard, & Dumez-Féroc, 2012, p. 161; Kessler & Bikowski, 2010, pp. 43-4; Francescato *et al*., 2006, p. 165). This can partly explain why policymakers may be skeptical or cautious in integrating CTs in CL curricula.

Wang (2008) found that higher education students were positive toward technology integration, stressing skills-, learning- and social-related benefits. However, it also became apparent that the combination was not always efficient, due to technical difficulties causing frustration and due to a lack of computer literacy that disadvantaged the less literate technology users. Kitchen and McDougall (1998) reported positive student perceptions with CL but no significant correlation between that and their computer literacy. Focusing on students collaborating through a wiki, Kessler and Bikowski (2010) found that interaction and language use benefited from using such an environment; however, teacher expectations were not met regarding how students actually used the technology. Felix (2002) reported on two studies examining student perceptions of the use of technology for language learning. The vast majority of the 208 students (104 from higher education, 82 from secondary and 22 from primary education) employed technologies complementary to face-to-face teaching, with promising results. Regarding higher education students, less than a fifth felt uncomfortable with using web technologies. Reported web-related advantages included flexibility, rich information, authentic materials, capacity for repeating tasks, computer skills development, and learning reinforcement. These far outweighed the perceived disadvantages (e.g., no speaking practice, lack of peer interaction, lack of feedback). Kim (2008) interviewed ten teacher students (from novice to seasoned professionals), and found that they favored using CALL technologies, but mainly as supplements to other instructional techniques. Additionally, the sample seemed to favor teacher-centeredness, therefore not really embracing CL. In a university German language class employing blogs, Dippold (2009) examined both students’ and teachers’ perceptions of the facilitative role of CTs in peer feedback and came up with positive views and anticipated profits; however, teachers expressed a need for more careful tool evaluation, more intensive training and a need for abandoning more traditional tools in favor of the more innovative Web-based ones. Finally, Wiebe and Kabata (2010) looked into the perceptions of 183 university language students and of seven teachers toward technologies in general. Teachers were mostly positive toward their implementation in the classroom, but over-estimated both how much time their students actually devoted to using those technologies for the purposes of their classes as well as how well they themselves believed they explained technology use to their students. Students, on their part, generally held positive views regarding technology usefulness. However, teacher and student perceptions of technologies did not always match, showing that, despite being in the same class, it should not be assumed that the two share similar views on how technologies should be, or are, used.[[31]](#footnote-31)

The limited research, as stated above, means that few studies have compared and contrasted student and teacher perceptions of CL and CTs (Wiebe & Kabata, 2010, p. 221; Brown, 2009, p. 47) and even fewer have done so within an ESP context.[[32]](#footnote-32) Even so, existing research shows that CTs can raise teaching and learning quality (Wang, 2008, pp. 189-90; Bennett, 2003; cf. Dillenbourg, 2002), enhance accessibility, allow for the instant sharing of knowledge, offer active support, provide means for immediate feedback, and aid CL (Wang, 2008; Boulos & Wheelert, 2007; Schofield & Davidson, 2002). CTs have the capacity to facilitate deep learning and higher-order cognitive processes and increase social interaction between students, inviting exchanges of arguments and ideas and sharing of information, leading to knowledge construction (Trentin, 2008; Prinsen *et al*., 2007; Alexander, 2006; Boulos, Maramba, & Wheeler, 2006; Lehtonen & Tuomainen, 2003; Baker, Levy Cohen, & Moeller, 1997). Furthermore, as collaborative components, they can act as motivators, since students usually wish not to disappoint their group members (Wang, 2008; Kramarski & Feldman, 2000;Ravenscroft, Buckless, McCombs, & Zuckerman, 1995). However, as mentioned in the discussion on CL, this does not always happen.

Turning now to language teachers’ reasons for integrating CTs in their practice, these range from ease of use and usefulness (Davis & Venkatesh, 2000), to their capacity of offering authentic material (Lam, 2000)andlinking students with native speakers (Egbert, Paulus, & Nakamichi, 2002). However, implementing CTs is not easy for teachers; a lot of commitment, in terms of time and energy, is required (Del Puerto & Gamboa, 2009; Salmon, 2004), which sometimes turns them against using these technologies. Other reasons that reportedly act as barriers include resistance to change of pedagogies and teaching style, absence of models, lack of knowledge, experience and confidence, age, budgetary constraints, lack of training, lack of belief in technology’s efficacy, problematic management and a perceived threat to their status (e.g., Urhahne, Schanze, Bell, Mansfield, & Holmes, 2010; Del Puerto & Gamboa, 2009; Collis & Moonen, 2008). Many of these problems arise from the fact that teachers need to adapt quickly to the ceaseless rhythm of development; I would concur with Caverly and MacDonald (2004) and Wang (2008) in arguing that continuous and quality professional training and development are of the utmost importance if teachers are to be able to cope with the evolution brought about by technology.

2.3.6 Linking CL, CTs and social constructivism

Following a thorough analysis of CL, CTs and social constructivism, here are the links between the three notions. Recalling the preceding discussion, CL and CT features include social connectivity, reflectivity, collaboration and interactivity. Furthermore, both CL and CTs, the latter as a mediatory tool, hand students the responsibility for their own learning, turning them into knowledge generators (Austin *et al*., 2010, p. 328). Via their numerous pedagogical advantages, CL and CTs can provide opportunities for efficient scaffolding and active learning, promote accountability and interdependency, engage students in meaningful interaction and advance knowledge building, hence aligning with social constructivist theories of learning (Ruys *et al*., 2010, p. 537; Hartshorne & Ajjan, 2009, pp. 184-5; Moreno, Gonzalez, Castilla, Gonzalez, & Sigut, 2007, p. 894; Prinsen *et al*., 2007, p. 393; Beatty & Nunan 2004, p. 179). Felix (2005) suggests that some authors even view the constructivist approach and CL as being synonymous (p. 85). Surely, the ideas of interacting and collaborating with peers and teaching one another within a social context, thus affording students the opportunity to co-construct knowledge via meaning negotiation, heavily echo Vygotsky’s ZPD and align with the social constructivist tenet that the social context provides the framework where knowledge is constructed by individuals via interaction between them (So & Brush, 2008, p. 320; Allen, 2006, p. 13). I would not go so far as to suggest that CL and social constructivism are one and the same but I would argue that social constructivism *is* the basis for collaborative pedagogies that entail instructional technology (Hung, 2011, p. 737; Tsuei, 2011, p. 216; Solimeno *et al*., 2008, p. 109;Stepp-Greany, 2002, p. 167).

Research on constructivism suggests that Web technologies can invariably aid teaching. Indeed, a classroom environment characterized by authenticity, active knowledge construction, ownership of materials taught and attention to students’ interests – all key principles of a constructivist philosophy, mediated by CTs – engages students in experiential learning and can lead to better skills and knowledge acquisition (Felix, 2002, p. 3). At the same time, interaction between peers and a consideration of their often different viewpoints are components absent from individual learning (Szewkis, Abalos, & Tagle, 2011, p. 561). Moreover, the collaborative, social nature of learning is vital not only for students’ education but also for their lifelong professional learning, given that learning at the workplace is mainly socially constructed and maintained (Eraut, 2007, p. 409). In Vygotskian and Deweyan thinking, learning is not an action happening in isolation but is rather a lifelong, collaborative process (Petraglia, 1998, p. 54). Furthermore, constructivist-oriented language learning curricula with a technology component can raise students’ awareness on a linguistic as well as on a communicative level (Rüschoff & Ritter, 2001 p. 224). It should also be noted that older students have been found to take to CL environments better than younger ones (Tenenbaum *et al*., 2001, p. 90). All the above render CL, CTs and constructivism a promising pedagogical trinity for tertiary ESP.

2.3.7 Summary

This section concludes my literature review, where a number of links between CL, CTs and social constructivism have been drawn. To the best of my knowledge, no single study has attempted to examine the three notions within an ESP framework in the way my research attempts to do. Considering that context is also a powerful parameter affecting student and teacher perceptions (Naismith *et al*., 2011; Rick & Guzdial, 2006), I would suggest that this case study in an ESP environment is an original piece of research, both in my local context as well as globally.

Having contextualized my study in terms of my ontological and epistemological stance, what follows is the chapter on methodologies and methods. I first introduce readers to my research design and to case study research. In Section 3.2, I address ethics, including insider (endogenous) research and also discuss other key considerations such as bias and researcher values. Then, in Section 3.3 I visit methodological triangulation and present the research instruments employed (3.4-3.6). In Section 3.7 I introduce readers to my sampling and piloting procedures while in Section 3.8 I focus on my data collection procedures. In the final two sections, I look at transcription/translation (3.9) and coding/analysis (3.10).

**Chapter 3 - Research Design**

This is a qualitative case study employing thematic analysis. In this section, I introduce readers to qualitative research and to case study and contextualize my choice of methodology and methods in terms of my ontological and epistemological viewpoints. Following this introductory section, the rest of the chapter is structured as follows: a section on ethics (3.2) discusses various considerations relating to insider research, informed consent, reflexivity, bias and researcher values. A section on methodological triangulation (3.3) leads to the research tools employed in this study: individual in-depth and group interviews (3.4), a qualitative questionnaire (3.5) and a reflective journal (3.6). Following that, sampling and piloting (3.7), data collection (3.8), interview transcriptions (3.9), and coding and thematic analysis (3.10), are all addressed comprehensively.

**3.1 Methodologies and Methods**

The qualitative methodology and methods employed here concur with, and result from my ontological and epistemological positions, namely interpretivism and social constructivism. Arguing in favor of the qualitative paradigm, Merriam (1988) maintained that education’s knowledge base and practice gain significantly from research focusing on “discovery, insight and understanding from the perspectives of those being studied” (p. 3). The case study methodology I employ here aligns with this claim.

Before addressing case study, it is imperative to briefly look at the centuries-long “war”, as Gage (1989) so succinctly puts it, between research paradigms. One of the major causes for this tension has always concerned reality and how it is conceptualized. Both social constructivism and interpretivism regard reality as socially constructed, multi-layered and complex rather than singular and verifiable (Cohen *et al*., 2005, p. 22). The former sees the world as a construct of multiple realities and it is only through a qualitative methodology and a value-laden axiology that people get to subjectively know those realities (Jennings, 2005a, p. 212; Merriam, 1988, p. 17);[[33]](#footnote-33) the latter considers how people construct and reconstruct reality based on different rationalization processes, perceptions and meanings attached to language and how all this renders reality and knowledge context-dependent (Bassey, 1999, p. 43). Related to the issue of multiple realities is subjectivity. Interpretivism regards all knowledge as subjective and contextualized (Bacon, 2005, p. 250).Context in particular is a keyword in this ontology; arguing that reality and knowledge are context-dependent means that responses by the same participants to a given question could be different under different conditions. This resonates well with Reason’s (1998) claim that knowledge is always perceptive- and purpose-driven and that our thought is constantly susceptible to shift (pp. 280-1). In addition to the above, Cohen *et al*. (2005, p. 22) argued that simplistic interpretations do not do justice to many events taking place; what is needed are “thick” descriptions (Geertz, 1973) rather than reductionism. The thematic data analysis I employ serves this purpose well (Boyatzis, 1998, p. vii). This is where qualitative inquiry as a *bona fide* interpretivist methodology fits in.

Equally important to reality and subjectivity are the notions of bias and of value-laden research, which have imprinted on the interpretivism-positivism, qualitative-quantitative dichotomy for ages. To my understanding, no paradigm can attain absolute value-freedom, neutrality and impartiality (cf. positivism, quantitative research). Researchers carry their own values, biases and perceptions concerning how reality is constructed into their work, and those can infiltrate the research process to varying degrees (Foster, 2009, p. 18; Seidman 2006, p. 127; Strauss & Corbin, 1998, p. 43), depending on the researcher’s effort – and willingness – to regulate them through certain techniques (viz. reflexivity, triangulation, member checks etc.; see further below) (Taft, 1999; Lincoln & Guba, 1985). However, despite the presence of such techniques, there are no foolproof ways to eliminate researcher bias (Davis, 1995, p. 437). Researcher bias has been reported to be a feature of various qualitative modes (e.g., feminist research; Haig, 1999, p. 223); ethnography (Cohen *et al*., 2005, p. 78); critical ethnography; Quantz, 1992, p. 473–4) and social constructivism (Jennings, 2005a, p. 212). It has also been argued to be present in quantitative methodologies (e.g., Olsen, 2004; Patton, 2002).

The inexorability of value-ladenness is not to say that researchers should not strive for value-freedom but rather to suggest that they should be reflexive and acknowledge which biases and perceptions have penetrated their research and in what ways those have affected their interpretations (Strauss & Corbin, 1998, p. 43). In other words, instead of viewing researcher bias as a shortcoming, we could use it as a source of insight (Axinn & Pearce, 2006, p. 54; cf. Porto, 2008, p, 692). The techniques employed in this case study to guard against researcher bias (namely triangulation, reflexivity, transparency among others), aim to that end.

Having said the above, both interpretivism and social constructivism seem to align with the main theme of my research, that is CL and CTs, due to the theme’s context-dependent, situated nature (Strijbos & Fischer, 2007, p. 390).[[34]](#footnote-34) The essence of this case study called for qualitative over quantitative inquiry. Given that my research questions concern participant perceptions and practices, an interpretive, qualitative methodology that would allow me to collect data and analyze them in order to address those questions comprehensively was the most appropriate choice. Additionally, since as a researcher I accept research as being a value-laden endeavor, qualitative methodology affords me with the opportunity to use a number of techniques to manage bias, preconceptions and intrusion of values as effectively as possible. Of course, there are examples in the literature where perceptions and practices have been explored with the use of quantitative methodologies (e.g., Sullivan, 2006; Wozney, Venkatesh, & Abrami, 2006). At the same time, qualitative methodologies and methods are also employed extensively in case studies similar to mine (e.g., Hall & Grisham-Brown, 2011; O’Neill, 2011; Pittam, Elander, Lusher, Fox, & Payne, 2009; Wu & Badger, 2009; Perry, Lennie, & Humphrey, 2008; Kollias, Mamalougos, Vamvakoussi, Lakkala, & Vosniadou, 2005).

Having explained my choice of a qualitative methodology, let me now turn my attention to the case study design this research employs.

3.1.1 Doing case study

A case study is the study of a case. Focusing on its use in education, case study findings may be used to inform practices (e.g., teaching, administrative), judgments or decisions (e.g., curricular revisions) and policies, *inter alia***.** The great variation in the *why* and the *how* to go about studying a case though, leads to little agreement among authors on what exactly constitutes case study research (Merriam, 1988, p. 1).[[35]](#footnote-35) Its multifaceted nature does not put case study at a disadvantaged position; on the contrary, that it can accommodate a multitude of methods and purposes, including qualitative and quantitative approaches (Yin, 2009, p. 19; Sturman, 1999) renders it a useful tool.

What has become apparent after reviewing a large number of case studies[[36]](#footnote-36) is the existence of four effectively ever-present distinguishing features: empirical investigation, contextual aspects, triangulation and the researcher’s role. *Empirical investigation* is needed so that researchers fully understand a case and account for the occurrence of certain events or behaviors (Sturman, 1994, p. 61) that affect, concern, or otherwise define the case. It is through empirical investigation and by means of collecting sufficient data (Bassey, 1999) that researchers are able to sketch a case in detail (Creswell, 1998; Merriam, 1998; Stake, 1995) and interpret the words and actions of participants (Maxwell, 2005; Patton, 2002; Merriam, 1988).

This empirical investigation is *context-specific* in that a phenomenon is best studied as a bounded system, in its natural habitat, where researchers can directly observe and examine the various parameters (Jennings, 2005b, p. 218). The context can be an institutional one (e.g., a school), a geographical one (e.g., a district), a temporal one (e.g., a timeframe) or any other form that would enable researchers to draw boundaries around the case. What defines context is the actual purpose of the case study, the characteristics and roles of the institutions or individuals involved (Hitchcock and Hughes, 1995, p. 319) and the researcher’s own agenda, aspirations, and even limitations.

The use of several methods (*triangulation*) allows researchers to check for data convergence and also leads to the acquisition of advanced knowledge concerning the case(s) under study (Jennings, 2005b, p. 226; Yin, 1994, p. 13). That the qualitative researchers need to explore and represent multiple perspectives and realities renders triangulation – as the one method allowing for a legitimate enrichment of the case’s databank – vital. Having said that, we should remember that, as previously mentioned, representativeness is not the main criterion in choosing a case to study. Even though opting for a typical case can be useful when aiming to generalize findings, it also stands true that infrequent events or behaviors may be crucial to understanding a case. This means that quantity can be substituted with quality, intensity and significance, since case studies do not *necessarily[[37]](#footnote-37)* need to seek for frequencies of occurrences (Cohen *et al*., 2005, p. 185). Therefore, I conclude that triangulation in case studies acts in a slightly different way to how it acts when employed in other research methods.[[38]](#footnote-38)

The fourth distinguishing feature concerns the *researchers’ role*. In case studies, researchers are considered to be the primary instruments for data collection and analysis (Merriam, 1988, p. 19). Exactly because of their interaction with the context, case study researchers constantly face criticisms of bias and preconceptions infiltrating research. This is further discussed in Section 3.2.

3.1.2 Types of case study

There are different types and kinds of case studies, depending on their purpose, outcome, and other special features. However, a disparity is evidenced in the literature concerning this categorization. Yin (1993) divided case studies into exploratory (acting as pilots to other studies), descriptive (providing a narrative of a phenomenon within its real-life context) and explanatory (as theory-testing mechanisms) (p. 5). In terms of their end product, Merriam (1988) split case studies into descriptive (aiming to present a detailed account of a phenomenon), interpretive (adjacent to Yin’s explanatory type, their purpose being to test assumptions) and evaluative (aiming to explain and assess) (pp. 27-8). Merriam also talked of four further kinds of case studies (ethnographic, historical, psychological and sociological), based on the methods employed in each (pp. 23-6). Sturman (1999) talked of the ethnographic, action research, evaluative and educational kinds (p. 107). Finally, Stake (1994, 1998) talked of instrumental case studies (aiming in refining a theory or gaining more information on the studied phenomenon), collective case studies (where a group of cases is examined to gain a fuller understanding of a phenomenon), and intrinsic case studies. This type sees the particular case as an interesting one to study and seeks to gain a better understanding of it, regardless of its representativeness. The purpose of an intrinsic case study is not to build a theory *per se* but rather to study this one phenomenon and – if possible – attempt to generalize findings to a wider context. This type is consistent with how the social constructivist and interpretive paradigms view case study as a research method, i.e. as the means by which to extensively look into a particular phenomenon (case) or phenomena (cases) within a real-life context with the use of multiple tools (e.g., interviews, observations) (Robson, 2002, p. 178). The present study adopts this latter type.

3.1.3 Why case study?

It is a basic tenet of research that a chosen design is determined partly by the researcher’s likings and partly by the problem itself, its questions and by the kind of anticipated outcome(s) (Merriam, 1988, p. 6). Although other methodologies could also be used to study the present case, there were mainly four reasons that, taken together, meant that the case study design best fitted the purposes of my research questions and overall aims. First, a case study highlights the exploratory nature of this study; i.e. its purpose is to examine a phenomenon (CL and CTs) (Merriam, 1988,p. xii). Second, through using multiple techniques, it allows for the establishment of research soundness and trustworthiness (for example, case study endorses triangulation as a standard feature, thereby collecting richer data and enhancing the authenticity and credibility of findings; Perry *et al*., 2008, p. 30). Third, as a design, the case study pays particular emphasis on the participants’ voice and aids in acquiring a greater understanding of an aspect in education which may lead to practice improvement (Luke, 2006, p. 72; Merriam, 1988, p. xiii). Finally, the literature suggests that when the object of one’s study is one’s own institution as is the case here, then quite often this necessitates case study research (Trowler, 2011, p. 3); the interpretations and knowledge offered by case study research are rendered legitimate because they are based on empirical rather than theoretical grounds. The implication is that, particularly for researchers studying their own institution, “insider” knowledge is the basis for judging the robustness of data analysis and of subsequent conclusions (Thomas, 2011, p. 33).[[39]](#footnote-39)

A short note is needed here on why this is a single- rather than a multiple-case design. This choice was dictated by my research questions and by my sampling criteria, which required an advanced ESP course extensively integrating CL and CTs. At the time of the study, there was only one such course running, and that rendered this a unique case.[[40]](#footnote-40) Having said that, I consider the criticism against single case studies for being inferior to multiple case studies because of their one-dimensionality as simplistic; single-case studies are also multiple, in that it is possible for ideas and findings to be linked in many different ways (Ragin, 1992, p. 225), hence rendering a multitude of interpretations possible. Additionally, from an epistemological viewpoint, the singular case has value in and of itself; what and how we learn from it ultimately derives from its similarities and differences to other cases (Stake, 1998, p. 94). In that way, case studies are inter-linked, hence greater understanding is gained into the workings of each particular case study; this enhances their strength as a research method.

3.1.4 Strengths and criticisms of case study research

This subsection focuses on case study strengths and criticisms. It discusses research soundness and problematizes the criteria employed in quantitative research (reliability, validity, objectivity), suggesting the use of *trustworthiness* and *authenticity* as the operational concepts to be employed here. It also introduces a number of techniques to establish those qualitative criteria.

Case study’s strengths and limitations inevitably had a bearing on the course of the present study. Case study is a research design with numerous benefits. One advantage is its ability to penetrate certain situations deeply, in ways that other kinds of analysis (e.g., numerical) would find difficult to do. Being a study of real-life situations in their real-life contexts, means that it can present interpretations based on experiential knowledge rather than on abstract theories. Contexts are dynamic, therefore subject to change (Cohen *et al*., 2005, p. 181). Case study appreciates that and offers context-dependent and context-specific interpretations. Pragmatically, then, the knowledge case study produces is judged on its degree of understandability and applicability (Kenny & Grotelueschen, 1980, p. 41). This is in line with Stake’s (1998) argument that the aim of a case study is representing the case, not the world. Still, there have been calls that this capacity for in-depth exploration has an adverse effect on case study’s ability to generalize its findings, given that those may be specifically embedded in a particular context (Yin, 2009, pp. 15-6; Bliuc, Goodyear, & Ellis, 2007, p. 236;Davis, 1995, p. 441). As a researcher, I oppose such criticism: I believe case study *can* offer the basis for generalizable knowledge to the extent that this is supported by extensive, sound evidence, much like it happens with other forms of research (Cohen *et al*., 2005, p. 182). Moreover, it has the potential for transferability and confirmability and can offer generalizable implications.[[41]](#footnote-41) Although the case study is a context-specific endeavor, it has been maintained that it is still able to extend its interpretations to other contexts, provided it achieves sufficient understanding of those interpretations (Taft, 1999, p. 119; also see Bassey, 1999). But even if case study does not aim at generalizability – as it happens here regarding findings – this would not belittle its value because generalization is not the ultimate purpose of all research (Stake, 1998, p. 91). A study has value in its own right, irrespective of whether its results are extended elsewhere or not – even more so when the study under question is one that looks into a unique instance that merits being researched.

Another strength of case study is the richness of data obtained and the access this allows to a number of data sources (Jennings, 2005b, p. 226). This results in outcomes becoming more easily comprehensible. Linking this to the point made above regarding generalization, data richness also provides researchers, and readers, with insight into similar situations, hence assisting interpretations for related cases, too. The in-depth nature of data collection methodologies in case study research means that a number of significant, unique features are collected that other methods (e.g., surveys) may not be able to attain (Cohen *et al*., 2005, p. 184). It also compensates for the criticism that case study does not establish causal relationships (Yin, 2009, pp. 15-6). Establishing causal relationships is not an indispensable research goal; it may be regarded as one of the strengths of experimental methods, but, as exhibited here, the strengths of case study lie elsewhere.

In contrast to other methods which show a preference for controlling their variables (e.g., quantitative research), case studies have the freedom to study any kind of parameter without needing to regulate it. In addition, case studies are strong in building in unexpected events; whereas in quantitative inquiry, such events may force researchers to major overhauls, in case studies such unforeseen occurrences simply become part of the study and are examined as they unfold (Flyvbjerg, 2006, p. 235;Cohen *et al*., 2005, p. 184). In essence, case study is especially of value when researchers have little control over events (Hitchcock & Hughes, 1995, p. 322).

Turning now to its soundness as a research design, case study has been criticized with regard to subjectivity, bias, theory, triangulation, case selection and ethics. I should stress two points here: one is that such criticisms can also apply to other methods (Flyvbjerg, 2006, p. 235). The other is that such criticisms can be countered, and this is done systematically throughout the thesis. Case studies have also been labeled a “soft” form of inquiry, lacking rigor (Yin, 2009, pp. 15-6). Nothing could be further from the truth. As we shall see, qualitative inquiry demands methodological sophistication (Silverman, 2005, p. 209) and has its own rigor, which may be different to, but as strict as that of quantitative methods (Flyvbjerg, 2006, p. 235; Guba & Lincoln, 1981, p. 378). Case study is no less thorough and meticulous than any other method despite the limitations this meticulousness burdens it with, in terms of time and resources needed (Jennings, 2005b, p. 226). Regarding this case study, the systematic procedures followed, a well-ordered research, and a number of techniques (e.g., (self)reflexivity, peer-review) have acted as guards against bias and against accusations of selectivity. Additionally, transparency (by having evidence and its relation to assertions open to scrutiny) and the reporting of negative instances, answer to accusations for a lack of credibility (Sturman, 1999, pp. 109-110) (see further down for a more comprehensive discussion on the soundness of case study). Having said the above, I consider it impossible for researchers to collect all possible data and to exhaust all possible interpretations (Bassey, 1999, pp. 22-36). However, that case study is based on empirical inquiry means that the data collected, albeit only a fraction of what could realistically have been collected, are strong in reality (Cohen *et al*., 2005, p. 184). At the same time, given the plethora of possible interpretations in any given case, I believe self-reflexivity to be one of the most essential elements of case study.

Two criteria for judging a study’s soundness which have been claimed to be problematic in case study research are reliability and validity. Historically, the two notions are borrowed from the quantitative, experimental tradition (Marshall & Rossman, 2011, p. 39). Reliability is seen as the accuracy of the observations made (Taft, 1999, p. 117) and the degree to which a study’s operations (e.g., the data collection procedures), can be repeated and yield the same results (Yin, 2009, p. 40). Validity is seen as the quality of the conclusions and the processes followed to reach those (Taft, 1999, p. 118); external (ecological) validity is the ability of a study to generalize its findings to other contexts (Yin, 2009, p. 40); internal validity is the truthfulness of the study outcomes, i.e. whether they actually result from the data available. The goal of both criteria is to minimize errors and biases (Yin, 2009, p. 45). By definition, reliability and validity in their positivist sense are problematic, not just in case study – a unique, context-dependent form of research – but in the social and behavioral sciences in general, given that *what* is being researched, i.e. the human behavior, and *who* is doing the research, i.e. the human researcher (considering his/her active role in the process), are both inconstant (Merriam, 1988, pp. 163, 170). The idea of replicating findings – having one reality that would yield the same results if studied repeatedly, as this has traditionally been conceptualized by experimental research – clashes with the constructivist viewpoint of multiple realities (as discussed earlier). To put it simply, it would be naïve to suggest that qualitative research could achieve replication of findings. Replication *per se* however, is not an issue in case study, at least not until new evidence is presented that contradicts the existing findings (Merriam, 1988,p. 172). Regarding generalizability, I have already argued how its application is (rather misguidedly) criticized and how the way it is conceptualized really differs between positivist and interpretivist thinking.

Apparently then, case study does not need to demonstrate reliability and validity in the way these are visualized by positivists. However, it has to demonstrate those criteria somehow. As paradigm assumptions normally shape how validity and reliability are termed and conceptualized, these notions should be defined in a way that fits into the character of interpretive, qualitative research (Marshall & Rossman, 2011, p. 251; Creswell & Miller, 2000, p. 125). In a constructivist paradigm, perspectives toward reality are interpretive, pluralistic and context-dependent, and appropriate criteria are needed to establish its soundness and rigor. Deviating from quantitative theorization so as to reflect the assumptions of qualitative research, some authors came up with different explanations of existing notions, resulting in different operational concepts. Hence, reliability refers to how consistently the same themes and categories are created by different researchers or by the same researcher(s) in studying different phenomena (Hammersley, 1992, p. 67). Under this definition, researchers need to document the steps followed, exhibiting such consistency along the way (Silverman, 2005, p. 224). In the same vein, validity is taken to be another word for truth. Considering that case study has been accused of biased data selection and sample cases to fit the researcher’s arguments (ten Have, 1998, p. 135), researchers need to convince readers of the truthfulness of a given study; this is achieved by justifying the interpretations given, based not on a fraction of the data, but on their totality, thereby avoiding anecdotalism (Silverman, 2005, p. 210; Hammersley, 1990, p. 57).

Other authors came up with different notions altogether. Creswell and Miller (2000) suggested that *trustworthiness* and *authenticity* substituted reliability and validity (pp. 125-6). In their seminal work on naturalistic inquiry, Lincoln & Guba (1985) divided trustworthiness into dependability (an account of the changes that might occur in the course of a study; cf. reliability), confirmability (whether findings could be confirmed by another study; cf. objectivity), credibility (a detailed description of the procedures followed, and a placement of boundaries and limitations on the study; cf. internal validity), and transferability (how the findings from one study are of use to other, similar contexts; also see discussion on generalizability above; cf. external validity). Authenticity corresponds to the last two sub-divisions (pp. 301-27; also see Marshall & Rossman, 2011, pp. 251-5). In accord with the interpretive, constructivist framework that underlies this study I will employ the notions of trustworthiness and authenticity as these have been suggested in this paragraph.[[42]](#footnote-42)

Having said that, to establish trustworthiness in qualitative case study, Yin (2009, p. 41) suggests the use of a case study protocol (a planner governing in detail the steps followed in the case study; this would allow researchers to design and follow a specific line of inquiry and also to keep track of any changes) and a case study database (a databank including an organized, documented, physical archive of all the data, notes and documents collected; this would allow anyone to review the evidence on which the case study outcomes and interpretations are based).[[43]](#footnote-43) A protocol and a database are also suggested by Marshall and Rossman (2011, p. 254) to account for replicability in qualitative inquiry in general. To establish authenticity and guard against accusations of selectivity in case study, a number of techniques have been proposed by qualitative paradigms. These techniques include (a) triangulation (using multiple methodologies to collect data), (b) disconfirming evidence (looking for data evidence that may cancel a created theme/category), (c) a chain of evidence (documenting exactly how interpretations have been reached so readers can trail the rationale behind each decision), (d) peer-review or debriefing (having colleagues assess transcripts and review findings, emerging themes and interpretations), (e) member checking (having study participants confirm or disconfirm interpretations), (f) reflexivity (acknowledging biases and assumptions), (g) external audits (clearly documenting research decisions and activities, so that people not involved in a study can assess its credibility), and (h) thick, rich descriptions (providing as much detail as possible so that readers get the chance to relive the researched phenomenon) (Yin, 2009, p. 41; Silverman, 2005, pp. 212-220; Creswell & Miller, 2000, pp. 124-5; Taft, 1999, p. 118; Lincoln & Guba, 1985, pp. 359-360). Following Creswell and Miller’s (2000) advice to use several authenticity procedures, irrespective of their ontological origin (p. 129), the present study has implemented all of the above.[[44]](#footnote-44)

3.1.5 Study background

As it has already been mentioned, the research design employed has certain limitations. These limitations and the way they may affect this study will be addressed in more detail in forthcoming sections and chapters, with reference to the particular research tools and processes they relate to. To properly appreciate those limitations however, it is important to provide a background to the study. This is also a step toward transparency, since it should help readers contextualize the research design.

The class participating in the case study, attended a compulsory Business English course. There were 24 3rd year students registered. This was a thirteen-week, three-hour per week, 5-credit course.[[45]](#footnote-45) I was one of its two designers and the first one to teach and review it. The course aimed at enabling students to use the English language efficiently both for their studies as well as a professional tool. It emphasized written and oral language: authentic documents and audio-visual material were widely employed, while attention was paid to practical skills (business letter and memo writing, communication with customers, company profile writing, cross-cultural communication, oral presentations) applied via a task-oriented approach. Furthermore, students were expected to develop their listening comprehension through online activities. Its instructional design framework was based on a constructivist approach; it hence aimed at maximizing knowledge construction and self-regulation (Tenenbaum *et al*., 2001, p. 88). For the largest part of the course students had to create meaning themselves. Collaborative work was employed as the means through which all the above skills were taught and practiced; hence, students formed groups of 2-4 for all tasks and had to collaboratively work out how to do things.[[46]](#footnote-46) At the same time, to enhance the collaborative nature of the course, Web 2.0 technologies (wiki, blogging) along with the Internet, were the main means for research, out-of-class communication between students and between students and myself, task completion and skills practice. A wiki was built for this course and served as a platform that students used to get information on their assignments and submit their written work. Blogging was practiced within the wiki by all student groups to submit joint work, edit group work, provide feedback on the work of other groups and receive my written and oral feedback. Oral feedback was facilitated with the use of recorded media. Finally, the Internet served as a research tool; students needed to do research and draw information supplementary to the information provided to them via course notes. Since online technologies have been found to facilitate the social construction of knowledge (Pear & Crone-Todd, 2002; Perkins, 1992), the way this course was designed and run can be seen as a practical example of social constructivist pedagogy.

3.1.6 Chapter structure

What follows in Section 3.2 is a discussion on ethics, with particular focus on insider research and its theoretical and practical implications for this study. Other important parameters (reflexivity, bias, researcher values) are also addressed. Section 3.3 considers methodological triangulation. I then discuss each of the research instruments employed and justify their use over other instruments (3.4-3.6). Section 3.7 introduces readers to my sampling and piloting procedures and 3.8 centers on the data collection procedures followed. This is supplemented by discussions on interview transcription/translation (3.9), data coding and thematic analysis (3.10).

**3.2 Ethics**

From the initial planning, to research design and methodological choices, to sampling and data collection procedures, to analysis and to reflecting on the implications of one’s findings, ethics is fully embedded in the research process (Baarts, 2009, p. 424). Closely linked to ethics is integrity, which combines rigor, respect and responsibility (University of Sheffield, 2012). The fact that integrity relates to the way data are gathered and authenticated and to how researchers are transparent in their decisions, renders ensuring this integrity itself an ethical issue (Stutchbury & Fox, 2009, p. 489).

Its indispensability aside, ethics is complicated. This owes much to the ever-changing character of research in general, and to the very nature of ethics as a construct. What we envisage before embarking on a research project hardly stays the same as the research progresses. This applies to its various parts, and ethics is no exception (Stutchbury & Fox, 2009, p. 489). The unpredictability of human interactions and the progress of a research project many times force researchers to make immediate decisions (Guillemin & Gillam, 2004, p. 273), hence the constant need for re-contextualizing ethics (Shaw, 2008, p. 401). One way of coping more effectively with this variability is *reflexivity*. At the stage of visualizing the research, we can consider the implications of the proposed study and their overall impact. We thus become better equipped to anticipate events and respond accordingly (Guillemin & Gillam, 2004, p. 277). Likewise, following the research, by adopting a critical approach, we can reflect on decisions made and develop a greater awareness of the research process.[[47]](#footnote-47)

In attempting to regulate this complex area as well as to aid the process of negotiating it, various research bodies (e.g., BERA, ESRC, SRA) provide codes of conduct. It has been claimed that, because of a relative vagueness, these can only serve as guiding principles, allowing researchers considerable freedom in fitting them to their specific needs (Smyth & Williamson, 2004, p. 10). Even so, such regulations can be useful in informing ethical practices. The present study was informed both by BERA’s latest version of *Ethical Guidelines for Educational Research* and by the University of Sheffield’s *Good Research Guidelines* (BERA, 2011; University of Sheffield, 2011). Before sampling, piloting, and data collection proper began, an ethics review application was submitted to the Ethics Review Panel of the School of Education, detailing the research procedures to be followed, especially those involving human subjects (“procedural ethics”; Guillemin & Gillam, 2004, p. 263).[[48]](#footnote-48) While unable to inform all aspects of research at such an early stage, this proved to be a useful reflective process as it allowed me to think the research through from an ethical viewpoint, note areas which I anticipated to be particularly challenging and visualize my study, its objectives and the viability of the means to pursue those. The application was approved in August 2011.[[49]](#footnote-49) Permission was then granted by the Dean at my home department to proceed with my interviews.[[50]](#footnote-50) This set “ethics in practice” (Guillemin & Gillam, 2004, p. 264) into motion: signed informed consent (agreeing to participate after being informed of the study’s purposes) was obtained by all participants, and confidentiality (not disclosing identity-specific data) and anonymity (not collecting – or disseminating – identity-specific data) (Howe & Moses, 1999, p 25) were guaranteed in writing.[[51]](#footnote-51)

However, ethical considerations are much more than simply treating participants appropriately (Marshall & Rossman, 2011, p. 121). Research is crammed with ethical dilemmas and hard decisions are needed at every stage (Kvale, 1996). Consequently, ethical considerations are addressed accordingly as they emerge at the various stages. This section mainly focuses on three such issues which proved to be the most challenging in the context of the present study, namely insider research, informed consent, and the interplay between researcher values, subjectivity and bias.

3.2.1 Insider (Endogenous) Research

The researcher’s positionality and how this influences the research is critical (Labaree, 2002, p. 102). Positionality stands for one’s ontological and epistemological viewpoints and background in terms of their effect on a study, and for the actual role researchers adopt in their studies. The former is dealt with elsewhere in the thesis. Here, focus is on the latter.

I should reiterate that constructivism and interpretivism view researchers as integral parts to the research process (Brannick & Coghlan, 2007, pp. 62-3). Exactly what part that is though, results from many factors, ranging from theoretical (study object and purpose) to more practical ones (budgetary constraints, time, resources available). Researchers used to be regarded either as outsiders (detached or neutral to the setting) or as insiders (immersed to the setting) (Evered & Louis, 1981; Merton, 1972). However, the literature also points to a conceptualization of insider/outsider research as two endpoints of a continuum (Surra & Ridley, 1991; Deutsch, 1981). Epistemologically, I believe that the researcher’s role regarding the degree of insiderness/outsiderness is a fluid, time- and context- dependent one. Having said that, I agree with Trowler (2011, p. 2) and Hume and Mulcock (2004, xi) in that researchers can, in fact need to, simultaneously be both insiders and outsiders. I would add that one of the two capacities normally dominates the other, depending partly on the researcher’s positionality and methodological choices (Labaree, 2002, p. 117) and partly on their degree of privileged access and knowledge. At the same time, I concur with Corbin Dwyer and Buckle (2009) in that a researcher’s actual insider/outsider status is of secondary importance compared to their “ability to be open, authentic, honest, deeply interested in the experience of…participants, and committed to accurately and adequately representing their experience” (p. 59).

Here, I conducted research in my own institution. I interviewed students whom I had been teaching for a semester, and colleagues with whom I’ve been working for the past five years and with whom I shared extensive knowledge regarding teaching policies and curricular strains. I can claim privileged insider status in that I was the one designing, teaching and reviewing the ESP course that formed the basis for my case study.[[52]](#footnote-52) Concurrently, I was an outsider in that I interviewed students who came from a field I was not particularly familiar with, and some colleagues with more overall experience in ESP design and teaching. By and large, depending on one’s role within their institution, a researcher could become more of an insider or more of an outsider, but never fully one or the other, since there will always be issues – however minor – people will not be entirely familiar with, and pieces of information – however trivial – they will not possess. Given my dual role within the research setting and the level of access, knowledge and possession of privileged information at all stages of the research, I consider the present study an example of primarily insider research.

Also termed endogenous research, insider research focuses on the researcher’s work place (Sikes, 2006, p. 110); it is research by full members of an organization *in or on* that organization (Brannick & Coghlan, 2007, p. 57). There is ample insider research literature in fields such as management, nursing, social studies and feminist studies but not much in education.[[53]](#footnote-53) Overall, theoretical and practical accounts relating insider research with teaching are lacking in general. In contrast, much has been written on insider action research (e.g., Coghlan, 2007; Coghlan & Holian, 2007; Ravitch & Wirth, 2007; Coghlan & Brannick, 2005) and on the insider/outsider debate (e.g., Corbin Dwyer & Buckle, 2009; Collet, 2008; Hellawell, 2006; Griffith, 1998). Overall, studies on insider research, regardless of the field, provide insight on the researcher’s reflexivity practices, the various advantages granted to researchers by “insiderness” and the disadvantages that hamper one’s research.

Talking of disadvantages, probably the biggest criticism insider research has attracted is that because of their position, emotional investment, pre-constructed knowledge and personal stakes, researchers are too close to the setting to be objective (Labaree, 2002, pp. 107-111). This over-familiarity, the argument goes, results in a loss of perspective, and in limited reflexivity about the setting and about the approach (Cohen *et al*., 2005, p. 314; Kanuha, 2000, p. 444). It thus becomes increasingly difficult for researchers to be neutral and question or even see things they are well accustomed to more clearly (Trowler, 2011, p. 2). In practice, this for example may influence the way researchers probe in interviews (Brannick & Coghlan, 2007, p. 69). It has also been claimed that the dual role of researcher/employee may place researchers in untenable positions (Morse, 1998, p. 61), damaging professional relationships and result in being marginalized or dismissed even, because of publicizing things meant to remain undisclosed (Sikes, 2006, p. 110). Role conflict can also lead participants into assuming similarity between themselves and the researcher (Corbin Dwyer & Buckle, 2009, p. 58) or into believing that researchers carry pre-formed expectations (Trowler, 2011, p. 2), thereby adapting their responses accordingly.[[54]](#footnote-54) For these reasons, researchers are urged to be upfront regarding their research purposes and also to negotiate their confirmability before entering the setting (Labaree, 2002, p. 113).

The potential of these distractions and constraints to inhibit the research process is discernible. However, we should be cautious not to discard insider research on such grounds. All methods have flaws. It is how these flaws are dealt with and how the respective strengths are taken advantage of that sees a given method as successfully implemented or not. Having said that, one should not overlook insider research’s considerable advantages. The knowledge and insight of an insider researcher are borne out of lived experience (Brannick & Coghlan, 2007, p. 60). This positively affects the robustness of one’s findings: insider research, in combination with case study research, yields findings the interpretations of which are staged in experience rather than in theory, rendering findings and interpretations more legitimate (Trowler, 2011, p. 3; Brannick & Coghlan, 2007, p. 57). Insiders’ immersion in the fieldandstatus in an organization grants them exclusive knowledge and privileged access to information, difficult to access by outsiders (Johnson, Avenarius, & Weatherford, 2006, p. 113; Labaree, 2002, p. 100). Insiderness allows researchers a deeper understanding of a setting (Foster, 2009, p. 20; Labaree, 2002, pp. 103-4); moreover, greater access to participants establishes rapport, trust and faster and easier acceptance (Corbin Dwyer & Buckle, 2009, p. 58). Such advantages, along with insights into insider research’s possible pitfalls led me into being more aware of everything relating to my study topic, irrespective of its “ordinariness”. Also, access to both my samples and to information was easier while my relationship to my samples ensured that rapport and trust were established quite early. Trust in particular has been claimed to be central to the social context of consent (Wiles, Charles, Crow, & Heath, 2006, p. 295).

Before moving on, I should note that, after considering the discussion on insider research, one can only go thus far as to proclaim the rigor and robustness of one’s own findings and interpretations. To this end, reflexivity, acknowledgment of one’s involvement, and awareness of one’s perspective can help researchers recognize the strengths and limitations of their positionality and consequently reframe their overall understanding (Corbin Dwyer & Buckle, 2009, p. 59; Brannick & Coghlan, 2007, p. 72).

3.2.2 Problematizing consent

Informed consent is the condition wherein people agree to participate in a study only after they are sufficiently informed of its purposes, and are given the freedom to participate or not and to withdraw at any point, without incurring negative consequences (BERA, 2011, p. 5). Although a much-visited aspect of ethics in other fields (particularly in the Health sciences), a thorough search in the qualitative educational research literature yielded few studies which focused on informed consent, its locus in the research process and the epistemological challenges it carries (Heath, Charles, Crow, & Wiles, 2007; Crow *et al*., 2006; Yeager-Woodhouse & Sivell, 2006; David, Edwards, & Alldred, 2001).[[55]](#footnote-55) This gap is strange, considering the centrality of informed consent as part of ethical conduct in educational research.

According to Crow *et al*. (2006, p. 85), the importance of this feature lies in that the more carefully it is applied, the higher the response rates and the more generalizable findings are. Overall, consent should be regarded as a requirement of research because the research itself benefits from it. Having said that, there are two main issues with informed consent. The first relates to the exact point in the lifecycle of a research project informed consent happens. The second is how problematic the very notion of informed consent is, i.e. how informed participants really are when asked to participate in a study (David *et al*., 2001, p. 348). In short, the challenge researchers face with informed consent is to be as truthful as possible toward prospective participants, while at the same time being aware of changes in the research design that might modify initial plans (Yeager-Woodhouse & Sivell, 2006, p. 194) and jeopardize earlier promises.

In the present study, following piloting, research instruments and conversation guides were finalized before informed consent was obtained. Still, I could not know in advance what information or new knowledge my inquiry would yield, what further probes new information would lead me to and, essentially, what possible interpretations would result overall. In my informed consent forms, I was careful not to make promises that would be hard to honor: hence, I informed student participants (1) why I was contacting them, (2) what the study was about, (3) that the study corresponded with the University of Sheffield’s Ethics policy, (4) that data would be treated confidentially, (5) that data would only be used for the purposes of this research, (6) that no names of participants would be saved by me or released to others, (7) that they had the right to withdraw at any stage and ask for their data to be erased, (8) that participation was voluntary and, (9) that participation or non-participation would not affect their assessment for their ESP or for any other class.[[56]](#footnote-56) Likewise, I informed teacher participants of points (1) to (8), as above.[[57]](#footnote-57) Keeping in mind the element of the unexpected in research, I regard point (7) as the most important one, as it does not take initial consent to be binding – what Heath *et al*. (2007) call “process consent” (p. 409) – thereby safeguarding participants against developments they might see as threatening or uncomfortable. Moreover, I regard points (8) and (9) from student participant informed consent forms as problematic: a researcher’s students are a vulnerable population in possibly thinking that their participation or non-participation may affect (a) their assessment and (b) how the teacher/researcher sees them. This potentially compromises the notion of voluntary participation and raises questions on the motivational factors lying behind their consent (Wiles *et al*., 2006, p. 296). Researchers may try to sound reassuring; however, student participants can be hesitant or reluctant to take those promises at face value. How much, then, does consent owe to the researcher’s “other” status? And could the answer to this question also affect the participants’ responses?[[58]](#footnote-58)

Surely, the dynamics of researcher-participant power relations inherent in research can influence the willingness to participate and the responses provided. There are cases where participants feel threatened by the researcher’s more powerful status, compared to their own (Labaree, 2002, p. 111). For example, Marshall and Rossman (2011, p. 150), Seidman, (2006, p. 33) and Kvale (1996, p. 126) discuss how asymmetric power – usually residing with the interviewer – may influence the way interviewees respond to questions. In any case, researchers should not consider it easy to get honest responses under such conditions. Students’ responses to a researcher/teacher may reflect what they believe you expect them to say and may be affected by the academic repercussions they might consider their participation or actual responses can incur. This was one of my main concerns in this study, and was tackled by conducting interviews with students *after* their final grades were submitted, hence quashing any fears for negative – or indeed hopes for positive – consequences of their participation and/or responses. Moreover, the ESP course was the participating students’ final language course, meaning that this was the last time they would have me teaching them.

Notwithstanding the above measures, a further way to ensure that participants have more confidence toward researchers and hence be more honest, is to properly follow informed consent procedure, namely to be as forthright as possible regarding the study purposes and also to inform prospective participants of all their participatory rights. According to Crow *et al*. (2006), such a procedure can enhance data quality, since participants are given both the information needed to decide as well as the time to adequately prepare mentally. Additionally, the provision of adequate information on a study to prospective participants removes uncertainty, clears anxiety and builds rapport and trust, resulting in higher participation rates (pp. 86-7).

However, gaining informed consent can also be problematic as it can unintentionally have an adverse effect on participation rates (especially with sensitive populations), inhibit the development of rapport, alter participants’ behavior due to their awareness of their participation (the “Hawthorne effect”; Jones, 1992, p. 451) and consequently affect data quality in a negative way (Crow *et al*., 2006, pp. 88-91). Additionally, “properly” following procedure in insider research is not a straightforward case of right or wrong: the transient and ever-changing nature of our knowledge during a research project means that informed consent is informed at the time it is obtained. How much informed it remains though, depends on the course of the research and on the changes occurring during it (Eisner, 1991, pp. 225-6). This brings me back to, and in a way answers, the first issue raised above: is informed consent something happening at the beginning of a research project or should it be an ongoing process? Ideally, it should be ongoing. In this study, although I did not ask participants to renew their consent following their initial informed consent – something which would have taken considerable time resources – the fact that they were informed of their right to withdraw at any stage and the fact that they were informed of their right to see data transcriptions and get information on the process of the study, means that the opportunity was there for them to review their consent and nullify it should they wished to do so.

3.2.3 Researcher values, subjectivity and bias

The discussion on values, subjectivity and bias in this section is brief, since this issue is revisited throughout the study. This subsection serves as a base upon which the issue is addressed elsewhere.

I restate the point I made at the beginning of Chapter 3, namely that research is *not* – *cannot* *be* – value-free (Kaplan, 1999, p. 90). It is awash with pre-conceived beliefs, principles, expectations and (mis)perceptions which affect our work (Cohen, 2000, p. 319; Howe & Moses, 1999, p. 34). This raises the issue of subjectivity, much like the selection of students and colleagues as participants in the present study raises the issue of insider bias. Questions of subjectivity and bias are typical of qualitative research (van Heugten, 2004, p. 207; Harrison, MacGibbon, & Morton, 2001, p. 325) but should not be regarded as reasons enough to condemn it to eternal criticism. Being reflexive and consciously acknowledging the values and biases affecting our research can turn such features to sources of insight (Axinn & Pearce, 2006, p. 54), making known to readers that how we interpret our findings rests on the choices made during the research (Ortlipp, 2008, p. 695).

At the same time, simply acknowledging our values and biases does not suffice to account for their impact on our research. It is only through making those values and biases explicit and subjecting them to careful and ongoing inquiry that these can be effectively regulated (van Heugten, 2004, p. 208; Kaplan, 1999, p. 90). Success in this results in greater authenticity (Cohen *et al*., 2005, p. 121). A word of caution though: there are so many different causes of bias (e.g., biased sampling, inconsistent coding, selectivity, poor rapport**;** Oppenheim, 1992, pp. 96-7) that researchers face an uphill task in challenging those. Still, we should not be quick to label all our values as biases, but rather remember that only those values that actually interfere with our inquiry can be regarded as biases (Kaplan, 1999, p. 90). Separating the former from the latter represents a further challenge facing researchers. As it becomes evident, this study makes every effort to acknowledge and guard against such biases and values.

3.2.4 Conclusion

This research has given rise to numerous ethical dilemmas. How much does participant consent owe to my status as teacher or colleague? Were people implicitly or unwittingly coerced into participating? Were they honest in their answers or did they give me the answers they thought I was seeking? Did I manage to distance myself enough from my insiderness to see things clearly and ask the right questions?

Quoting Sikes (2006), research is neither neutral nor innocent (p. 105). Its potential implications can be far-reaching and may extend to people not directly relevant to the study. Therefore, researchersshould think of their role and of the way they handle ethics very carefully. There is no unshakeable solution to ethical dilemmas. What is needed is moral responsibility (Ryen, 2010, p. 432) and reflexivity (Kvale, 1996, p. 117) in order to negotiate those dilemmas successfully. Our obligation is to ensure the integrity and transparency of our research (Stutchbury & Fox, 2009, p. 489; Sikes, 2006, p. 117) and I believe that this thesis has taken the right steps to that end.

**3.3 Triangulation**

Methodological triangulation is one of case study’s major strengths (Yin, 2009, p. 114), establishing trustworthiness and authenticity by amassing richer data (Perry *et al*., 2008, p. 30; Merriam, 1988, p. 172). It is defined as the systematic use of multiple tools that look at the topic under study from different angles, rendering observations and interpretations verifiable and credible or not (Marshall & Rossman, 2011, p. 221). Triangulation serves as a means of reducing the possibility of readers misinterpreting the researcher’s interpretations (Stake, 1998, pp. 96-7). Moreover, given that a number of sources provide several measures of the same event, triangulation can be used to assess a study’s tools (Yin, 2009, pp. 114-8).

In the present study, methodological triangulation served two purposes: first, given my previously stated position that replication of interpretations and generalization of findings should not be considered as the quintessential purposes of case study research, triangulation has been used as a means of clarifying meaning by addressing different possible interpretations (Stake, 1998, p. 97), thereby strengthening the study’s usefulness for other settings (Marshall & Rossman, 2011, p. 253). This use of triangulation is consistent with current CL research (Strijbos & Fischer, 2007, p. 391). Additionally, triangulation aided in looking for convergence between different data sources, to form common themes and categories through the elimination of overlapping areas. The thematic analysis employed here, validates Creswell and Miller’s (2000) suggestion that providing corroborating evidence collected through multiple methods aids in locating major and minor themes (pp. 126-7). The purpose of corroboration is to ensure that the reported findings accurately reflect participants’ perceptions (Stainback & Stainback, 1988).

Before addressing my research tools, a link needs to be drawn between those and the study’s theoretical underpinnings. According to constructivism, meaning is socially constructed, and the knowledge upon which it is produced, is created from the actions taken to obtain it. Within this paradigm, the data collection methods employed here can be seen as a means of social encounter where knowledge is – albeit in different ways and with varying degrees of success – formed and produced; they thus become sites for meaning construction and of interpretive practice rather than neutral channels for transmitting undistorted information (Holstein & Gubrium, 2011, p. 151). Likewise, study participants are not passive by-standers but active meaning generators (Holstein & Gubrium, 2011, p. 152). *Context* is also an important factor here. Its constant interaction with the researcher and the participants connects these methods to the interpretive approach toward social knowledge. This approach “recognizes that meaning emerges through interaction and is not standardized, emphasizes the importance of understanding the overall text of conversation and the importance of seeing meaning in context and accepts the importance of culture” (Rubin & Rubin, 1995, p. 31).

In what follows, I introduce my research tools, justify their use and discuss their merits and limitations. This should serve as a prelude to how they have actually been employed in this study (Section 3.8).

**3.4 Semi-structured Interviews**

In qualitative research, the core data collection methods are believed to be in-depth interviewing, systematic observations and document analysis, with in-depth interviews possibly the most widely employed one (Darlington & Scott, 2002, pp. 2, 48). Interviews have been employed here as the main means of data collection mainly because they can thoroughly explore people’s perceptions.

3.4.1 In-depth semi-structured individual and group interviews

I should first stress that by looking at people’s perspectives, interviews elicit subjective views (Marshall & Rossman, 2011, p. 146). Added to that is the fact that the meanings researchers make can be as arbitrary as the language used to convey those views and their meanings. Because of the subjectivity of people’s perceptions and of subsequent interpretations, researchers can employ triangulation with other tools as this has the potential to raise research quality.

Keeping the above in mind, individual and group interviews[[59]](#footnote-59) were employed with the student sample in tandem with student reflective journal entries, while individual interviews were employed with the teacher sample as follow-ups to the qualitative questionnaire. The conversation guide for the student sample was specifically tailored to address my research questions while the conversation guide for the teacher sample was created based on the topics raised by individual teachers through the questionnaire.

Interviews carry a number of advantages and disadvantages. Due to space limitations, I only discuss those strengths and weaknesses which had a bearing on this study. Consistent with BERA’s (2010) description, interviews proved to be an effective way of eliciting participants’ perspectives, yielding rich, high-quality data, as I could prompt and probe for clarifications and for further information when needed (cf. survey questionnaire) (also see Mack, Woodsong, MacQueen, Guest, & Namey, 2005, pp. 29-30). A major strength of interviews is that they provide researchers with unique insight and understanding of participants’ perceptions, regarding educational and other social issues (Axinn & Pearce, 2006, p. 36; Seidman, 2006, p. 130); as such, this tool perfectly catered for my research purposes.

As a personal form of communication, face-to-face interviewing with students allowed me to build and strengthen rapport and trust and, by their own admission, to make them feel more comfortable (cf. online questionnaires) (Miller & Glassner, 2011, p. 134; Darlington & Scott, 2002, p. 54). Rapport with most teacher participants was existent before this study commenced, given that we have been colleagues since 2008. This strengthened the authenticity of findings from that sample. Rapport and trust issues apart, let us not discount the fact that interviewees are experts on their own experience and interviewers are the ones learning things. The implication is that different people talking about the same phenomenon would in all probability provide different perspectives (Mack *et al*., 2005, p. 29; Darlington & Scott, 2002, p. 48). This should not impact on the trustworthiness of the data yielded through interviews though: “good interview material should be viewed as ‘reliable enough’, *under* *the circumstances”* (Holstein & Gubrium, 2011, p. 154). Likewise, placing the participants’ comments in context enhances authenticity (Seidman, 2006, p. 24). Regarding clarity, I was able to explain the research and answer questions prior to the interview, hence clearing any misunderstandings or ambiguities (cf. questionnaires).

Interviews proved to be a flexible tool in that I could re-phrase questions and explore themes as they emerged (Marshall & Rossman, 2011, p. 149; Axinn & Pearce, 2006, p. 27; Mack *et al*., 2005, p. 37), thereby enriching my databank. This was particularly useful since participants touched upon a number of issues I had not anticipated which related to my research questions. Especially as follow-ups to the teacher questionnaires, the flexibility of individual interviews enabled me to deepen the interpretation of standardized data gathered.

As a targeted tool, interviews allowed me to focus directly on my research questions and to shed light on causal relations (Yin, 2009, p. 102; Mack *et al*., 2005, p. 30) (despite the criticism, as mentioned earlier, that case study is supposedly inept in establishing causal relationships, I was still able to uncover potential causal relationships).[[60]](#footnote-60) In any case, had the procedure not been well-focused, interviews could easily be sidetracked and time could be lost on non-pertinent issues.

Another strength of interviews is that they provided me with the opportunity to analyze data and cease interviewing upon saturation (Axinn & Pearce, 2006, p. 79; Seidman, 2006, p. 55); this would not have been the case with other methods (e.g., surveys, which are administered simultaneously in their totality). Regarding group interviews in particular, those carried further benefits: a broad range of views was accessed and some of the answers provided stimulated further responses. Moreover, a large amount of information was collected in less time (BERA, 2010; Mack *et al*., 2005, p. 51).

Interviews carried a number of limitations, too. First, the conversation guides I employed had not been used before, meaning that, apart from piloting, those were not tested elsewhere; using the particular guides however was a *sine qua non* since these were specifically tailored to address my research questions. Second, teacher interviews touched upon professional practice and at certain points, this evoked strong feelings and a reluctance to elaborate on more sensitive issues (e.g., openly criticizing practices of colleagues, criticizing curricular decisions), despite guarantees of confidentiality. I did use probes but could not force participants to express an opinion. Third, there was the issue of interview account authenticity. It has been acknowledged that sometimes interviewees give interviewers what they want to hear (Miller & Glassner, 2011, p. 133). To avoid having students positively accentuating their answers (Cavanagh, 2011, p. 30), student interviews took place after their final grades were submitted. Fourth, in group interviews, there can be an issue with those participants who are last in line to answer a question, especially when all previous participants respond similarly. To avoid having those participants simply copying what others were saying (e.g., due to an unwillingness to be different) I had the order changed with every new question. Related to the last two points are issues of truthfulness (see further below). Fifth, some participants were much less talkative during the initial rounds of group interviews than others, probably due to hesitancy, shyness or because they knew little about the topic (Axinn & Pearce, 2006, p. 30; Mack *et al*., 2005, p. 35). I had to address those participants directly to make them feel more comfortable or to ensure they would not fabricate responses; such interventions disturbed the discussion’s natural flow. Sixth, during group interviews it became apparent that some participants came to the interviews without holding particular beliefs on certain topics and only shaped an opinion after listening to others talking. Whenever that came to my attention, I asked participants to express their honest opinion. Honesty of course is another hazard in interviewing and relates to issues of authenticity and trustworthiness (Seidman, 2006, p. 23). A lack of honesty has been found to negatively affect the overall quality of interview data (Marshall & Rossman, 2011, p. 145; Miller & Glassner, 2011, p. 134). How interviewers go about conducting interviews can impact on honesty. The various techniques employed in the course of the interview process, as discussed here, also aimed at strengthening the research quality and value of this method.

Finally, a few words are needed concerning bias, which is probably the main criticism against interviewing. A number of factors have been claimed as possible causes of bias in interviewing, including, among others, poorly articulated questions (Yin, 2009, p. 102), misunderstandings on the part of interviewer or interviewee, leading questions or prompts/probes imposing ideas or values, interviewer expectations (Cohen *et al*., 2005, p. 121), researcher positionality, social similarities or differences between interviewer-interviewee (Miller & Glassner, 2011, p. 136), poor rapport and overall handling, biased sampling, and inconsistent coding (Oppenheim, 1992, pp. 96-7). To some extent, I find this a fair criticism: since interviews are interactions between humans, some form of bias intrusion is inevitable and it is impossible to free that interaction from contaminating factors, irrespective of how regulated and well-designed an interview is (Holstein & Gubrium, 2011, pp. 161-3). Everyone carries their own histories and ideas and it would be naïve to suggest that these will not infiltrate the interview process. However, I also believe that interview outcomes can be enhanced, not hampered, by biases. Researchers can acknowledge bias and strive to minimize its adverse effects. Furthermore, they need to be transparent and explain how the various forms of bias were dealt with and why some forms of bias could not be minimized. This sort of reflexivity provides researchers and readers with a platform upon which to weigh the outcomes. In this study, I tried to reduce the possible causes of bias primarily by phrasing questions in as much a neutral way as possible, by piloting them and by asking for feedback on their articulation, clarity of expression a.s.o..[[61]](#footnote-61) Additionally, I tried not to influence interviewees by keeping my involvement minimal, by avoiding leading questions, by remaining reaction-less, by avoiding passing on opinions or interfering much with the process and also by letting them know that there were no “right” or “wrong” answers (Axinn & Pearce, 2006, p. 183; Mack *et al*., 2005, p. 29). A number of techniques (e.g., checking for understanding, checking on contradictions, reflecting ideas and summarizing, and probing for clarifications – even though time-consuming) aided in data authenticity and clarity (see Kvale, 1996). As a last measure, I tried to minimize inaccuracies that may have arisen as a result of poor recall, by recording interviews and also by keeping notes during interviews and by expanding those into richer descriptions within 24 hours following each interview (Mack *et al*., 2005, pp. 44-5).

3.4.2 Using semi-structured interviews

Cohen *et al*. (2005, p. 270) cite no less than fourteen different types of interviews.[[62]](#footnote-62) Such a huge array can be rather perplexing, especially given that different terms may be found to overlap if the criteria forming their exact definitions are compared. According to Kvale (1996), the various interview types differ in their purpose openness, structure degree, how exploratory or hypothesis-testing they are, whether they are after describing or interpreting and whether they mostly focus on cognition or emotion (pp. 126-7). Here, it suffices to say that, broadly speaking, in terms of the freedom they allow and of the way they are organized, interviews can range from tightly structured and more standardized, to unstructured ones that may seem like regular conversations (Lincoln & Guba, 1985, pp. 268-9; also see Kvale, 1996; Rubin & Rubin, 1995). Based on the criterion of structure, which has been argued to reflect the actual purposes of the interview (Cohen *et al*., 2005, p. 270), a semi-structured approach has been followed here.

The semi-structured type was employed to facilitate discussion and yield the answers to the open-ended questions posed but also to allow participants to elaborate where needed without constraining them (Darlington & Scott, 2002, p. 56). Open-ended questions in particular are an effective means of eliciting responses without limiting the length of the answers provided, therefore allowing participants the opportunity to considerably expand on their perspectives (Mack *et al*., 2005, p. 42). Additionally, they allow interviewers the chance of narrowing down the participants’ possible response avenues (Rubin & Rubin, 1995), not, as a major criticism against interviewing goes, to fit the answers provided by others, but rather to fit the research purposes. By employing semi-structured interviews, researchers have the opportunity to guide participants through the various topics that need to be addressed and can also make sure that all participants have freely and openly expressed their views.

Interviewing is a dynamic process (Holstein & Gubrium, 2011, p. 153) and many times, adjustments during it are needed (e.g., shifts in focus, probings for more information, looking at related issues raised unexpectedly). Semi-structured interviews allow for a certain level of flexibility on the exact sequence and wording of questions (Cohen *et al*., 2005, p. 278) (cf. structured interviews).

Another reason that warranted semi-structured interviewing was that based on my research design, I was after identifying common themes. Had I employed an unstructured, more open type, that identification would have been more difficult to achieve due to the considerable freedom participants would have had in visiting topics not within the interests of this study, therefore negating the advantage provided by the focused nature of this type of interviewing. At the same time, since my research questions were looking at students’ and teachers’ perceptions, a certain degree of freedom was necessary to allow participants to express themselves more freely; this precluded the use of a more structured type.

Finally, a semi-structured type allowed me to choose when and how to raise certain questions. Given the topic of my study, such flexibility proved crucial, as at times, and based on the participants’ answers, I needed to address certain issues over others, diverge from the conversation guide for a while and shift the question order. My relative expertise in the fields of CL and of CTs allowed me to accompany my scripted questions with unscripted ones when needed, thereby raising the quality of my data (Nichols & Childs, 2009, p. 115). The rigidity of a more structured schedule and the way each question would be conceptually chained to the next would make that harder. Added to that is the freedom the semi-structured design allows for prompting, probing (Mack *et al*., 2005, p. 43) and clarifying there and then (Darlington & Scott, 2002, p. 49); again, these affordances would have collided with the more rigid form of structured interviews, whereas they would have been much less focused in an unstructured type.

**3.5 Qualitative Questionnaire**

The self-administered, email questionnaire[[63]](#footnote-63) served as a prelude to the follow-up interviews for my teacher sample. Here, I address its particular structure and emerging strengths and limitations.

3.5.1 Questionnaire structure

Questionnaire types can range from highly structured to unstructured ones. The former is more quantitative-oriented, used to generate statistically analyzable responses whereas the latter is preferred in cases where rich, word-based data are sought and is thus favored by qualitative inquiry. Qualitative questionnaires that are more unstructured and open-ended are what Cohen *et al*. (2005) suggest should be employed in case study contexts, since they are more appropriate in capturing a particular situation’s specificity (p. 247). My questionnaire is a mixture of closed and open items; given its purpose, it is situated between the semi-structured and the unstructured, open-ended type.

An important factor in how successful a questionnaire can be in catching participants’ attention and in eliciting information is question order. Oppenheim (1992) suggested that question sequence should ensure that participants continue to cooperate. There is the danger of initial questions creating a specific mind-set which can influence how the remaining questions are viewed and addressed (p. 121). Hence, questionnaires should begin with non-threatening, factual questions and slowly build up the participants’ interest with opinion ones. Regarding practical considerations, there should be simplicity in the design, clarity of meaning, clear instructions, and proper sectionalizing (Cohen *et al*., 2005, p. 259).

The questionnaire was divided in three parts, each with clear focus (Collaborative Learning, Computer Assisted Collaborative Learning, Curriculum Design). Thematic categorization has been shown to reduce the number of “don’t know” answers, increase trustworthiness and internal consistency of responses, and also help participants make sense of otherwise ambiguous items (Lam, Green, & Bordignon, 2002, pp. 425-8). In designing a questionnaire, attention is also needed on features which can affect the nonresponse, dropout, and overall completion rates, including its length, visual presentation and item format (Vicente & Reis, 2010, p. 262). How these features have been implemented is addressed below.

Regarding the items included in the questionnaire, I should stress that the comments that follow are made based on the nature of this questionnaire, i.e. that it has been designed and used to elicit perceptions and beliefs leading to thematic analysis, and also that it has been designed and used as a prelude to the follow-up interviews. In the ensuing discussion, emphasis is paid on the emerging strengths and limitations.

3.5.2 Questionnaire items – Closed questions

The fifteen closed items have been included (a) in order to prepare participants for the open-ended items, (b) to make participants consider a number of pertinent issues before addressing the open-ended items, and (c) to provide me with prompts and probes for the follow-up interviews. Closed items are relatively quick to complete, but do not offer participants the chance to comment further. The risk with closed items is that they may not be exhaustive, and are therefore susceptible to bias (Oppenheim, 1992, p. 115).

Five out of the fifteen closed items were dichotomous questions,[[64]](#footnote-64) of which three were used as sorting devices forwarding the participant to a further item or not,[[65]](#footnote-65) depending on the answer given. I think that the reasons mentioned above for employing closed items counterbalance the criticism that yes/no questions may not yield useful information (Cohen *et al*., 2005, p. 250).

Four further items were rating scales.[[66]](#footnote-66) Every attempt was made during piloting so that the range of possible responses was as exhaustive as possible. However, as in all word-based data collection methods, there are issues of interpretation – what “strongly disagree” means for one participant may equal what “disagree” means for another (Stapleton & Mills 2008, p. 143). A way round this, may be crude but practical enough for coding purposes, would be for researchers to group negative perceptions together, disregarding the subtle differences on the actual scale (hence, “disagree” and “strongly disagree” would both be coded as negative stances). At the same time, it would be important to have both “disagree” and “strongly disagree” as options, so that participants get more answers to pick from, rendering their answer more representative of their perceptions. Overall, having a multitude of options renders these items particularly useful for eliciting participants’ attitudes, perceptions and opinions (Cohen *et al*., 2005, p. 255).

Additionally to the above, there were six multiple choice items.[[67]](#footnote-67) The purpose of having these was twofold: they provided me with very easy thematic coding and they gave participants something to think about before answering the open-ended questions. Two dangers loom: although researchers may succeed in creating mutually exhaustive and non-overlapping categories (Cohen *et al*., 2005, p. 251), there is always the possibility (as above), that the list of options is not exhaustive. Here, there was also the danger of the provided options leading participants in their answers to the open-ended questions that followed. To minimize such risks, I requested for particular feedback on these items during piloting. As a result, the lists, albeit not exhaustive, conceivably included the most important notions that pertained to my research questions. Also, the possibility of leading participants through the items was minimized somewhat by the number of different options participants had to choose from.

3.5.3 Questionnaire items – Open-ended questions

Finally, there were seven open-ended items[[68]](#footnote-68) of which five[[69]](#footnote-69) composed of two parts. These are ideal for small-scale research as they target an in-depth exploration of topics by allowing participants to answer freely, honestly (see below) and to write as much as they like, thus minimizing the risk of inaccurate answers (Stapleton & Mills, 2008, p. 143). Open-ended questions can unveil meanings hiding under closed item responses. Similarly to interview questions, open-ended questionnaire items “can catch authenticity, richness, depth of response, honesty and candor…hallmarks of qualitative data” (Cohen *et al*., 2005, p. 255). On the downside, codification and classification of responses can be tricky (Montgomery & Crittenden, 1977, p. 235) and it can prove difficult to compare findings between participants if there is great width in their answers (Cohen *et al*., 2005, p. 256). Additionally, high rates of non-completion have been associated with open-ended items (Reja, Lozar Manfreda, Hlebec, & Vehovar, 2003, p. 159). Despite the limitations, open-ended items were included because the type of information elicited via those fits my research purposes and design.

3.5.4 Other issues, strengths and limitations

As a form of self-report, self-administered questionnaires divide opinions concerning issues of bias. Suggested limitations relating to self-reported measures involve teacher practice, self-reporting bias, and researcher refinement of teachers’ reports. To counter such limitations, observational data are needed to verify how reported measures and observed teaching practices relate (Ruys *et al*., 2010, p. 548). Conversely, self-administered tools have been claimed to guarantee participant privacy and hence reduce social desirability bias, improving data quality (Kim, Kang, Kim, Smith, Son, & Berktold, 2010, p. 58). Although it cannot be ensured that the answers provided are true and honest, having analyzed both pilot and study questionnaires, I tend to agree that anonymity and the lack of immediate contact between researcher and participant in self-administered questionnaires increases privacy, encourages honesty and goes some way in ensuring that self-reporting bias is substantially minimized (Sturman & Taggart, 2008, p. 130; Cohen *et al*., 2005, pp. 128-9). However, as discussed elsewhere, bias cannot be eliminated completely. Irrespective of the above, the present study opted against teacher classroom observations, first because of the considerable time this would have taken, and second, because the way ESP courses are allocated means that not everyone teaches ESP courses every semester, therefore it could take up to two years to observe most questionnaire participants.

In terms of trustworthiness and authenticity, the questionnaire was another link in establishing a chain of evidence (along with the follow-up interviews), supporting my interpretations; it hence served as one of the techniques to establish authenticity and guard against selectivity accusations. Member checking was also offered as an option, but has not been exercised by any participant. Regardless, my clear documentation of the overall procedure and the various decisions taken and interpretations made, renders external audits possible.

Email questionnaires are one of many different forms of web surveys. Compared to other web forms (e.g., surveys embedded in emails, web link surveys) and to more traditional paper-and-pencil ones, questionnaires as email attachments may involve more steps, may assume an ability on the participants’ part to navigate through downloading, saving, and uploading the questionnaire (Vicente & Reis, 2010, p. 255), can be less eye-pleasing by involving fewer graphics, and always carry the risk of a virus which may result in participants being more reluctant to participate (Dommeyer & Moriarty, 2000, p. 40). Older studies show that participants prefer embedded over attached surveys (Dommeyer & Moriarty, 2000), that response rates are lower for electronic survey administration compared to a paper-and-pencil one (e.g., Crawford, Couper, & Lamais, 2001; Klassen & Jacobs, 2001; Kwak & Radler, 2002)[[70]](#footnote-70) and that certain participants may exhibit a propensity not to respond to web surveys (Tepper Jacob, 2011, p. 41). Nevertheless, the proliferation of the Internet with its minimal costs and capacity for instant data collection (Vicente & Reis, 2010, p.251) resulting in computer-assisted methods gradually surpassing the previously dominant paper-and-pencil methods (Kim *et al*., 2010, p. 58), the fact that all participants in my sample use emails daily to correspond with one another and the fact that I used my institutional mail server for this communication, rendered this administration method the safer, most immediate and effective one.[[71]](#footnote-71)

Moreover, having the questionnaire as a word document offered me a more professionally looking, plain design that, along with the inherent continuity of written text, shifted the participants’ attention on the questions.[[72]](#footnote-72) Also, email questionnaires take less time to administer than, for example, telephone surveys (Tepper Jacob, 2011, p. 43). Finally, for such a case study with a small-sized sample, there was zero risk for coverage error (Groves, Fowler, Couper, Lepkowski, Singer, & Tourangeau, 2004), as questionnaire collection was electronically confirmed.

Administering the questionnaire also carried a number of limitations. A major one related to the instrument’s robustness: the questionnaire employed here was designed for this study, therefore its strengths and weaknesses had not been addressed by other studies (Ade-ojo, 2005, p. 196). Its originality means hitches are possible; however, piloting it with other tertiary education teachers and researchers familiar with questionnaire design aimed at addressing those, and resulted in a number of changes.[[73]](#footnote-73) Using multiple experts to review the questionnaire has been recognized in the literature as a step toward identifying potential problems (Olson, 2010, p. 313). The instrument can be further improved if employed in future studies.

A second limitation was that inadequate answers may result because of poor wording (Stapleton & Mills, 2008, p. 140) or because of poor comprehension. Even if the wording is not poor, ambiguities may arise (Cohen *et al*., 2005, p. 249). The problem intensifies if the questionnaire makes extensive use of “empty” words (e.g., good, successful, effective), as such words are interpreted differently by different participants (Cohen *et al*., 2005, p. 251). Elimination of linguistic ambiguity is a common target of piloting (Griffin *et al*., 2003, p. 262) and this has been addressed accordingly, resulting in a number of rephrasings. However, it is possible that ambiguities continue to exist even after piloting. Having minimal or no contact with participants following administration means there is always the danger of participants misinterpreting a number of questionnaire items, resulting either in nonresponse or in providing false answers. Although two participants emailed me with a couple of questions, the non-synchronous nature of questionnaires means participants may be more reluctant or find it impractical to ask questions regularly.

Third, a number of questionnaire items may be deemed sensitive (requiring private information) or threatening (seeking the participant’s opinion on an issue that may be a source of, or a cause for conflict in their practice).[[74]](#footnote-74) Additionally, items may be seen as burdensome, requiring extra cognitive effort[[75]](#footnote-75) or socially undesirable (requiring opposing the existing norms)[[76]](#footnote-76) (Olson, 2010, p. 301). Such questions may result in underreporting (Cohen *et al*., 2005, p. 256). To minimize this, I made such items parts of a wider discussion (Sudman & Bradburn, 1982, p. 55). I also sectionalized the questionnaire, kept its length short and rendered some of these questions optional, which I believe places less weight on participants in answering them. This last step may carry the risk of participants avoiding those questions altogether, but nonresponse is a risk that is there anyway. Such measures seem to have worked: returns of questionnaires exhibited a relatively satisfactory completion rate (50%) and a very low nonresponse rate.[[77]](#footnote-77)

**3.6 Reflective Journal**

Both students and I kept a journal. Student entries aimed at triangulating findings from their interviews by having them documenting their own experiences with CL and CTs at designated intervals throughout the semester. My entries, on the other hand, aimed at keeping track of my ideas about my research at various points and at recording various considerations and any changes occurring in the research design, instruments and other processes as a result of data flow and also as a result of constant literature review.[[78]](#footnote-78) Both uses render my study transparent to readers while the second use also renders it open to critical self-reflection. In what follows, I discuss the reflective journal, its standing as a research tool, its use in this study and its strengths and limitations.

The importance of the reflective journal as an instructional and as a research tool is well-advocated in the literature. As an instructional tool, it is employed in both constructivism and interpretivism (Ortlipp, 2008, p. 703). It is rooted in the experiential learning, adult learning and lifelong learning theories (Hubbs & Brand, 2010, p. 59) and is extensively employed in various educational and professional disciplines, enabling students and teachers to practice and develop skills of analysis, self-reflection, critical thinking, enhancement of content understanding, meaning making, discovery of new insights, self-assessment and writing fluency (Dyment & O’Connell, 2010, p. 233; Findlay, Dempsey, & Warren-Forward, 2010, p. 84; Hubbs & Brand, 2010, p. 57; Lai & Calandra, 2010, p. 422; Stevens, Emil, & Yamashita, 2010, p. 351; Towndrow, 2004, p. 174; Borg, 2001, p. 156). It can also provide teachers with a course/student assessment tool (e.g., Aldridge, Fraser, Bell, and Dorman, 2012, p. 259; Bahous & Nabhani, 2011, p. 21; Bisman, 2011, p. 315; Bruton, 2011, p. 321; Wilson, Hine, Dobbins, Bransgrove & Elterman, 1995, p. 172).[[79]](#footnote-79) Instructionally then, reflection holds a prominent role in educational and professional settings.

This study however, is more interested in the utility of the reflective journal as a research tool. The literature reveals that contemporary educational studies commonly employ reflective journals as a primary, or as one of their main data collection instruments (e.g., Abednia, 2012; Aldridge *et al*., 2012; Bahous & Nabhani, 2011; Bisman, 2011; Bruton, 2011; Feagan & Rossiter, 2011; Hutchison & Rea, 2011; Lin & Bates, 2010; Stevens *et al*., 2010). Reflective journals can be put to a variety of uses in the research process: entered as a data set, journal entries can act as a *triangulating* *device* (Janesick, 1999, p. 511) to data collected via other methods. Triangulation has already been addressed.[[80]](#footnote-80) Here, it suffices to repeat that triangulation adds to the credibility of findings (Miles & Huberman, 1994), reduces biases and contradictions, enhances authenticity (Mathison, 1988; Denzin, 1978), establishes trustworthiness (Stevens *et al*., 2010, p. 357) and maximizes the consistency of interpretations (McRobbie, Ginns, & Stein, 2000, p. 87).

Reflective journals are also a way for researchers to document their role (Janesick, 1999, p. 511) and acknowledge how their values and biases may have influenced the research, thus lending *transparency* to it (Ortlipp, 2008, p. 703). This opens the research to public inspection (Anfara, Brown, & Mangione, 2002, p. 31), handing readers the opportunity to see how the knowledge offered has been constructed (Watt, 2007, p. 83).

Finally, reflective journals are a means of facilitating *(self)reflexivity* (Ortlipp, 2008, pp. 695-6). Accepting that research cannot be value-free and that the researcher’s own subjectivity influences research means that a way is needed for researchers to critically account for those values. The fact that in qualitative methods, researchers are often the primary instruments for data collection and analysis (Watt, 2007, p. 82; Janesick, 1999, p. 506) renders reflexivity an indispensable part of research. Reflexivity allows researchers to inform their practice and challenge their assumptions by visiting and revisiting their experiences, by inquiring into their knowledge or supposed knowledge, and by becoming aware of their thoughts, feelings, beliefs, values, actions and understandings (Bolton, 2009, p. 752), considering how all these impact on their study (Watt, 2007, p. 82).

Before concluding this section, I need to mention two further advantages of the reflective journal which became apparent within the present study: first, data tend to be rich and descriptive (Pianta & Hamre, 2009, p. 110); in fact, data can be as rich and descriptive as researchers want them to be, depending on the number of probes. Of course, this also means that it may be difficult to detect patterns (Pianta & Hamre, 2009, p. 110); however, I think that this was overcome by the systematic nature and specificity of the probes that students were asked to provide their views on. Second, the data collection process was not inhibited by predetermined measurement and response categories. Rather, the relative freedom that characterizes the search for concepts and categories that relate to one’s research purposes make the reflective journal a practical tool to employ in qualitative inquiry (Adler & Adler, 1994, p. 378).

**3.7 Sampling and Piloting**

Permission to carry out this study with students and teachers was granted by my home department, once anonymity and confidentiality were guaranteed and the research aims were explained. This section discusses the sampling and piloting procedures followed, their strengths and limitations and how these affected my research instruments and research design.

3.7.1 Sampling

Purposive sampling (Patton, 2002) was preferred over other non-probability sampling methods.[[81]](#footnote-81) Participants were not selected randomly but because of some shared characteristics that allowed for a full and detailed exploration of the study’s objectives (Burns, 2000; Lincoln & Guba, 1985). What is of greater significance in this method is the criteria used rather than the number of participants (Office for National Statistics, 2008); under this light, the case study criterion of selecting every case “to serve the research purpose of gaining insight into the particular chosen phenomenon” (Burns, 2000, p. 465) was met. Additionally, this method fitted well with one of my case study aims, namely reaching an understanding of the issues raised rather than attaining generalizability or representativeness (Vaughn, Schumm, & Sinagub, 2006). According to Cohen *et al*. (2005), purposive sampling is frequently employed in case studies and other small scale research. The same authors argue that the sample deriving from such a method is a selective and biased one; however, this should not be perceived as weakening my research design. On the contrary, this is exactly the type of sample satisfying the research needs of this study.

Purposive sampling meant that my initial sample size was not fixed prior to data collection. Data review and analysis commenced following the fourth interview conducted and the fourth questionnaire completed and continued along further data collection (Mack, 2005). I therefore ceased interviewing after student interviewee 16, at which point I became convinced that theoretical saturation had been reached since no significant novel information was reported in the four interviews I had conducted last (Axinn & Pearce, 2006, p. 79; Seidman, 2006, p. 55). No saturation point was reached with my teacher sample.

Having said the above, for each participant group, I used certain criteria that ensured homogeneity. A screening procedure was applied to further narrow down participant numbers (Yin, 2009, p. 91). Hence, students were contacted to participate on the basis of the following: (a) they must have been fully registered students; (b) they must have been registered in the case study ESP course; and, (c) provisionally, they must have attended 80% or more of their ESP during the semester (amounting to a minimum of 20/24 classes). The sample came from a single class as this was a course running for the first time, the researcher was one of the two teachers who had designed it and the course made extensive use of both CL and CTs. Moreover, these were 3rd year students, hence a certain degree of knowledge on their part (in terms of experience with CL, with using technology a.s.o.) was expected; in that respect, the selection of this particular case, based on its uniqueness, was straightforward. A total of twenty-four students were asked to participate, nineteen of which agreed to do so initially. The final student sample consisted of sixteen students, of which four were individually interviewed and twelve took part in group interviews.[[82]](#footnote-82) Moreover, twenty of the twenty four submitted entries in a reflective journal. There was relative heterogeneity across the study in that student participants were chosen based on their overall performance in their ESP course in a way that both higher-achieving and lower-achieving students were equally represented in the sample. Hence, out of a total of sixteen students comprising the final student sample, eight got a final grade of between 5-7.5 and eight got a final grade of between 7.6-10.[[83]](#footnote-83) All other criteria being common between participants, regarding the two performance-based categories created, every attempt was made to ensure that each group interview consisted of at least one member from each of the categories and that two students from each category were represented in individual interviews.

On their part, teacher participants were contacted to participate based on the following criteria: (a) they must have been teaching at University level at least since 2006, to ensure a certain minimum level of expertise regarding tertiary teaching; (b) they must have supervised and/or taught and/or designed one or more ESP courses; and, (c) they must have had the opportunity to implement CL and CTs someway in their teaching during these past six years at University level, irrespective of whether they ever actually implemented them. Again, sample choice was straightforward; at the time of the study, only sixteen teachers fulfilled the sample criteria. The final teacher sample consisted of six full-time and two part-time language teachers. All participating teachers filled in a questionnaire. As a means of triangulation, four teachers were further invited for follow-up interviews.

Table 1 provides an overview of the number of pilot and main study participants.

|  |  |  |
| --- | --- | --- |
| Study Sample | | |
|  | Pilot study | Main Study |
| Student participants | | |
| Individual interviews | 3 | 4 |
| Group interviews | 6 (2X3) | 12 |
| Reflective journal entries | 20 | 35 |
| Teacher participants | | |
| Questionnaires | 4 | 8 |
| Follow-up individual interviews | 2 | 4 |

Table 1: pilot study and main study samples

3.7.2 Piloting

A pilot case study is an important step leading to the actual case study as it can provide researchers with the opportunity to refine the data collection process, both in terms of content and in terms of procedures (Yin, 2009, p. 92). Hence, all tools were piloted in the year prior to the study, providingme with valuable insight and feedback. Overall, the pilot participants were selected based on two criteria, namely access and relative similarity to case study population.

Student interviews were piloted with sixteen 2nd year students[[84]](#footnote-84) who had taken an ESP course with me the previous year. The relatively large pilot size was intentional; given that all my research instruments were novel, I needed to perfect them as much as possible.

Every effort to replicate proper study conditions was made (Drever, 1995). There was a call for participation[[85]](#footnote-85) and informed consent was obtained. A similar procedure was followed for individual and group interviews. Once students had agreed to participate, two groups of three were randomly formed while three other students were penciled in for individual interviews. Following communication with the students, all interviews were scheduled and took place in the students’ free time, at university premises, within the space of a week. All individual and group interviews lasted for a period between 45-60 minutes and compensation was offered to participants in drinks and snacks. I went through the entire set of questions one by one and asked students to provide feedback concerning sequence, level, clarity, coherence, wording and signposting. Moreover, I checked whether students could meaningfully answer the interview questions and whether the questions generated information related to my research questions. I also requested feedback on setting, time, and other practical aspects of the process. Piloting the interviews is a technique widely recommended and used in the literature (Shawer, 2010; Seidman, 2006) and an important one in terms of establishing instrument trustworthiness (Silverman, 1993).

I also piloted the reflective journal; students in one of my ESP classes were asked to address specific, open-ended questions at two separate intervals. I also used it for personal reflections with that class, to acquaint myself with its potential, practise it in real-time and see how this could be helpful as a research tool inside and outside the classroom (Lew & Schmidt, 2007).

On their part, the teachers’ questionnaire and follow-up interviews were piloted with two fellow researchers as well as two language teachers, former colleagues of mine. Following a call for participation[[86]](#footnote-86) and having obtained their informed consent, the questionnaire was emailed to them and they were asked to return it electronically within ten days, with feedback on its content (appropriateness, sensitivity, relatedness), level, wording and length, including any suggestions they might have had for additions or deletions and comments on the questionnaire’s sectionalizing, itemization and layout. Piloting of questionnaires has been found to increase practicability, authenticity and trustworthiness (Wilson and McLean, 1994; Oppenheim, 1992). After that, follow-up interviews were piloted with two teachers, in roughly the same way as with the student individual interviews, seeking a similar type of feedback. The only difference between student and teacher pilot interviews was that the latter lasted less time, since there were fewer questions.

In terms of feedback received, regarding interviews, both samples suggested a number of rephrasings for clarity purposes. Changes were made accordingly.[[87]](#footnote-87) Some of the students who were group-interviewed argued that they would feel more comfortable had they been grouped with people they knew. Also, some of the students who were individually interviewed argued that they would feel more comfortable had they been group-interviewed. These comments had an effect on the finalized research design, as participants were given relative freedom to pick which group they participated in or choose to be individually interviewed. Teachers only commented on the short length of the interviews. Hence, given the heavy workload of teachers and for convenience purposes, I decided to conduct follow-up interviews via the phone.

Regarding questionnaires, again there were a few comments on question clarity, while two participants argued that they found it long. Also, one participant suggested I should not include questions on curriculum design, as she deemed that to be a sensitive subject, given the implications it carried within her own institution. I did not remove any questions since they all related to my study aims; however, to make them less threatening to participants, I rendered the open-ended questions concerning curriculum development optional and I also included those questions in larger question groups so that they appeared to carry less weight in the context of things. Overall, minor revisions were made in both instruments concerning wording and number.[[88]](#footnote-88)

Regarding the reflective journal, the experience I gained from piloting was invaluable in that it brought its strengths, limitations and demands to my attention. This helped me use it more effectively in the study. For example, the pilot showed that some students would answer questions in ten words and others in a thousand; thus, in the proper study, there was a word limit.

Looking back, piloting afforded me the opportunity to fine-tune my instruments to a certain degree in terms of content and quality, and also to think about time constraints and other practical aspects of the process. Moreover, given that I had not been engaged in interviewing and questionnaires since 2010, piloting presented me with a chance to practice my own techniques as a researcher, reflect on my approach and review it accordingly (Seidman, 2006). Finally, piloting gave me the chance to undertake some preliminary, very basic coding and analysis of data (Cohen *et al*., 2005) to check whether the kind of information yielded by the instruments would fit well with my research questions.

The only apparent limitation regarding piloting was that, because of time constraints, there was neither a de-briefing (Drever, 1995) nor a second piloting of the instruments. It has been suggested that more sampling further refines the tools and also provides researchers with more interviewing experience (Kvale, 1995).

Having discussed sampling and piloting, I now turn my attention to the data collection process.

**3.8 Data Collection**

Providing detailed information on how a study was conducted is an indispensable part of rigorous research (Felix, 2008, p. 147). Therefore, here, the data collection process is thoroughly described.

3.8.1 Student interviews

Following piloting and revising, there was an in-class announcement about the study and a call for participation was emailed to the students.[[89]](#footnote-89) It was stressed that their participation was strictly voluntary and that participating or not would have no repercussions, positive or negative. Additionally, students were informed that the data gathered would only be treated collectively, hence anonymity and confidentiality were guaranteed. Informed consent was obtained by the sixteen students who had agreed to participate. There were two copies of the consent form for each participant; one was signed and kept by participants while the other was signed and returned to me.[[90]](#footnote-90) I circulated a time schedule and participants noted down the dates and times they were available for interviewing. Participants were also asked to choose whether they wished to be interviewed in groups – and with whom – or individually. A small number of their preferences were not adhered to, due to timing clashes and also due to my attempt to ensure sample heterogeneity.[[91]](#footnote-91) The schedule was provisionally prepared and was reviewed at the beginning of each week throughout data collection. Initially, interviews were scheduled to be conducted between March 19 and April 7 2012. This was extended until April 21 2012 since four interviewees had changed their initial date preferences. This turned out to facilitate the whole process since it allowed me to review and analyze all data every time an interview was completed.

Initially, all interviews were to take place within university premises; eventually two of them had to be conducted elsewhere for the participants’ comfort. Location conditions were favorable to interviews: all individual interviews were conducted in secluded places (i.e. classrooms and offices) with no external distractions.

The revised conversation guide was employed for all interviews. This included fifteen open-ended questions, specifically designed to address my research questions and divided into four sections: (1) general questions relating to ESP courses, (2) CL, (3) CTs, and (4) wrap-up questions. A number of prompts and probes were used at various points; for this purpose, the conversation guide was accompanied by a list of thematic keywords I wished participants to discuss. Prompts and probes were used whenever answers were deemed insufficient, where clarifications, explanations, confirmation or more information was needed, when an issue was not brought up or when a link needed to be drawn between a current and a previous comment (Patton, 2002; Kvale, 1996; Lofland & Lofland, 1995). Which prompts and probes were used differed from one interview to the next, based on participants’ answers.[[92]](#footnote-92)

All interviews were conducted by myself and lasted between 45-60 minutes. Each was audio-recorded, partially transcribed, validated[[93]](#footnote-93) and coded[[94]](#footnote-94) before the next one was conducted, allowing me to check for saturation at all times. I also kept hand-written notes at various points to track any unexpected changes occurring and also to document details which were not recorded, such as hesitations, clarifications asked, timing and location. To ensure anonymity, interviewers were uniquely coded (INT/S1, INT/S2, a.s.o.). As compensation for their participation, participants were offered drinks and light snacks. Through the call for participation but also orally after interviews were conducted, participants were informed of their right to a copy of their transcribed data to verify data accuracy (Davies, 1999); no participant has exercised that option.

A crucial aspect of the collection process is data authenticity (Ryen, 2010, p. 420; Yin, 2009, p. 40), which is underpinned by rapport with participants (Silverman, 2005; Kvale, 1996). As mentioned earlier, this was existent and was strengthened through an informal, brief discussion before interviews began and also through the starting questions which were solely used to relax students.

Interview data collection had a number of limitations. First, one of the groups consisted of four French native speakers. As their group interview was conducted in English, comprehension misunderstandings arose and I frequently had to explain questions again. This may have affected the participants’ intended meaning as well. Probing during this interview was more extensive than in other interviews but helped minimize misunderstandings. Second, since the rest of the participants were Greek-speaking, interviews took place in Greek[[95]](#footnote-95) and were thereafter translated in English hence some loss of meaning is possible. Being a certified translator myself, I managed to minimize the error margin by keeping terminology consistent. Third, at various points during group interviews, I noticed that participants contradicted themselves. Because of this, I had to probe for clarifications. This resulted in disorienting the rest of the group and effort was needed to get everyone back on track.

A final point to make here is that interviewing is an art and it is through practice and piloting that its skills are mastered (Kvale, 1996). Given my relatively limited prior experience in interviewing, I benefitted both by piloting and by conducting interviews. At the same time, I think that teachers have the added benefit of dealing with the drill of questioning and answering all the time; a well-prepared schedule and practice can lead teachers/researchers into becoming competent interviewers (Drever, 1995).

3.8.2 Teacher questionnaire

Similarly to interviews, following piloting and revising, an email was sent to the teachers informing them about the study and calling for their participation.[[96]](#footnote-96) Likewise, teachers were informed that data would only be treated collectively. They were also informed that a follow-up interview may be required. Questionnaires were emailed to teachers as Microsoft Office Word attachments on April 11 2012. To improve response rates, three reminders were emailed at regular intervals. Although the questionnaire was provided in electronic format, participants were free to either return it electronically or in hard copy by April 30 2012. Eight out of sixteen teachers completed the questionnaire.[[97]](#footnote-97) Given teacher workload, the 50% response rate was satisfactory.[[98]](#footnote-98) Informed consent was obtained by participating teachers. Again, a copy of the consent form was signed and given to participants while another copy was signed by them and was returned to me.[[99]](#footnote-99)

To ensure anonymity, each questionnaire was assigned a unique serial code (QQ/T1, QQ/T2 a.s.o.). Also, both internal and external confidentiality were ensured to safeguard their position within the organization as well as among their colleagues.

The questionnaire was administered in English. No compensation was offered to participating teachers, given that the communication between us was electronic.

3.8.3 Teacher follow-up interviews

Following a random draw, four of the teachers who returned the questionnaires were contacted for follow-up interviews. As with student interviews, I circulated a time schedule and participants noted down preferred dates and times. All interviews were individual and took place on separate days between June 5-15 2012. Following each interview, I reviewed and analyzed the data. As above, this proved to be a demanding, but worthwhile practice, as it provided me with a better understanding of the information gained.

As mentioned earlier, the conversation guide differed slightly from participant to participant. Roughly speaking though, question sequence mirrored those used in the questionnaires. The guides created included seven open-ended questions, specifically designed to address the topics raised by each participant through the questionnaire, which were of particular relevance to my research questions. In all, interview questions related to (1) CL, (2) CTs and (3) curriculum design.[[100]](#footnote-100) Following similar practice to the student interviews, I employed a variety of prompts and probes to gain more depth into the participants’ answers when needed.

Each interview lasted between 20-40 minutes, was audio-recorded, partially transcribed, validated[[101]](#footnote-101) and coded[[102]](#footnote-102) before the next one was conducted. Contrary to the student interviews, I did not check for saturation, due to the small number of interviewees. Hand-written notes were taken at various points (see student interviews above). To ensure anonymity, each interview was uniquely coded (INT/T1, INT/T2 a.s.o.). Teacher participants were offered, but did not accept, monetary compensation for their involvement.

As was the case with student interviews, participants were given the option to get a copy of their transcribed data in order to verify data accuracy; no participant has exercised that option.

3.8.4 Reflective journal

Personal reflective journal entries consisted of notes I had taken throughout the study, documenting reflections, thoughts, ideas, occurring changes, and other considerations.[[103]](#footnote-103) These had a self-reflexive purpose, to track changes in design and instruments; they also aimed at rendering the research process transparent. Frequently revisiting these entries led to certain changes in my research design (documented throughout the thesis) and also made the research process visible to readers. Surely, concerning self-reported instruments, there is always the question of subjectivity; this however is visited elsewhere in the thesis.

Student reflective journal entries, on the other hand, regarded the participants’ viewpoints regarding CL and CTs at two intervals before interviews were conducted. Students were asked to focus on related strengths/weaknesses, group dynamics, type and formation, and assessment. There was a word limit of 100-250 words for each entry.[[104]](#footnote-104) Students were informed verbally of the purpose of this task and also of its anonymity. Codes were assigned to the entries (RJ/S1, RJ/S2 a.s.o.). Although this was an optional task, a relatively high response rate of 72.9% was obtained (35/48 possible entries).

The purpose of these entries was to triangulate findings from student individual and group interviews (Janesick, 1999, p. 514). Since student entries were submitted only twice during the study and were based on specific probes, this was not a conventional reflective journal. However, it did provide me with rich data to triangulate interview data.

**3.9 Interview transcription and translation**

In this section, I discuss how transcribing and translating interview material have been managed, as both have been argued to carry ethical issues (Marshall & Rossman, 2011, p. 167).

3.9.1 Transcription

Each interview was partially transcribed with the help of a word processor, translated and verified.[[105]](#footnote-105) Verification was attained by proof-reading while the tape was playing, the day following the initial transcription. This was imperative to do, since a verified transcription can counter accusations of researcher bias influencing the analysis. Although a particularly time-consuming process, with each transcription taking up to six hours, the fact that interviews were conducted a few days apart allowed me to transcribe, translate and verify data before the next interview took place. Transcription includes the participants’ discussion of, and comments and elaborations on the conversation guide questions and on any resulting prompts and probes. Where paralinguistic elements were important for the study aim, I noted these noted during interviews (Howitt & Cramer, 2011, p. 326). Thematic analysis[[106]](#footnote-106) allows for a comprehensive, “orthographic” transcript including necessary verbal and non-verbal elements (Braun & Clarke, 2006, p. 88). I should reiterate that no participant names were mentioned on tape nor do they appear on transcriptions. The unique codes assigned to safeguard anonymity appear on the transcribed text and in the data analysis. I opted for partial transcription over a verbatim one for a number of reasons: first, not everything the participants said related to the study. Sometimes participants would say something not within the research scope. At other times, participants’ answers would reveal a misunderstanding of the question (Powers, 2005). Second, although I employed partial transcription, I made every attempt not to transcribe out of context. Third, my specific research purposes meant I was more interested in *what* participants said rather than in *how* they said it. Hence, partial transcriptions were deemed adequate given that they were accompanied by field notes; supplementary field notes have been found to be of more use to the data collection process than a transcription alone, even a verbatim one (Fasick, 2001; Wengraf, 2001). Finally, as a researcher I adhere to the principle that the level of text transcription should complement the level of data analysis (Drisko 1997) and that only those parts of an interview which are specifically related to the research aims need to be documented (Howitt & Cramer, 2011, p. 326; Kvale, 1996); there is no point in spending more time to transcribe specific elements which will be of no use later. My data analysis aimed at exploring general themes and patterns in participants’ perceptions and practices, and this level of analysis did not require a full transcription (McLellan, MacQueen, & Neidig, 2003).

The above do not suggest that partially transcribing interviews carries no dangers. Considering that the spoken word does not parallel the written one (Marshall & Rossman, 2011, p. 164), decontextualizing text may mislead readers. In conjunction with that, being integral parts of research – a value-laden endeavor itself – transcripts are likewise value-laden. I concur with Cook (1990) in that transcribing data is a process always involving selection; as such, it can never be deemed to be complete or objective. Selection means that researchers opt, or are forced to, – deliberately or inadvertently – leave information out which may include elements that may affect the meaning of what speakers say (e.g., emphasis, irony, degree of emotion and doubt on the speaker’s part; Lemke, 1998). A related concern here is that any such alterations may affect data quality and in extent affect data trustworthiness. I tried to atone for these dangers by keeping concurrent and post-interview field notes to mark any such information that may have had a bearing on the participants’ sayings, and also by trying to flow the transcript as naturally as possible. Another countermeasure would be for researchers to be transparent and reflective about the transcription procedures followed (Poland, 1995); I believe that the current section is a step in that direction.

A short note here as to who is doing the transcription: transcription should not be seen as a simple clerical task but rather as a process of meaning interpretation and generation (Halcomb & Davidson, 2006). Being the transcriber of one’s own data has been seen as desirable (Park & Zeanah, 2005), even vitally important in qualitative research (Howitt & Cramer, 2011); the fact that the researcher is the transcriber adds more credence to the end product. Assuming this dual role allowed me to pay close attention to data (Matheson, 2007), get to know the interviews better (Seidman, 2006) and become more familiar with their linguistic and paralinguistic features (Howitt & Cramer, 2011). Transcribing my own data also proved to be a good way of assessing and improving my use of the conversation guide and overall interviewing technique as it handed me the opportunity to constantly revisit and update my practices.

3.9.2 Translation

As already mentioned, being a certified translator myself, there was no need to hire a translator. Even though time-consuming, translating one’s own interviews carries the advantage of minimizing the error margin, since it is easier to maintain terminological consistency along the text. Undoubtedly, representing the full sense of a word from one language to another is a complex endeavor itself (Seidman, 2006, p. 104), certainly more complex than transcribing. From personal experience, a successful translation requires sticking to the translation, being consistent, and avoiding interpreting or spicing things up, keeping in mind that absolute accuracy is impossible; the translator can only attempt to approximate the interviewee’s meaning (Marshall & Rossman, 2011, p. 165). This is better achieved when the interviewer is also the translator – even though it could raise criticisms of bias.

Overall, no serious problems were encountered in translating the interviews. Even when participants used varied vocabulary to discuss a given topic, this was translated as accurately as possible and was then categorized thematically. I fixed grammar and syntax, for purposes of fluidity. Furthermore, probing during interviews gave me the chance to clear any ambiguities and facilitated thematizing answers, without necessarily having the interviewees change the terminology they employed in the first place. Finally, the fact that only the partial transcriptions were translated made my work easier.

**3.10 Thematic analysis**

Thematic analysis is a widely employed qualitative analysis method (Howitt & Cramer, 2011; Braun & Clarke, 2006; Attride-Stirling, 2001; Holstein & Gubrium, 1997), a way of thematizing patterns after tracing those within data (Attride-Stirling, 2001, p. 387;Boyatzis, 1998, p. vii). However, scarce literature accounts have resulted in a relative lack of formalization. This is evident as thematizing methods under the guise of thematic analysis often employ procedures in different ways (e.g., Schinke, Bonhomme, McGannon, & Cummings, 2012; Griffiths, Ryan, & Foster, 2011; Park, Butcher, & Maas, 2004; Moir & Abraham, 1995). Moreover, studies from fields as diverse as linguistics, medicine, psychology and ICT, although naming thematic analysis as their analysis method, offer very little or are too simplistic as to what that is and how exactly they went about it (e.g., Sawkill, Sparkes, & Brown, 2013; O’Neill, 2011; Gildberg, Elverdam, & Hounsgaard, 2010; Wiles *et al*., 2006).

A great strength of thematic analysis is its flexibility, since it is not dependent upon a particular theory or epistemology (unlike, for example, grounded theory, conversation analysis, or narrative analysis). Rather, it can be employed within different theoretical or epistemological frameworks.[[107]](#footnote-107) This can lead to rich analyses of data (Braun & Clarke, 2006, p. 78); at the same time, thematic analysis should be clearly specified and situated, based on the specific way it is being employed. By being explicit and systematic in how the analysis was performed, this thesis aims to counter over-flexibility or looseness criticisms.

Approaches to thematic analysis differ given one’s research questions and purpose. Depending on the extent and ways in which data content affects codification and thematization, thematic analysis can be inductive, theoretical/deductive, semantic, realist/essentialist or latent constructionist(Braun & Clarke, 2006; Boyatzis, 1998). In the current thesis, coding and subsequently, thematization, were, to various degrees, a combination of data-driven, theory-driven, and latent-constructionist processes. Largely, data analysis was inductive, i.e. not departing from a theory. To best appreciate the participants’ perceptions and practices as these were portrayed by themselves, I needed my themes and categories to match their perspectives and reflect their own accounts as accurately as possible (Howitt & Cramer, 2011, p. 280; Bogdan & Biklen, 1992, p. 166) rather than the other way round. This bottom-up process is consistent with case study research and with the wider hermeneutic tradition (Sturman, 1999, p. 104; Merriam, 1988, pp. 3, 53-5). At the same time though, theories, hypotheses and expectations guide research and research questions themselves derive from the researcher’s theoretical and epistemological orientation (Sturman, 1999, p, 104; Merriam, 1988, pp. 60-1). Adopting a primarily inductive approach does not equate abstinence from acknowledging my theoretical and epistemological backdrop nor does it mean that coding and thematization are performed in a vacuum. Every step of the process is detailed and theoretically framed. As it shall become obvious in phases 2 and 3 of the analysis, the data were also related to my research questions. In accord with the constructivist framework underpinning this study, themes were identified at a latent, as opposed to a semantic, level: an effort was made to move beyond describing the surface level of data, and towards interpreting and theorizing the underlying assumptions, contexts and conditions that shaped the participants’ perceptions and practices in the way they did (Braun & Clarke, 2006, pp. 84-5).

The thematic analysis described below was carried out separately but similarly for each of my two samples. Data were analyzed using a six-phase process: familiarization, first generation of codes, theme recognition, theme reviewing, theme definition and specification, and finally, report write-up.[[108]](#footnote-108) These steps overlap often and this renders thematic analysis more systematic. In fact, the quality of thematic analysis is heavily dependent on the researcher’s ability to continuously move back and forth between data and analysis, in order to refine the latter (Howitt & Cramer, 2011, p. 341). This is a feature that characterizes the current analysis. Certainly, there are other models based on thematizing, including thematic networks (Attride-Stirling, 2001),[[109]](#footnote-109) grounded theory (Straus & Corbin, 1998),[[110]](#footnote-110) and thematic content analysis (Luborsky, 1994).[[111]](#footnote-111) Mainly, I opted for the Braun and Clarke model because, due to its particularly methodical and detailed approach, it offers a comprehensive understanding of the data, leading to an in-depth appreciation of participant perspectives and practices.

Thematic analysis was performed manually with the aid of a word processor. I preferred manual to software-aided thematic analysis because, having not used the latter before, I felt more comfortable this way.

A final note here: it is imperative that researchers report the data analysis technique in a thorough way because this renders interpretations more valuable and adds transparency for other researchers and readers (Braun & Clarke, 2006, p. 79; Attride-Stirling, 2001, p. 386). Next, I go through each step in detail.

1. Data familiarization

This stage began concurrently with data collection. Immersion in the data, involving an active, repeated reading of them, is a key aspect of thematic analysis (Howitt & Cramer, 2011, p. 328; Braun & Clarke, 2006, p. 87). Collecting, transcribing and entering data in the various databases myself made me even more familiar with my material and allowed me to recognize broad patterns even at this early stage. It also gave me a rough idea about the direction of the analysis. This was a cognitive endeavour as much as anything else and prepared me for the next phase, namely initial coding generation.

1. Initial coding generation

Increasing familiarization with the dataset helped me contextualize everything, therefore taking an active part in generating codings and themes. Consistent with the emic approach adopted, coding was primarily directed by the data rather than by theory. As mentioned in Section 3.9, only relevant data were transcribed. This “winnowing” (Creswell, 2007, p. 140) extended to all data collection methods and to coding. It has been argued that partial reading of data leads to unreflexive, romanticized (Roulston, 2001, p. 281) and ultimately, one-dimensional interpretations, lacking transparency and complexity (Howitt & Cramer, 2011, p. 330). To guard my analysis against such criticisms, following winnowing, the finalized dataset was fully coded.

Initial coding generation is the first step toward theme generation (Howitt & Cramer, 2011, p. 337). This type of *a priori* coding (coding following data collection but before finalization of coding) is believed to improve coding trustworthiness since it allows for future modifications (Montgomery & Crittenden, 1977, p. 236). Here, I first read all data once as continuous prose and made a list of observations about interesting or often repeated ideas. Next, I went through the text again, line by line, and provided *initial codes*, i.e. brief, suggestive summaries about aspects of the data that I deemed important or directly relevant to my research questions (for a sample, see Figure 1 below).

Only one code was provided to any given extract. When initial coding was completed, chunks of text under identical or similar codes were collated by means of copying and pasting the material, with the use of a word processor. This resulted (a) in rephrasings of initial codings, where other names were adjudged to fit the data better, and (b) in merging of codings, where two or more names were found to contain like content. Initial coding yielded 91 codes for the student sample and 87 codes for the teacher sample.

|  |  |
| --- | --- |
| Text | Coded for |
| Some students in groups of 4-5 may not help as much in certain tasks, so I think that it is unfair for those students to get the same mark as someone who has tried and worked a lot. But there is no way to be fair unless work is split between students. It’s a risk, some are benefitted, others may get a lower mark because the group didn’t do well even though they themselves worked a lot and were due to get a higher mark. This is natural in CL.  (S01) | Some students in groups of 4-5 may not help, so common grade would be unfair.  Difficult to assess fair unless work is split between students.  Collaborative assessment is a risk: some benefit, some lose.  Lack of justice in collaborative assessment is natural. |

(Figure 1: Sample data extract, with codes applied)

A consideration in this second phase is that any given coding provided is only one of a number of possible codings; the larger the chunks of text coded, the wider the span of possible codings (Howitt & Cramer, 2011, p. 337). Hence, I tried to code my data in small chunks of between 1-2 lines, to reflect the meaning of the data in a precise way. In any case, data familiarization aided me in producing representative codings. Because of space limitation, only a sample of initial codings is provided here; full initial codings are available if requested.[[112]](#footnote-112)

1. Searching for themes based on initial coding

Theme generation was also facilitated by the use of a word processor. This tool proved an excellent organizational device, helped in better conceptualizing patterns among themes, and accelerated the retrieval of large amounts of data, saving both space and time.

Moving from a first to a second level of interpretation and, based on their commonalities, the codings from phase 2 were grouped together to form tentative themes. So, for example, Code X: *Collaboration results in more ideas and in idea sharing* and Code Y: *Collaboration eases preparation and makes learning more effective*, collated into Theme Z: *Perceived CL benefits resulting from sharing*. Those codes which at first did not seem to fit under a particular theme, were placed under a “Various” theme and were re-considered for categorization later. Codings from phase 2 could be placed under one or more pertinent themes. No problems were encountered in defining themes.

The formed themes reflected major patterns in the codings. Some themes resulted directly from a single coding, testifying to the overlap between phases 2 and 3. Some themes were identified as main (overarching) themes, while others were identified as subthemes and were placed in turn under main themes. Every effort was made so that the emerging themes reflected commonalities and general trends regarding their “member” codings.

1. Review of themes

The next phase revolved around refinement and involved checking for coherence in the codings under each identified preliminary theme and also checking so that themes were clearly distinguished between them. Hence, I first tested the preliminary themes against the coded extracts, resulting in two tables showing the tentative main themes and subthemes identified for the two samples.[[113]](#footnote-113) This step deviated somewhat from Braun and Clarke’s model in that instead of tables, they provide their candidate themes on maps; a table was more convenient here, mainly because the number of my preliminary themes was substantially greater than the number they present on their maps. I then tested those tables against the entire dataset in its pre-coding condition. These steps led to the emergence of new themes due to combination and refinement (e.g., *CT knowledge* and *Refinement* were collated into a single theme in the teacher sample). No themes were discarded. The outcome of phase 4 was the two final thematic maps (Figures 2 and 3):

Autonomy and accountability

Effects of CL/CT integration in ESP

Benefits and drawbacks

Teacher assessment and peer feedback

General viewpoints

Group dynamics

Benefits and drawbacks

(Figure 2: Final thematic map for student sample)

ESP curriculum development and the future of CL and CTs in language teaching

Benefits and drawbacks

Extent of CL employment in ESP

Level of CT knowledge and related training

Use of CTs in ESP

Group formation

Benefits and drawbacks

(Figure 3: Final thematic map for teacher sample)

This constant revision ensured that the ensuing thematic analysis was representative of the data (Howitt & Cramer 2011, p. 343). Braun and Clarke (2006) warn against infinite revisions (p. 92) and I managed to steer clear of that danger as my refinements directly resulted from my research questions; once the themes reflected the research questions, this process ceased.

A note here is needed on data prevalence: more or fewer codings under a theme do not render that theme more or less important. Essentially, the identified themes need not be the most prevalent ones, but the ones that capture the most important elements from the dataset in relation to the research questions (Braun & Clarke, 2006, p. 82). Prevalence is revisited in Chapter 4.

1. Theme definition and labeling

Following on from the final thematic map, this fifth phase provides clear, exact descriptions for the refined themes in the form of definitions and labels. These state what themes are or are not and how they differ from other themes. In the final analysis, for each of those descriptions, a concise name was used.[[114]](#footnote-114) The accuracy of this task in terms of structure and hierarchical organization was aided by the subthemes already identified in phase 3. To be as accurate as possible, I had to go through the entire dataset once again and check the compatibility of each theme’s and subtheme’s description against the data under them.

A particularly useful, informal technique to check for the soundness of those descriptions was employed here, as suggested by Braun and Clarke (2006, p. 92). This calls for researchers to describe the scope and content of individual themes in a few words; refinement is needed should researchers are unable to do so. No further refinement was required.

1. Report writing

This final phase is carried out in Chapter 4, which follows. Through illustrative extracts, a detailed, analytic and interpretive narrative considers themes individually and relates them to each other, to my research questions as well as to existing research.

**Chapter 4 - Results and Discussion**

The ensuing discussion directly links all identified themes to my research questions. For organizational purposes, I address my research questions in turn. Under each question, I cite and discuss all related themes and subthemes, and address various implications. To give an indication of how common themes and patterns were, prevalence[[115]](#footnote-115) and incidence[[116]](#footnote-116) are reported for a number of the emerging patterns (Howitt & Cramer, 2011, p. 329). Readers should bear in mind that, as it is evident throughout the discussion below, my analysis draws data from all sources in an integrated way rather than separately.

In many points of the discussion, it proved challenging to compare my findings with those in the literature, because of differences in respective research designs and also because, to the best of my knowledge, to date no study has looked at how CL and CTs can combine in a tertiary ESP environment, in the way this study does. Notwithstanding these hindrances, some comparisons are drawn between my findings and findings from other studies, since the themes identified here are widely discussed in the literature, albeit in diverse contexts. Additionally, where similar patterns emerge, parallels are drawn between my two samples, which is one of the innovations this study offers.

**4.1 Results and discussion by research question**

*Student sample – Research Question 1*

What are the perceptions and practices of University students regarding the integration of CL in their ESP course(s)? Which benefits/drawbacks do they perceive CL to carry?

Theme: Perceived benefits and drawbacks of CL integration in ESP

The first theme discusses students’ perceived CL benefits and drawbacks. Students were asked whether they liked any CL features and whether they perceived CL to carry any benefits, following its integration in their ESP course. Idea sharing, interpersonal relations and motivation were the three sub-themes identified.

The notion of sharing was particularly prevalent, with interviews corroborating with reflective journal entries. There were two particularly prevalent patterns here: the first, reported by ten interviewees and four reflective journal entries, was that collaboration renders learning easier and faster, since tasks are shared, leading to less work for each student:

[INT/S2] It’s always easier to collaborate than working alone.

[INT/S13] Students share responsibility; this means less work for each one.

[RJ/S26] The work is distributed between group members…each person has less to do.

The second pattern, reported by eleven interviewees and three reflective journal entries, was that collaboration results in idea generation and sharing (e.g., Hunter, 2006):

[INT/S1] People have different ideas, someone may not think of this or that idea…people combine their ideas in the end.

[INT/S7] When students work together they can share ideas, new ideas come to the fore.

[RJ/S28] Different ideas and perspectives arise.

A less prevalent pattern was that, compared to more individualistic learning pedagogies, CL is a more enjoyable and more interesting experience, shown by comments like “*it’s more pleasant to collaborate with someone else than working alone*” [INT/S2], “*CL makes the course more interesting*” [INT/S12] and “*the combination of ideas makes our partnership more pleasant*” [INT/S1].

Finally, some participants stressed that CL eases preparation and makes learning more effective. Participants reported that via CL, students can help, and learn from, each other. Direct links to Vygotsky’s *ZPD* are demonstrated by the following remarks:

[INT/S2] My partner has more knowledge in English, more vocabulary, can develop her ideas more easily, so for me it’s easier to collaborate with her because I know I may give my ideas but she will be able to develop them better…For me, it’s an advantage. My partner has certain abilities which I don’t have and hence the outcome is better to what I would have provided, had I been working alone.

[INT/S13] Students can see how others work and this could lead them into adopting new learning styles, hence becoming better students.

[RJ/S24] We can learn from one another, we can benefit from someone’s abilities and improve our performance.

The second sub-theme revolved around how interpersonal relations lead to a more beneficial CL. Peer feedback, group spirit, authenticity, free speech and the development of social skills were all mentioned in comments like “*learning to work in teams…respect others’ opinions*” [RJ/S29], “*we get to know each other better*” [RJ/S24], “*peer comments, both positive/negative, on how you go about your work are beneficial*” [INT/S16], and “*you need to learn how to work with people you may not know well, but this will also happen in our jobs…we need to know how to do it*” [INT/S11]. Some of the ideas here have been touched upon in detail later on.

Finally, a third, relatively under-reported sub-theme centered on how CL raises motivation, due to the pedagogy adopted and to the skills taught. One student in particular, reported that “*for this ESP we are motivated…the skills we learn are related to our studies*” [INT/S2]. The literature presents contradictory results, as CL has been marginally found to be perceived as a positive motivator (Phipps, Phipps, Kask, & Higgins, 2001). Motivation is again visited when the teacher sample is discussed.

Moving on from perceived benefits to perceived drawbacks, incidence-wise, numbers were significantly lower. I found this to be problematic, as the literature suggests that, when faced with innovative classroom routines, students may resist change (Porcaro, 2011, p. 45). I expected students to hold more negative perceptions compared to the ones they stated, given that most of them have been acculturated in school systems that promoted individualistic over collaborative forms of learning. However, we need to consider that, throughout the semester students could form their own groups. As free group formation has been found to increase satisfaction with CL (Ciani *et al*., 2008), this may have shifted student perceptions toward being more positive. Also, we should not underestimate the effect researching teachers can inadvertently have on student participants.

In any case, to begin with, some students focused on the disagreements and resulting compromises: “*in case you disagree with another group member, this is bad for both*” [INT/S8]; “*if conflicts arise it becomes more difficult to carry out the work*” [RJ/S31]; “*it’s not always easy to agree with others in order to work with them*” [RJ/S30]; and “*you are obliged to compromise on some things, e.g., the structure of the work*”[RJ/S26]. Others reported on a lack of communication among group members, which negatively affects the time needed to perform tasks: “*it’s not always easy to communicate well with others*” [RJ/S30]; “*the time we sometimes need to do a task is extended when there’s no proper communication between us*” [INT/S14].

The most commonly perceived drawback however, concerned the presence of irresponsible and selfish students in one’s group, which would assumingly lead to loafing and render CL more difficult and less beneficial:

[INT/S7] Certain people may wish to promote their own ideas over those of others.

[INT/S9] Depending on people’s characters, if one tries to force their ideas, there will be problems in the group.

[INT/S13] If you happen to work with someone who is irresponsible or only looks after themselves, you’ll find it very difficult. You may fail the task and get a lower mark because you happened to work with that particular person.

[RJ/S23] It’s a disadvantage for me to be working with people who don’t have the time for their lessons or even worse when they don’t know the topic or much worse, don’t care at all.

[RJ/S28] Some people aren’t always willing to work hard…this causes conflicts in the group and affects the overall group work.

The points raised in this theme were further examined in the next series of questions, regarding group dynamics.

Theme: Group dynamics

This theme discusses group dynamics as a key parameter of CL. Students were asked to say how well they perceived groups to have worked, including any resulting problems. Four sub-themes were identified: collisions, loafing, group formation and group size.

Regarding collisions and competitiveness, twelve interviewees stated that they experienced none, whereas four reported experiencing at least one. Reflective journal entries corroborated these findings: ten entries reported no conflicts or competitiveness, while four reported some conflict and competitiveness. There were two reflective journal entries stating extensive conflict; however, this was not reported by any interviewee.

A notion drawing much attention here was loafing: nine interviewees reported experiencing it in their groups. The presence of loafers was illustrated by comments such as “*not everyone is doing enough work. Some people aren’t cooperative…this means not everyone works the same*” [INT/S16] and “*I experienced loafing by all members of the group*” [INT/S1]. A further seven participants stated no such experience, acknowledging however the possibility of loafing. Their answers related directly to how groups were formed (see below), as exemplified by comments like “*because we know each other, I’d never do that to my friend, I’d collaborate because we get each other. Maybe I’d do it with others*” [INT/S2], “*if the group was randomly assigned, there’d definitely be loafing, competitiveness and conflicts*” [INT/S10] and “*you are then forced to do everything on your own because you know the other member(s) won’t do much*” [INT/S9]. These findings were not corroborated by reflective journals: only three entries reported experiencing loafing. This can be explained by that reflective journal entries were collected before interviews had commenced, and the intervening period saw students collaborating for their oral presentations, which was the course’s most demanding task in terms of collaboration, time and resources. Findings therefore, suggest that loafing increased as the semester progressed. The existence of loafing in my sample is consonant with data from Arnold *et al*. (2012) and Bacon (2005) showing that although students contribute to their groups, loafing persists.

Following on from above, the third sub-theme concerned how groups were formed. Students were asked to pick their preference between free-formed or pre-formed groups. Results show a clear inclination towards the former (twelve interviewees). Eleven reflective journal entries corroborated this preference. One participant stressed how free formation increases her self-confidence: “*it’d be a disadvantage if groups are pre-formed. Maybe I’d be shyer or scared, less confident expressing my views. Working with people I know makes things more comfortable, I can express my ideas more easily*” [INT/S11]. Others commented on prior negative experiences when paired with weaker students, something that forced them to do all the work by themselves: “*it happened to me to work with someone not so good. Sometimes you are forced to do it because maybe the group has been determined by the teacher and it so happens that a weak student is part of it. You are then forced to do everything on your own because you know the other member won’t do much or is too weak to do quality work”* [INT/S9]; “*not everyone has the same abilities and skills. I wouldn’t accept someone who can’t help and would just accept what I suggest*” [RJ/22]. Prior negative experiences were also related to group cohesion, as these comments suggest: “*I’d find it difficult to cooperate with people I don’t really know. It carries a risk but if we pick groups ourselves, we can choose to work with people we can cooperate with. Also, there wasn’t always a sense of community in groups where people don’t know each other well; when this happened, people did not pay much attention to me*” [INT/S12]; “*I prefer forming our own groups because we know each other better than the teacher knows us*” [RJ/S23]. This last point is consistent with Gillies (2004) and Mulryan (1994) who found that a lack of team cohesion and group spirit, which seem to be emanating from pre-formed groups, results in minimal or no contribution by some members (also see Johnson & Johnson, 2003).

A last justification for preferring free groups was that this choice greatly minimizes loafing, competitiveness and conflicts, since members know each other well enough and are most possibly friends. In a setting such as CL where strong interdependence is essential for success (Monaghan, 2011) and where groups formed by students display more intrinsic motivation and classroom community (Ciani *et al*., 2008), this preference was expected:

[INT/S13] There were no conflicts since I was grouped with people I know very well.

[INT/S7] If the group was randomly assigned, there’d definitely be competitiveness/conflicts.

[INT/S2] Because we know each other, I’d never do that to my friend, I’d collaborate because we get each other…Maybe I’d do it with other people.

[RJ/S22] I prefer forming our own groups because that gives me the possibility to choose people who can really be helpful, willing to collaborate. I personally choose my best friend because I know her abilities, that she likes hard work as I, so I am sure that by collaborating we will have a great result and mainly, no conflicts. On the contrary, if groups were pre-formed I am convinced some members wouldn’t be helpful.

Conversely, those students who seemed to agree with pre-formed groups cited knowing their fellow students well enough by now as their reason: “*our class has been together for three years, we know each other very well, it wouldn’t be difficult to collaborate with whomever. I’m not sure whether things would be so nice if there were students in our class from other departments*” [INT/S1]. Others stated that learning to work with different people was very important in terms of authenticity: “*pre-formed groups would prepare us for when we will have to work with people we don’t know…this will also happen in our jobs, so we’ll need to know how to do it*” [INT/S8]; “*I prefer pre-formed groups, because although we’ll have to make a greater effort to adapt, we’ll learn to work with different people*” [RJ/S29]. The representativeness of pre-formed groups to real-world work situations has been well-documented in the literature, even recommended (e.g., see Bobbitt, Inks, Kemp, & Mayo, 2000). The fact that organizations are increasingly emphasizing their employees’ skills of working collaboratively, practicing leadership and generating results as teams (Hall & Buzwell, 2013; Aggarwal & O’Brien, 2008; Hansen, 2006; Windschitl, 2002; Herman, Keldsen, & Miller, 2001) renders this perception all the more significant, particularly in ESP where the language taught directly relates to professional settings (Harding, 2007, p. 6). One thing that participants did not mention was that pre-formed groups can be mixed-ability ones, especially if teachers know students well, therefore maximizing the potential for a ZPD. When friends pick friends, irrespective of their performance levels, and especially in instances where really weak students are pitted together, forming “weak” groups, the potential for a ZPD is dramatically minimized.

The final sub-theme concerned perceived ideal group size. Results here were conclusive. All interviewees reported a size between two and four members as ideal, with smaller numbers preferred over larger ones within that range (nine interviewees showed preference for pairs).[[117]](#footnote-117) Reflective journal entries fully corroborated these results (half the entries showed preference for pairs, and only one entry argued in favor of a 5+ group size).[[118]](#footnote-118) Participants justified their perceptions by arguing that fewer members means more freedom of speech, practicality, fewer conflicts, fair distribution of work, better communication and organization whereas more members means more time needed, more loafing, less concentration and more conflicts:

[INT/S1] I wouldn’t like bigger groups, two-three members is ideal. If there were more students in each group, it’d take more time to complete a task because there would be more ideas to combine.

[INT/S2] Between two-three. In bigger groups, there’d be loafing by some and you’d be annoyed if someone wasn’t collaborating.

[INT/S6] Two-four; we may not be able to concentrate a lot when we work in larger groups.

[INT/S15] Depends on the kind of the task…In higher education I believe two is the ideal number since there are rarely any conflicts and it’s more practical.

[RJ/S31] Two…because it allows for better organization and there’s less likelihood of conflicts. Also it involves you more in the work.

[RJ/S32] Two…because they can collaborate better… communication, arrangements of the meetings and task distribution will be easier.

Only one student expressed preference for a group of 5+, arguing that it simulates real-world settings: “*Five or more…I think that teamwork requires more than two or three. In the future, in a company we have to get used to working in groups of many people*” [RJ/S29]. However, this benefit is countered by reported drawbacks: a study by Ballantine and McCourt Larres (2007) showed that groups of 5+ would result in loafing, increased difficulty in coordinating, and in shy students not expressing their views.

Overall, perceptions here may have been influenced by the size of this class (twenty-four) and by the fact that class sections of the students’ home department are usually around that number. Regardless, findings are consistent with research; small groups have been found to yield more contributions and to engage hesitant students (Dewiyanti, Brand-Gruwel, Jochems, & Broers, 2007; Wegerif, 1998) while two is considered as sufficient for CL to succeed, provided that positive interdependence and individual accountability are honoured (Bacon, 2005).

Overall, and as a general comment, these perceptions must be taken in context. Ciani *et al*. (2008) argued that student perceptions and experiences with CL are affected by group formation and group size. All other things being equal, I would expect such perceptions to be different had their groups been pre-formed, had they been brought together with people they were not friends with, had their groups been bigger, or had their previous experiences with CL been more positive or more negative.

The discussion above on group dynamics reveals that, even inadvertently, there is a trend of creating roles within groups and among peers. Expressions such as “*weak student*”, “*irresponsible*”, “*my best friend*”, “*other people*”, “*not cooperative*”, “*only* *look after themselves*”, “*force their ideas*” and “*promote their own ideas over those of others*” have been employed when participants talked about their peers. Role creation within groups is consistent with the literature (e.g., Arnold *et al*., 2012).

Theme: Autonomy and accountability

Participants were then probed to give their opinion on autonomy and on accountability, both traits of CL settings. The majority (eleven participants) held positive views regarding autonomy in ESP and in higher education in general:

[INT/S1] I prefer getting directions at the start and then work with my group... I think this is very positive at university, we’ve experienced this since the 1st year, teachers challenge you to think on your own, by giving you the basics and then letting you do the work. It’s very important.

[INT/S7] I think autonomy is good, we may make mistakes but we learn out of those. We can discover things ourselves.

[INT/S10] I realized I could find ways to overcome most troubles encountered, either on my own or with others.

Five participants held neutral or negative stances towards autonomy:

[INT/S12] I don’t like autonomy, I expect the teacher to give me the information.

[INT/S11] Sometimes you may get carried away, lose track of time and not do what is required.

Regarding accountability, most interviewees (nine) also held positive views:

[INT/S1] It doesn’t scare me. We already do this and we don’t have any issues with it.

[INT/S9] It’s down to each member to meet deadlines. This freedom is an advantage because it can lead students to become more responsible, more critical, more organized, and make decisions.

[INT/S8] Accountability is always there…Students need to be accountable.

As evidenced by the following comments, not everyone shared this positivity though:

[INT/S2] We have the stress of passing/failing courses. Accountability scares me because it’s your head on the line. You may fail a course and then may need to prolong your studies…it scares me if I am fully accountable for something.

[INT/S10] The teacher cannot rely on students to be held accountable all the time and continuously.

Readers should consider that primary and secondary national curricula in Cyprus do aim at developing autonomy and accountability, but not extensively (Cyprus Pedagogical Institute, 2010). From personal experience, this shows in the performance of 1st year university students and the sample’s mixed responses need to be seen in light of that, as findings here mainly reflect student experiences from their higher education years.

Theme: Teacher assessment and peer feedback

Assessment in CL was one of the major themes emerging in both samples and was the one area with the greatest incidence in the student dataset, appearing to be particularly troublesome for students (and teachers, as this shall become obvious later). This was not surprising, since higher education is a rewards-based system, inevitably rendering assessment the main concern for students. Let me note that any interpretation of their perceptions, should consider that, by the time interviews were conducted, students had already experienced mixed assessment (i.e. common plus individual grade) for their in-class presentations, individual grades for their mid-term exams, and common grades only for their in-class assignment. This theme then, discusses student perceptions of peer feedback and also discusses assessment in CL as the main problematic area perceived. Fair practices are debated, and a number of assessment forms for CL surface. Attention is also drawn to the teacher’s role in assessing CL.

First, students were asked to discuss perceived risks in common-only assessments.[[119]](#footnote-119) I only enquired about this form of assessment because by their own admission, this was the one type that students had not experienced extensively before this class. As the following comment reveals, participants consider such assessment unfair when there are instances of loafing or of mixed-ability groups, yet accept it as a normal condition of CL: “s*ome students in groups of 4-5 may not help as much in certain tasks, so I think it’s unfair for those students to get the same mark as someone who has tried and worked a lot…It’s a risk, some benefit, others may get lower marks because the group didn’t do well although they themselves worked a lot and were due to get higher marks. This is natural in CL*” [INT/S1]. Based on her prior experiences, another student acknowledged that, because of loafing (however minimal as it has previously been noted), pairs are not immune to unfair assessments and that she found herself on both ends: “*this can also happen when there are only two students in a group. From personal experience, I once got low marks because my partner barely collaborated. But also the opposite happened: I got higher marks because group members were better students and helped so that the result was better*” [INT/S2]. These findings are consistent with negative student perceptions on shared grades in Phipps *et al*. (2001) and Ravenscroft (1997).

Students were then asked to state which form of assessment they perceived as fair in a CL setting. Half the participants suggested a common plus individual grade: “*common grade means common ideas are graded but also individual grades assess individual skills*” [INT/S11]; “*I agree with common plus personal grade…it’s only fair that each member also gets a separate mark based on what each person does*” [INT/S8]. Reflective journal entries corroborated this view: “*it’d be fairer this way…a common mark is needed…an individual mark is [also] needed in case one member of the group works more or less*” [RJ/S33]; “*it’s fair to have a common grade evaluating the collaborative work as a whole and an individual grade, as not everyone worked the same, or is at the same level*” [RJ/S28]. Recall that in Section 2.3, it was discussed how CL is based on positive interdependence and individual accountability; mixed assessment assesses both, rendering common plus individual grading consonant with CL’s core elements. Overall, Webb (1997) remarked that in mixed assessments, groups can be graded on their productivity and collaboration, while members can be graded on their abilities and collaborative competence. Within the social constructivist framework, students learn on their own and in collaboration with others. I believe that assessment should look not only at a student’s unassisted efforts and ability but also at what the student can learn from collaborating with others. Assessing individual plus group performance is also consistent with a workplace ethic that calls for team outcomes (Redding, 1992), which result from individual and collaborative efforts. This is consonant with the ESP context which affords students skills that can be useful in a professional environment.

Compared to responses purporting mixed assessment, preference for common only or individual only assessment received a much lower incidence. Four interviewees and one reflective journal entry favored common grades only. As one participant remarked, “*everyone in the group works the same most times*” [RJ/S34]; another said that “*we’ve done the work together and it’d be unfair if we didn’t get the same grade*” [INT/S5]. These answers contrast with responses cited further up, which touched on loafing, on weak students and on unfair allocation of labor between group members. It may be that these particular participants did not experience such negative experiences in their groups or, in the case they did, they were the ones that benefitted from the hard work of their peers.

Finally, a further four reflective journal entries showed a preference for individual marking only, because “*individual grade is fairer. If someone has worked very hard and his partner didn’t contribute…they don’t deserve same grades. Each person should be graded individually for what his effort is worth*” [RJ/S22]. A second participant stated that “*each student makes a different job…they should receive different marks*” [RJ/S29]. Other participants noted that “*individual grades evaluate the qualities of each person, both in group work/in personal skills*” [RJ/S31] and that “*it’d be unfair to give group grades since some students’ grades would be reduced and some students’ grades would be unfairly improved*” [RJ/S26]. It is interesting here that no interviewee shared this perception of an individual only grade, something suggesting that the period that had elapsed between receiving reflective journal entries and conducting interviews shifted some students’ perceptions, probably because they saw how mixed assessment worked. This mirrors a move away from individual assessment, as already exhibited above. Overall, results suggest a shift in perceptions, away from individualistic, toward more mixed modes of assessment. From the perspective of teachers who design and teach ESPs that are immersed in social constructivism, this is a positive shift.

To shed more light on this pattern, I probed for students’ perceptions of the teacher’s role in assessing CL. Students acknowledged how difficult it can be for teachers to assess CL fairly, given how hard it is for them to know exactly who did what. This was exemplified by comments like “*there’s no way to be fair unless work is split between students…It’s difficult to be 100% fair in assessing groups. The only way I can think of is that tasks are split equally between group members and the teacher knows who did what*” [INT/S1] and “*teachers cannot know who did what*” [INT/S7]. In contrast, some argued that teachers should be in a position to know who does what and hence assess fairly: “*the teacher must be in a position to judge*” [INT/S8], although others acknowledged that this is tricky: “*teachers can understand whether someone has worked more than others although they cannot prove it*” [INT/S9]. Finally, a further two participants suggested that students themselves may hold the key to this: “*I know it’s not [right] to tell on others – i.e. that they haven’t worked that much – but…*” [INT/S10] and “*we can split the work and say who’s done what*” [INT/S5]. There have been suggestions in the literature that students can keep a log on how their groups work and that, based on these observations, teachers can award common grades and still penalize loafers (e.g., Mello, 1993). However, research has also shown that this can turn into a vicious circle (Eastman & Swift, 2002; Gremler, Hoffman, Keaveney, & Wright, 2000), as it can come down to the word of one student against that of another. Again, perceptions here may reflect students’ personal experiences with assessment in CL. For example, if a student feels that she has been unfairly assessed and that others have benefitted by taking advantage of her hard work, this may have significantly skewed her answers.

To conclude the first research question, students were asked to provide their view on peer feedback, since this was employed extensively in their ESP. Half the interviewees were negatively predisposed against it and suggested that it should not be employed since the teacher is the authority, has more valid judgment, and their feedback is the one that counts. This is illustrated from this participant’s comment: “*I’d like to get feedback by someone who has the capacity to give feedback, i.e. the teacher…what matters is teacher feedback*” [INT/S9]. Another interviewee argued that “*it saves time to have him there, instead of trying to make corrections between us. Teacher’s opinion is more valid. When we do something as a group, we exchange ideas, agree and disagree, but in the end it’s the teacher that says yes/no*” [INT/S1]. Peers, in contrast, were deemed to be insufficient or untrustworthy in providing valuable feedback, as illustrated by comments like “*peer feedback may be a waste of time*” [INT/S1], “*peer feedback is just an opinion, I don’t think they can offer me things the teacher cannot*” [INT/S12], and ‘s*ome peer feedback may be intended to rile us, it may not be honest*” [INT/S9]. Preference for teacher over peer feedback is consistent with results in the foreign language literature (e.g., Arnold *et al*., 2012; Hyland & Hyland, 2006; Hanrahan & Isaacs, 2001; Zhang, 1995).

While valuing teacher feedback, the rest of the interviewees seemed to also value peer feedback, as a means of simulating the real world by heeding criticism: “*it’s helpful and useful, it prepares us for later on, when we get a job, sometimes we’ll be criticized by others, so we have the opportunity now to experience this and get the chance to improve*” [INT/S8]; “*peer comments, both positive/negative, on how you go about your work are beneficial*” [INT/S16]. Peer feedback was also seen as a means towards a more autonomous learning experience: “*it’s best if we have feedback from our peers first and then by the teacher, so we get the chance to think ourselves*” [INT/S2]. Finally, another participant saw it as providing a chance for improvement: “*other comments will help us to see more things*” [INT/S7]. These findings are consistent with Roskams (1999) and Jacobs, Curtis, Braine, and Huang (1998).

Overall, teacher feedback was regarded to be more valid, while peer feedback was seen as being more representative of the real world. The divergence in opinions on peer feedback can be explained by the experiences particular students have had in providing or receiving peer feedback and also by the overall CL experience they have had.

*Student sample – Research Question 2*

What are students’ perceptions and practices regarding the use of CTs to support CL in their ESP? Which benefits/drawbacks do they perceive CTs to carry?

Theme: Perceived benefits and drawbacks

Moving from CL to CTs, students were asked to discuss any CT features they favored and whether they perceived any benefits in the integration of CT – and technology in general – in their ESP course. In interpreting the following findings, readers should bear in mind that responses should not be taken in a vacuum, in that CTs were used as a supplement in a CL pedagogical framework. It is possible that had CTs been used in a different context, at a different frequency ratio, perceptions may have differed.

Participants came up with a large array of benefits. There was high prevalence in perceptions which viewed CTs as rendering learning easier, faster, more organized and more readily accessible (eleven interviewees). Reflective journal entries corroborated these results (seven entries):

[INT/S8] At the beginning it needed some getting used to, but surely it makes things more organized and readily accessible.

[INT/S3] It’s faster…we can get a lot of information quickly.

[INT/S7] It’s useful…things are more organized…you also save space.

[RJ/S6] Technology has improved education by making lessons more interesting for students and providing easy and quick solutions to students and teachers looking for information online.

[RJ/S10] I believe technology has changed the form of education and managed to make it easier and more attractive for students. It saves time.

It was also suggested that by allowing for online work, CTs render learning a more interesting experience (six interviewees, eight reflective journal entries).

[INT/S1] No CTs would mean a more boring class.

[INT/S2] CTs are attractive for students. They make things less monotonous… [without CTs] it would be similar to other classes we take, nothing special.

[RJ/S10] Using CTs for learning purposes attracts our interest more because nowadays most of us are really familiar with technology. I find the fact that CTs are now used more in education very interesting and helpful…CTs have managed to turn knowledge from something boring into something attractive and possible for all. For example, nowadays more students are willing to do a task because they can use the internet for it.

[RJ/S15] In lessons that are usually boring to students, with a little use of CTs, they will get more excited and would want to participate more.

The high prevalence of this perception is consistent with research by Sagarra & Zapata (2008).

Another high prevalence perception in both interviews (six) and the reflective journal (six) was that since technology is everywhere, students can benefit from knowing how to use it. The current era calls for more use of CTs and students have acknowledged the need to keep pace with them, as illustrated by comments such as “*learning how to handle a computer gives you an advantage for the future…computers and technologies are everywhere. Not knowing how to use technologies in education nowadays is like not knowing the alphabet*” [RJ/S2] and “*education needs to keep pace with our times*” [INT/S10]. Other participants focused on the necessity of knowing how to use such technologies: “*we have to know how to use technologies because we’ll probably need to use them later on*” [INT/S6]; “*it is not only useful, it’s necessary for us in 2012 to use technologies; I think they should be used more*” [INT/S9].

Other perceived benefits included easier communication and no time/space limitations: “*technological progress in education can improve relationships between students because they tend to communicate via blogs, emails etc. Due to this, communication skills are developed between students and teachers’* [RJ/S9]; “*the use of technology means students can interact and communicate with teachers and peers electronically instead of being restricted to f2f meetings*” [RJ/S19]. Others talked of more effective learning (“*technologies offered an easy and effective way of teaching and learning”* [INT/S14]) as well as of increased creativity and productivity (“*the appropriate technologies use can be very beneficial in increasing educational productivity*” [RJ/S9]). A number of reflective journal entries talked about the merits of distance learning; as this was outside the scope of this research, these entries are not discussed here.

Perceived enhancements of learning and satisfaction are consonant with research by Garrison and Kanuta (2004) and by Dowling, Godfrey, and Gyles (2003); a positive relationship between web enjoyment and its perceived usefulness has been found by Mitchell, Chen, and Macredie (2005). Felix (2004, 2001) has shown that student perceptions towards instructional technology are mostly positive and that technology facilitates language learning. Ayres (2002) and Warschauer (1996a) have found that technology is perceived as motivating, that it promotes learning and that it is suitable for language learning. Also, it has been shown that when technologies are heavily integrated in the curriculum, language learning is more successful (Ushida, 2005). Overall, the literature suggests that positive perceptions emanate when the technologies employed are characterized by stability, are well-supported, organized, include activities with clear goals, and provide instant feedback (Felix, 2004, 2001; Torlakovic & Deugo, 2004)

Students were then asked to address perceived drawbacks in the integration of CTs in their ESP. Given the heavy integration of CTs in the course, it was encouraging for me as a course designer to see that perceived drawbacks had a significantly lower incidence (six interviewees, two reflective journal entries) compared to the perceived benefits. One participant stressed that excessive use of CTs can harm interpersonal relations in the classroom: “*using technologies more and more can cause a real damage in the interpersonal relationship between teacher/students”* [RJ/S12]. Another participant talked of how using technologies may distract students: “*many times in the classroom we may lose track and use technologies for purposes other than educational*” [INT/S13]. This kind of behavior was observed a number of times during this case study, and it sometimes proved to be distracting for others as well. It can be caused by a lack of interest, tiredness or boredom and it is one of the things teachers need to find a way around when implementing technologies in-class. Stricter control (easier said than done in classes of 20+), firewalled computers, or a reward system that would encourage students not to lose track, could be some ways to suppress the phenomenon.

The most frequent perceived drawback however was the debilitating impact a lack of related know-how can have on students: “*if someone has limited knowledge of technologies it can be difficult*” [INT/S11]; “*it can be a disadvantage for people not accustomed to using it*” [INT/S8]. However, it was noted that, in a CL setting, this can be overcome with the help of others: “*working in groups means even if someone has limited knowledge of technologies, others can help*” [INT/S2]. It is suggested in the literature (e.g., Felix, 2004) that students need training in computer literacy. This is one of the issues that course designers need to consider before implementing innovative tools into the curriculum. If students do not have the necessary knowledge, they need support; in a different case, it can prove extremely challenging both for them and the teacher. Teachers face a similar concern (see further down).

Theme: General viewpoints regarding CT integration in ESP

After discussing benefits and drawbacks, students were asked to address any other concerns relating to CT integration in their ESP. Some interviewees (three) agreed to its usefulness, but admitted that they don’t really like using it: “*I think it’s a useful tool but I don’t really like it. I know how to use it better now but I can live without it*” [INT/S3]. Similar findings have been shown in the literature (e.g., Stracke, 2007; Stepp-Greany, 2002). Others acknowledged that CTs are being widely employed in education, and that this has considerably transformed the educational landscape: “*it’s a big change that we now use technologies to this extent*” [INT/S10]; “*widespread use in education*” [INT/S16]. Given that most CTs function online, a participant expressed concerns over the internet’s “permanent” nature: “*using the Internet makes things a bit transient, how can we be sure that the information will be there for us always?*” [INT/S10]. Finally, another participant expressed their liking for CTs but stressed that it would have been less exciting had it been employed in all university courses: “*I like it…had we used technologies for all courses though may have rendered it boring*” [INT/S12]. This last comment should serve as a warning against overusing CTs, both for teachers as well as for institutions. The evidence here, however scant, shows that it would be best if CTs were interchanged with other tools, so that students’ interest is maintained.

*Student sample – Research Question 3*

How has the integration of CL and CTs in the ESP course affected how students normally go about studying?

Theme: Effects of CL/CT integration in ESP

The purpose of the final research question for the student sample was to examine (a) how students’ preexisting perceptions on instructional technology might have shifted in any way following CT integration in their ESP and in their tertiary studies in general, and (b) to examine whether the students’ approach toward preparing and studying for their ESP was affected *because* of the use of CL and CTs. Despite this being a narrow theme data-wise, it provides valuable insight into the research question at hand. Regarding (a), there was the limitation that only six students responded. Four reported that their perceptions on technology had changed to a more positive stance since they entered higher education:

[INT/S2] I’ve changed my viewpoint, especially regarding wiki use, because [when] we used that in another course I wasn’t sure of its purpose; now I am.

[INT/S6] I didn’t care before because there was limited use in my previous university. Now I think it’s good because I’ve seen we can do many things with it.

[INT/S9] At the beginning I wasn’t really into CTs but now, after three years of studies, I can’t really think how things could be done without.

[INT/S10] It made an impression on me that we made such an extensive use of CTs for this course and I think it benefitted us greatly. I’ve got used to such technologies now compared to when I first came to university.

Two others stated that their perceptions had either not changed or had changed to the worse: “*my perception…hasn’t changed to the better*” [INT/S7].

To the question whether their approach toward the ESP course was affected because of the use of CL and of CTs, four students responded positively: “*it’s changed my approach. I studied using the computer most times whereas before I used to take hand-written notes and study those*” [INT/S7]; “*the approach this semester made things faster and easier. I think CL and CTs is the best method and has helped many students”* [INT/S9]. Another six argued that there was no change in their approach (“*I don’t think my approach has changed a lot but as a group we have to meet all the time*” [INT/S6]); one student justified her response by saying that the mixed method was not something new: “*no, because I was already used to working in groups*” [INT/S13].

*Teacher sample – Research Question 1*

What are the perceptions and practices of University language teachers regarding the integration of CL in their ESP courses? Do they embed CL in their ESP teaching or not and why? What benefits/drawbacks do they see in that? Have their perceptions and practices toward CL in ESP teaching shifted during the past 5 years or so and if yes, in what ways and because of which factors?

Theme: Extent of CL employment in ESP

The use of questionnaires along with interviews aided my analysis with the teacher sample, as a number of the data have resulted directly from closed items. Readers should bear in mind that questionnaires were administered first with eight returned, and interviews were used as follow-ups with four of those teachers.

The first item on the questionnaire was a closed one and asked how extensively teachers tend to integrate CL in ESP courses. Results read:

Extensively: 5

Moderately: 3

Rarely: 0

Never: 0

Results reveal that all teachers reportedly integrate CL in their ESP courses to varying degrees. A number of ESP curricula at my workplace prescribe the use of CL, but do not dictate it. Surely, some teachers may not wish to deviate from the suggested pedagogy. However, I would take this finding as resulting mostly from the teachers’ own initiative because more often than not, they are free to choose their pedagogical approach.

The second item asked through which means teachers have integrated CL in their ESP classrooms. Participants were free to pick as many options as applicable:

Computers: 5

Internet: 4

Blackboard: 3

Wiki: 1

Blog: 3

Non-technological means: 3

Other: 0

Results show that teachers employ a wide range of means to aid with CL. This has two implications relating to training: one is that they themselves need to know how to use each tool and two, students who do not know in advance, should be taught how to use these tools. It is interesting to see that three teachers also use non-technological means to implement CL. Also, teachers have picked nineteen options in total, meaning that some teachers implement CL via more than one means. This could mean that training may be needed on a number of tools and also that different tools cater for different needs. In terms of catering for the needs, interests and knowledge of different students – and of teachers – a variety of tools are required. In addition, different uses of CL demand different tools (e.g., blogs can be used when classes take place at a lab; however, if teachers need to provide immediate feedback for a collaborative writing assignment in a classroom without computers, then notepads can be used).

Theme: Group formation

This is a narrow theme as it only comprised of two questions; however, it is an important one, as it provides more insight into teacher practices regarding group formation and size in an ESP context integrating CL. First, teachers were asked to report how they form groups:

I like to group students myself: 2

Students are free to form groups on their own: 6

This depends on the task at hand: 6

The practices at grouping students revealed here, aim at developing group autonomy and cohesion as promoted by CL. A clear preference for free-group formation is consistent with views from the student sample on the same topic. However, stated preferences here contrast with research showing that control maintenance is behind teachers’ grouping practices (Baines, Blatchford, & Kutnick, 2003).

Six participants also shared the view that group formation depends on the particular task at hand. The literature suggests that this could be interpreted as an attempt to form mixed-ability groups, so that weaker students could be supported by stronger ones, hence enhancing the potential for a ZPD (e.g., Gillies & Boyle, 2008).

In terms of preferred group size, results read:

2 students: 1

3 students: 0

4 students and over: 0

Depends on the particular task: 7

I don’t think group size really matters: 0

Teachers do not really express preference on group size, thus findings somewhat contrast with both the literature and the student sample. A meta-analysis of sixty-six studies examining how group work affected learning, suggests that four should be the maximum number of members in a group (Lou, Abrami, Spence, Poulsen, Chambers, & d’Apollonia, 1996). Moreover, the student sample exhibited a clear preference for pairs and only one participant suggested that groups should contain 5+ members; at the same time, only one student proposed that group size should depend on the task at hand. I would suggest that the relative difference in perceptions is justified. Teachers see groups from the outside and form an opinion based on intended group outcomes, while students are directly involved in groups and form an opinion based on prior experiences more than anything (as their comments suggest).

Theme: Perceived benefits and drawbacks of CL integration in ESP

Participants were first asked to provide their perceptions on potential benefits CL carries for ESP students. The most prevalent pattern (five responses) was that students can learn from each other through peer feedback and idea sharing. This is best illustrated by comments such as “*one important benefit is the improvement obtained when working with others. Weaker students cover their shortcomings, and better students become more competent by explaining or correcting others*” [QQ/T6], “s*tudents learn from each other’s mistakes…they assess each other*” [QQ/T2], and “s*tudents exchange views on things that interest them, share experiences*” [QQ/T4]. As in the student sample, CL is directly linked with Vygotsky’s ZPD.

Learning to collaborate in groups, hence improving communicative and linguistic skills, was also deemed important:

[QQ/T8] Students usually like working in groups and most of the time feel comfortable with other students. CL is a way to help students improve their overall communication skills (essential in the real world) by learning to express and defend their ideas and also by learning to accept others ideas.

[QQ/T1] When students work together on a task they’ll benefit linguistically and emotionally well beyond the ESP classroom.

Additionally, participants stressed that students benefit in terms of autonomy:

[QQ/T5] CL enables students to practice and use what they’ve learned more actively and without the permanent surveillance of the teacher.

[QQ/T6] CL helps students to act autonomously, be responsible of their learning and become independent students.

Consistent with the literature (e.g., Eastman & Swift, 2002), teachers also focused on the authenticity CL lends to the ESP class, as it provides students with the chance to experience how a professional setting can be like:

[QQ/T4] [CL offers] hands on [practice].

[QQ/T3] Teachers can observe how students work together and encourage students to work collaboratively rather than alone as this is normally how it’s going to be in their work environment in the future.

These findings were corroborated with interview data, where it was acknowledged that exactly because it is an ESP environment, authenticity assumes even greater importance:

[INT/T1] It’s a more realistic situation in class than individualistic learning, these being ESP courses I think authenticity is highly important. Working with others prepares students for their future careers. Peer-feedback allows them to be more autonomous and independent.

[INT/T3] I think CL can give students a glimpse of what life in a company would be like, we don’t always collaborate with our best friends and we don’t always like the people you have to work with.

Taking the two samples together, autonomy and real-world representativeness are recurring patterns. Considering that particularly the second notion emerged from participant answers without any probing for, both samples show an awareness as to this feature within an ESP context, which serves as extra incentive for students to do well in these classes. This awareness resonates well with contemporary practices of companies in employing and training their employees, emphasizing both collaborative as well as technological skills (Waldeck & Dougherty, 2012, p. 355).

Participants were then asked to report any benefits they perceive CL to carry for ESP teachers. In accord with Hall and Buzwell (2013), the most prevalent pattern here (five responses) was that CL allows teachers extra time and because of that, they can help students more:

[QQ/T1] Teachers are free to circulate and facilitate the work done in the groups.

[QQ/T5] It gives you short breaks to deal with other issues (walk around…help students, prepare next activity, relax for 2 minutes).

[QQ/T2] Teachers avoid talking all the time in class, they engage their students in the learning process.

[INT/T1] The teacher has time to deal with students more efficiently.

Consistent with similar findings in the literature (e.g., Summers, Beretvas, Svinicki, & Gorin, 2005; Cabrera, Crissman, Bernal, Nora, Terenzini, & Pascarella 2002; cf. Phipps *et al*., 2001), CL’s capacity as a motivator was brought up. However, as in the student sample, the notion of motivation was under-reported in terms of incidence, as only one teacher addressed it as such:

[QQ/T8] What’s beneficial for students is also [beneficial] for teachers. A big problem for teachers is always how to best motivate students and CL can contribute to increase motivation.

After addressing perceived benefits, participants were asked to name any drawbacks CL may bring to the ESP classroom. The fact that CL is a time-consuming pedagogy that requires extra preparation was noted by participants as a serious problem. In fact, seven of the eight participants noted time restrictions as an inhibiting factor in employing CL in their classes, exemplified by comments like “*effective CL takes time in terms of preparation…activities may not work effectively the first time*” [QQ/T2] and “*it’s time-consuming and it could take you back in the syllabus*” [QQ/T3]. Findings were corroborated by interviews: “*it can be time-consuming in terms of implementation…it can mean more preparation on the teachers’ part*” [INT/T2]; “*a lot of work awaits teachers in preparing for this shift in pedagogy*” [INT/T4]. The worry from teachers’ perspective obviously emanates from that the additional time needed to apply CL means losing ground on covering the syllabus – unless the syllabus specifically caters for this (for more on this, see Implications). Findings here are consistent with the literature; Austin *et al*. (2010) found that, gradually, teachers become aware of how complex CL can be.

Much like in the student sample, when asked what the most serious area for concern when implementing CL was, the vast majority of the participants (seven) named assessment. Furthermore, the emerging sub-themes of fairness and form of assessment also echoed the student sample. The overall pattern was best illustrated by this comment: “*assessment is a major headache; you don’t want students to come knocking on your door asking for re-evaluations, that’s the last thing a teacher would need*” [INT/T3].

A number of related issues with regard to assessing collaborative work came to the fore. The main one was the choice of form of assessment: “*whether to assess collaborative work individually or collectively*” [QQ/T1]; “*it’s not easy to decide how to mark. I give the same mark to all students in a group but sometimes I feel some students have worked more than others or that some students are better than others*” [QQ/T3]. This was corroborated by the interviews: “*how to grade students has been by far the most difficult thing*” [INT/T3].

Being just to students was the other major assessment-related pattern: “*to be fair to all students…to realize the contribution of each student*” [QQ/T6]; “*impossible to monitor the performance of each student throughout the duration of each task*” [QQ/T2]; “*teachers have to be fair…assessing students in groups is difficult and sometimes problematic*” [QQ/T8]. Again, these findings were corroborated by interviews, as these illustrative comments show: “*assessing fairly, I think this is the most obvious one…I’ve had students complaining about not getting a high enough grade because of someone else not doing their work and students complaining of loafers and I’ve been trying out different ways of assessing CL*” [INT/T4] and “*essentially, assessment is the biggest issue given that it’s really difficult to know who did what in a group*” [INT/T1].

Teachers were also asked to report how they assess students in CL contexts. Closed-item responses read:

Common plus individual grade: 4

Common grade only: 2

Individual grade only: 2

There is a striking balance between the respective answers in the two samples. In both, mixed assessment was preferred by exactly half the participants, while common grade only was preferred by a quarter of each sample. The only difference is that a further quarter of the teacher sample assigns individual grades only, while no interviewee from the student sample expressed preference for this mode.

The fact that assessment is a common area for concern in both samples serves to highlight a number of points. First, perceptions are heavily influenced by the predominantly rewards-based nature of higher education upon which the success and failure of one’s efforts are judged. Second, for all its merits, CL is not always a bed of roses and serious organization is needed for as smooth an implementation as possible. The above comments show that assessment can be a nightmare for teachers, as any misplaced judgment can backfire; comments from the student sample show that problematic assessment or assessment that places them at a disadvantage, or which does not subjectively acknowledge their effort, can turn them against a pedagogy, regardless of its benefits.

Moving on from assessment, it was also reported that for students who fail to grasp tasks well, or for students with little prior knowledge of it, CL can be an arduous experience, and may result in loafing: “*CL may be tedious for those without a good understanding of the task*” [QQ/T1]; “*groups aren’t always functioning well; some students who haven’t experienced CL before find it difficult to get used to it, others students who are either not strong enough or don’t care that much just sit back and let others do the job*” [INT/T1].

Group formation also proved problematic, especially when teachers are unaware of each student’s strengths and weaknesses:

[QQ/T8] Teachers sometimes need to know their students’ character to form the right groups, which isn’t the case at the beginning of a semester.

[INT/T2] I think teachers are responsible of controlling such situations and the way groups are formed can act as a means of controlling or preventing such behaviors in the first place. This can be tough though when it’s the beginning of the semester and teachers don’t really know students.

Another participant addressed the fact that CL challenges teachers’ traditional role and control mechanisms:

[INT/T2] The lack of control on the teacher’s part can be an issue, especially when students can do things outside the classroom…I think the teacher’s role as it has been traditionally is slowly changing from teacher to moderator.

It was also pointed out that CL implementation can be challenging for teachers who have been more accustomed to other pedagogies before, not least because students themselves may also not be used to CL:

[INT/T4] Different students react differently to this and it’s been challenging to say the least for me to manage and implement a pedagogy I was not accustomed to.

In addition to the above, teachers referred to certain behaviours that can directly result from group work: strong students avoiding weaker ones, weaker students feeling uncomfortable or reserved when grouped with more strong-minded peers and stronger students experiencing injustice by knowing their own performance means higher grades for students who do not really deserve them:

[QQ/T2] Not all students are engaged in the tasks since strong students usually avoid weak ones.

[QQ/T3] Shy students don’t normally participate in this type of activities.

[QQ/T8] Some students are quiet or reserved and feel uncomfortable working with others especially if there are some strong personalities in the group. Also, some hard working students who do most of the work can feel bad especially if they know all the members of the group will get the same grade.

[INT/T1] Group dynamics can be a headache with students not contributing and students having not experienced CL before needing extra attention…this takes its toll.

[INT/T2] Students who aren’t used to this type of work may shun it or just sit back and allow others to take the mantle. I’ve also had instances of intra-group bullying which can happen when really strong-minded individuals are pitted against really weak students.

The concerns raised here align with the student sample. As I already argued, convergence means ground for improvement on such issues and serves as another example why obtaining student perceptions is important for the process of designing or updating curricula.

Finally, participants were asked to pick all issues they had encountered in applying CL in the ESP classroom, from a number of possible options:

Student inability to work in groups: 2

Student unwillingness to work in groups: 4

Time restrictions: 7

CL does not bode well with ESP syllabus: 0

Student assessment issues: 2

Other (please specify): 0

A comparison between the answers picked from the list and the drawbacks reported in interviews reveals that there is not always correspondence between the two. There was a match regarding time restrictions, when seven teachers stated that they had faced it and then three interviewees addressed it as a drawback. Regarding assessment though, two out of the four interviewees brought “student assessment issues” up, compared to seven out of eight addressing the issue in questionnaires when asked about perceived CL drawbacks. This could mean that teachers do acknowledge a number of issues that may hinder CL’s implementation but acknowledging does not necessarily equal that they themselves have faced or are facing all such issues in their classrooms. Overall, perceived drawbacks such as time constraints, negative student reactions, grouping and curriculum issues are mentioned in the literature (e.g., Gwyn-Paquette & Tochon, 2002).

Another issue relating to perceived benefits and drawbacks which was examined during the interviews was whether teachers have shifted their perceptions and practices regarding CL integration in ESP teaching during the past 5 years and if yes, in what ways and because of which factors. Some argued that one or both of their perceptions and practices have unavoidably shifted to some extent, as shown by the following comment: “*yes they’ve changed…they had to. I tend to use CL more now*” [INT/T1]. Others have not altered views, but did shift their practices: “*I can’t really say I’ve changed my perceptions regarding CL…but my practices have changed into a more extensive employment of CL*” [INT/T3]. Interviewees attributed such change on the increasing implementation of CL in curricula: “*CL is more integrated in curricula now compared to when I began teaching. This has made me use CL more*” [INT/T2]; “*ESP syllabi of the last few years are increasingly more CL-oriented*” [INT/T1]; “*CL looks to be on the up when it comes to pedagogies and we see it integrated more and more in higher education curricula*” [INT/T3]. Another reason cited was that CL is becoming a universal educational trend: “*the way higher education is nowadays, CL is employed increasingly in all fields, not just in language learning…I find most students are quite used to working with others*” [INT/T2]. Teachers also attributed the change on CL’s compatibility as a pedagogy with the requirements of the ESP framework which calls for more authenticity and autonomy, shown by comments like “*before this period maybe the approach was more individualistic but the reality of the workplace demands a shift in pedagogy as well*” [INT/T1] and “s*tudents come to university without any real experience in working collaboratively, but this changes rapidly the moment they enter higher education. Because of that, language learning and the ESP classroom in particular have to follow suit and I think CL is a pedagogy that fits the ESP purposes perfectly well with the group work and the authenticity and the opportunities it lends students to be more autonomous*” [INT/T3].

One interviewee in particular, provided interesting insight into how (and why) more experienced teachers had to acclimatize, even though they were used to different pedagogical approaches:

[INT/T4] Being a seasoned teacher I was more accustomed to the communicative method and to more individual-tailored courses. With the emergence of more and more ESPs, CL is increasingly being integrated and this suits the futures of these students. I tend to integrate it in ESPs I design and even if the syllabus does not impose certain pedagogies, I try to give it a go and see how the class reacts…As times change, so do teachers and their chosen methods. Students surely need the abilities that CL can pass on so I would say that the transition was troublesome for me but at the same time a necessity.

Regarding more experienced teachers, the literature suggests that change is not seamless: indicatively, Wilson and Berne (1999) found that more experienced teachers face difficulty in implementing teaching innovations, requiring support and time to adjust.

Inherent in the above comments is that pedagogical shifts happen irrespective of whether teachers dislike or resist them. As curricula evolve according to the market’s needs, so too pedagogies. Under that spectrum, CL can be seen as a mirror of the professional environment where collaboration can play a significant role, offering students a chance to practise the way they shall conduct themselves later.

A note of caution before moving on: perceived teacher perceptions of CL should be received with some reservation, as the research literature reveals a potential pitfall of such findings. In two separate studies, it was found that reported and actual use of CL by teachers differed substantially; the great majority of the samples in these studies initially reported using CL, only to later emerge that very few were using CL in a structured way (Lopata *et al*., 2003; Antil, Jenkins, Wayne, & Vadasy, 1998). Not using a formalized model of CL places the benefits CL intended to bring to the class in the first place into doubt and skews findings on perceptions and practices. Extra attention should be paid by curriculum designers and policymakers therefore, in ensuring that when integrated, CL follows certain standards and that adequate support is provided for teachers and students alike.

*Teacher sample – Research Question 2*

What are the teachers’ perceptions regarding CTs in ESP teaching and curriculum? Which related benefits/drawbacks do they perceive such an integration to carry?

Theme: Level of CT knowledge and related training

This theme looks into the teachers’ perceived level of instructional technology knowledge and on their views regarding related training. Results on perceived knowledge level read:

Advanced: 3

Average: 5

Novice: 0

When asked whether they thought language teachers should be trying to keep up with the advancements of technology to be able to successfully embed CL in their ESP classroom(s), all eight participants answered positively. The same unanimity resulted when answering whether they believed it would be necessary for them to be getting training on the actual use of CTs in education. The literature consolidates these findings as it has shown that staff development and training are needed so that educators can successfully implement an innovation like CTs in their teaching (e.g., Wang, 2008; Jelfs & Colbourn, 2002).

The interviews cemented the resulting pattern which revealed that teachers should try to keep up with the developing pedagogical context:

[INT/T1] As time goes by, technology advances quite rapidly…this means teachers should try to keep pace with that or be left behind…particularly younger teachers who are beginning their careers now.

[INT/T2] Fast-track development means any knowledge teachers have needs to be updated quickly.

[INT/T4] Using CTs today makes thinks more interesting for students. Teachers are always informed of latest developments in pedagogies and as it happens with all pedagogies, some adopt new ones, some keep on using their trusted ones. Institutions provide incentives for teachers to go to seminars and see how CTs can be employed in education and teacher trainees are introduced to CTs while being students themselves…I think CTs are the future in language teaching.

Interviewee comments reveal that professional development is assuming great importance in today’s landscape. It is important for seasoned teachers, who are maybe afraid of implementing these new technologies since they grew up in a different environment or are resistant because they prefer their tried and trusted methods. At the same time, it is important for new teachers who need to be better equipped to deal with the challenges of the modern classroom and who need to prepare their students efficiently for the workplace. We have seen earlier that students consider a lack of knowledge as the biggest obstacle they can face in a collaborative setting, as that would hinder their progress. Hence, the need for training is imperative. The literature suggests that professional development on CL renders teachers and students more adept in employing CL properly (Lunenberg & Korthagen, 2005; Felix, 2004; Lopata *et al*., 2003; Johnson & Johnson, 1999b; Antil *et al*., 1998). More enhanced understanding of what CL is and how it works will go some way to eradicate inconsistent implementations of CL (Veenman *et al*., 2002).

Theme: Use of CTs in ESP

This theme discusses teacher practices on *how* CTs are employed in the ESP classroom and their perceptions on whether CTs *should* be employed in the first place. Results were conclusive when participants were asked of their position concerning CT integration, with seven in favor. When teachers were asked to pick whether and how often they tend to employ CTs in the ESP classroom, reported integration frequency varied: half the sample (four) stated using CTs occasionally, three stated using CTs often or always while a single participant stated no use of CTs. Although numbers between the two closed categories match up, I would hold some reservations as to the face value of that; using something does not always equal favoring it.

Through interviews, participants were subsequently asked to consider, irrespective of their personal practices, whether teachers who do not employ CTs find themselves at a disadvantage. One interviewee acknowledged that not everyone employs CTs equally, also revealing the reasons behind using CTs: “s*ome use CTs more than others, not just because the syllabus says so, it’s because they feel it enriches their classroom. Usually it’s up to teachers to implement CTs in their classes*” [INT/T3]. Further comments suggest that teachers do not perceive not employing CTs as detrimental to those teachers who do not employ them: “*I don’t think that teachers who don’t use CTs extensively are at a disadvantaged position*” [INT/T4]; “*teachers who don’t employ CTs in their classroom – and I know a few colleagues who don’t – are not doomed to fail*” [INT/T1].

When asked to say why a teacher would not integrate CTs, one interviewee pinpointed to one’s personal perspective and also to the demands such integration would place on the workload: “s*ome don’t [integrate CTs] either because they don’t care, don’t want to or because of their already stuffed workload*” [INT/T2]. Relating to that and to the previous discussion on professional development, another interviewee stressed a need for training when integrating an innovative practice, and that this further burdens an already heavy workload: “*it hasn’t been easy trying to keep up, because teachers need to do professional development all the time and CTs are only a part of that development*” [INT/T1]. Some of the issues raised here are further addressed next.

Theme: Perceived benefits and drawbacks of CT integration in ESP

Teachers were then asked to name the most important benefits that CT may bring to the ESP classroom for students and teachers. Over half the sample (five) focused on motivation: “*I believe using CTs can enhance motivation which is essential for learning*” [QQ/T8]. This is consistent with Kim (2008), Ayres (2002) and Warschauer (1996a) whose results show that the majority of teachers consider technology to be a motivator in language learning. Various skills were also mentioned: “*Pronunciation is enhanced, listening skills are practiced*” [QQ/T2]. This last comment contrasts with findings in the literature. Kim (2008) did not get any teachers reporting speaking enhancement as a potential benefit of technology usage. Moreover, no participant in my student sample cited either pronunciation or listening as a perceived benefit, itself somewhat consistent with Sagarra and Zapata (2008), in whose research, less than a third of their student sample perceived technology to improve their pronunciation and listening.

Half the participants also talked of autonomy and independency for students, as illustrated by remarks like “[*CTs provide]* *opportunities [for students] to work outside of the classroom in their own time and pace while collaborating*” [QQ/T3] and “*[CTs] help students to act autonomously, be responsible of their learning and become independent students”* [QQ/T6]. The literature supports this notion (e.g., Kim, 2008).

In accord with Pardo-Ballester (2012), a third cluster of answers centered on how CTs provide authenticity, allow students to be more actively involved and render learning more fun and interesting:

[QQ/T2] Teaching becomes more fun.

[QQ/T4] CTs make learning more interesting as students are participating more actively.

[INT/T2] I think CTs can actually make classroom a more interesting place for students to be in, especially given that this age of students is digitally literate to a large degree.

[INT/T1] I like it that they offer an authentic outlet.

A point raised in interviews was that CT implementation helps education to keep up with “digitally-native” students:

[INT/T3] Students are growing up in ipads and laptops today and seem eager to use these for their education. Certainly there’s a shift from how education was 10-15 years ago.

[INT/T1] Many students nowadays are well acquainted with CTs…this interactivity is already part of their lives and I think education should keep pace with that.

This point resonates a similar perception from the student sample, where the need was acknowledged for students to keep up with today’s increasingly digital age.

A last reported perceived benefit was that CTs provide the classroom with numerous resources, exemplified by comments such as “*CTs offer a multitude of sources to take advantage of*” [INT/T1] and “*I like it that there are so many tools out there…it’s impossible not to find something that suits each teacher’s taste and fits the syllabus purposes*” [INT/T3]. The capacity to expand the spatiotemporal boundaries of the classroom may be seen as one of the greatest benefits of using CTs;[[120]](#footnote-120) nonetheless, a wealth of resources is not always a good thing. Inevitably, some resources are better than others and teachers need to be extremely cautious in choosing what is appropriate for their classes, both in terms of the level as well as in terms of authenticity. Also, searching for and evaluating sources may be time-consuming and can add to the teachers’ time concerns.

Turning our attention away from perceived benefits, teachers were asked to name the most important drawbacks they perceive CTs may bring to the ESP classroom for students and teachers. In terms of incidence, and in consonance with the respective perceptions in the student sample, the most prevalent pattern concerned a lack of familiarity with CTs, which purportedly placed both students and teachers at a disadvantage. Participants acknowledged that both groups need time so that they can catch up with technologies:

[QQ/T3] It could be problematic to students not familiar with technologies.

[QQ/T4] Students need more time to familiarize themselves with technologies new to them.

[QQ/T4] It’s a learning curve; teachers may also need a lot of time to familiarize themselves with the technologies they want to use.

These findings were corroborated by interviews:

[INT/T2] The fact that so much development happens in so little time can be really problematic…if as a teacher you want to be kept updated on these developments, this can take some time.

[INT/T4] There’s an entire generation of teachers that wasn’t brought up in technology…it can be quite arduous for them to get used to using this now. This can be quite an issue…the time needed for someone to get to know how to use [CTs].

Another perceived drawback, also consistent with perceptions in the student sample, was the disturbance caused when students work in groups, socializing and entertaining themselves (using social media for example) rather than studying:

[QQ/T2] When it’s a big group, noise and confusion may be possible problems. Students tend to speak to each other, engage in activities other than the ones given by the teacher.

[INT/T3] Students can sometimes get distracted and entertain themselves rather than use CTs for their tasks.

Other participants remarked that not all students have access to computers away from university, and that sometimes using CTs on campus can be hindered by technical problems or budgetary constraints:

[QQ/T8] Some students still don’t have easy access to computers or internet connection outside the university…Technical problems and lack of the right equipment [may render using CTs on campus problematic].

[INT/T3] Budgetary constraints can sometimes be an issue.

A final perceived drawback was that using CTs would mean bigger workloads, resulting in more time concerns:

[QQ/T2] Dealing with every single student in a computer lab is very tiring. A lot of energy and effort is needed on the teacher’s part.

[QQ/T3] It normally creates more work.

[QQ/T4] Time restrictions [may hinder using CTs].

Increased workload, commitment and effort as a result of CT integration are some of the main concerns appearing in the research literature (e.g., Jelfs & Colbourn, 2002; Wheeler, 2001).

*Teacher sample – Research Question 3*

What is the future of CL and CTs in the ESP context? Would teachers embed a collaborative pedagogy in a new ESP course? Do teachers think that students’ perceptions with regard to CL and CTs should be taken into consideration when developing or reviewing ESP curricula?

Theme: ESP curriculum development and the future of CL/CTs in language teaching

This final theme looks into teacher predictions on the future of the language teaching profession with regard to CL and CT integration. It also examines whether teachers would embed CL in a new ESP course and to what extent, and also debates the role students can play in the integration or not of CL in new ESP curricula.

First, teachers were asked to state how they expect CL and CTs to feature in the language teaching profession in ten years’ time. Only half the participants in the sample answered, unanimously expecting CL and CTs to hold centre stage in the profession in the coming years: “*courses will be blended and a great part will be given to CL…CTs will be integrated as an integral part*” [QQ/T6]; “*already most teachers have integrated CL in their classes…I expect an increase in the use of CTs with better equipped classes*” [QQ/T8].

Teachers were also asked to say whether they would embed CL in a prospective ESP course. The questionnaires yielded conclusive results, as all participants answered positively, with varying degrees of projected integration:

To a great extent: 3

Moderately: 3

Only to a limited extent: 2

Because of the variation in responses, I used interviews to probe about embedding a collaborative pedagogy in a new ESP course. The answers provided were particularly enlightening, as participants touched upon a number of issues raised in my samples, such as the need to keep up with the changing times, ESP’s capacity to provide students with a framework characterized by authenticity, and concerns over students’ reaction – and teachers’ probable resistance – to change:

[INT/T1] I’d choose to embed both, probably CL primarily and then CTs whenever I’d think these would help…21st century teaching models should focus more on collaboration as this is what students will face in the real world. ESPs need to embed CL.

[INT/T2] I’d probably have some components that would require CL/CTs, times are changing and so too syllabi.

[INT/T3] I’d choose to embed such components because of the aforementioned benefits. I’d be a bit skeptical though as to the extent of such integration; I wouldn’t like my students to suffer from a drastic change in their educational habits.

[INT/T4] Yes but not to the detriment of my trusted methods. I recognize their potential but for the time being I don’t really wish to make wholesale changes to my syllabi.

Again, one should be careful in interpreting these findings. As Lopata *et al*. (2003) and Antil *et al*. (1998) showed, reported use and actual use do not always match. Future integration of collaborative pedagogies would be contingent on a number of factors such as curricular requirements, student level, institutional policies and prior experiences, among others.

To conclude this theme, teachers were asked whether they think students’ views with regard to CL and CTs should be considered when developing ESP curricula. Seven participants answered positively, and justified their perception by stating that such pedagogies should be employed only if students can take to them, hence students should be considered for such decisions:

[QQ/T3] If students feel they cannot cope with technologies, it could be a waste of time trying to use them in the classroom.

[QQ/T8] I believe teachers must always take into consideration the beliefs, opinions, needs, motivations of students.

[INT/T3] Students should have a say in how syllabi are formed; obviously pedagogical decisions are down to the teacher but things like content and methodologies can also be decided after students have given their own feedback on prior practices.

Another participant talked of better academic performance, should students be consulted:

[QQ/T4] More positive results [will ensue].

In accord with similar calls in the literature (e.g., Pardo-Ballester, 2012; Jefferies, 2003; Ayres, 2002; Wilson, Lizzio, & Ramsden, 1997), students’ opinions should also be considered for course review purposes, something that is actually the case at the participants’ workplace:

[INT/T1] Student views are taken into consideration when reviewing new curricula; this is the way it should be. No teacher knows in advance whether a new course will work and getting student feedback can be a valuable source of information on how to go about revising the course to be more effective next time it’s taught. I can’t really see any drawbacks in this.

[INT/T2] Student views are heard and taken into consideration when reviewing courses…I think it’s good that such feedback is given. It may have been more productive and successful if students were required to provide feedback rather than leaving it as optional.

Largely, curriculum designers need to be aware of how different pedagogies affect the learning process and of issues like appropriateness, effectiveness, experiences, dilemmas and expectations. If departments are to invest time and money into developing and implementing new pedagogies, they might as well consider student perceptions. Moreover, I believe that for constructivist-based curricula built on student-centered pedagogies, student input is vital so that ESP courses are practicable, viable and meaningful (also see Adams, 2006; Tenenbaum *et al*., 2001). Overall, students’ *and* teachers’ perceptions of how CL and CTs interact in the ESP context are important to enhance our (limited so far) understanding of how this combination can benefit this specific learning environment more.

This concludes the analysis of my findings. In what follows, some further implications are examined.

**4.2 Implications**

Although this study does not seek to generalize its findings, its implications can have application within a wider context:

(1) The idea of a ZPD fostered by a collaborative pedagogy is apparent throughout the dataset, illustrated by excerpts like “*one important benefit is the improvement obtained when working with others. Weak students cover their shortcomings…good students become more competent by explaining/correcting others*” [QQ/T6]; “*my partner has certain abilities which I don’t have…hence the outcome is better to the outcome I’d have provided, had I been working alone*” [INT/S2]; “*we can learn from one another…benefit from someone’s abilities and improve our performance*” [RJ/S24]. Analysis of the perceptions and practices suggests that ESP contexts integrating collaborative pedagogies and utilizing scaffolding (CTs), give rise to individual accountability and positive interdependency, therefore setting zones of proximal development into motion. Via their comments, students and teachers appear to perceive such a development as greatly beneficial and welcome.[[121]](#footnote-121) A combination of CL and CTs in ESP can hence be regarded as one that meets the learning targets of this quite specific, idiosyncratic and dynamic learning context, and one that can cater for both students’ and teachers’ needs.

(2) Assessment was the one area with the greatest incidence in the dataset, appearing to be particularly troublesome for both samples. Students exhibited predominantly negative stances against shared grades as giving rise to unfairness and to instances of being taken advantage of, while teachers opined that fairness and choice of assessment form were problematic. What was also problematized was the teachers’ role in assessing CL, with both samples acknowledging the difficulties inherent in knowing who does what in a collaborative classroom.[[122]](#footnote-122)

Mixed assessment was integrated throughout the ESP;[[123]](#footnote-123) this was reported to be the preferred mode for the majority of the two samples, indicating a shift from individualistic to more mixed assessment modes. This method signalled a move away from checking students’ memory toward a more authentic form, namely reflectivity, a promotion of the learning process, a consideration of the qualitative changes[[124]](#footnote-124) in students’ knowledge, and an appreciation of task relevance to their professional orientation (Austin *et al*., 2010, p. 328; Tynjala, 1999, pp. 364-6; also see Knowles, Holton, & Swanson, 1998). Through mixed and collaborative assessment, social constructivism and CL have the potential to foster deep learning (Brett & Nagra, 2005, pp. 282-3; also see Biggs, 1999) which can be welcome in advanced language classes such as ESPs where students need to grasp the various skills well to apply them properly. In all, as assessment in collaborative-based curricula has been linked to positive and negative perceptions, it requires meticulous planning so that (a) the perils identified by participants are avoided and (b) the potential of CL is realized more fully.

As a side implication, besides summative assessment, the ESP context allows teachers the opportunity to also apply formative assessment: students can reflect on their learning experiences in working in groups (Alvarez, Espasa, & Guasch, 2011, pp. 388-9). Hence, assessable tasks could consist of feedback, participation, engaging in group thought processes and dealing with peer criticism. Such input could benefit both students’ self-reflexivity processes and teachers’ reviewing of the curriculum.

(3) Group dynamics are crucial in CL. Size and formation type can affect the effectiveness of collaboration and the resulting learning experience. Students almost unanimously advocated groups of between two-four, while teachers reported that size is dictated by tasks. Both samples were heavily supportive of free formation, although some pronounced that the authenticity the ESP context should strive for, calls for pre-formed groups. Finally, intra-group dynamics, power struggles, unwillingness or inability to work in groups, assigning roles between students and loafing were all mentioned as hazards that can harm interpersonal relationsin the classroom and hinder CL’s potential benefits. Evidently, collaboration is at its most productive should positive interdependence and individual accountability ensue. Presence of these two pillars ensures that regardless of size and formation type, the ESP context (a) can maximize the benefits of this pedagogy and (b) can take decisive steps toward realizing its overall goals by simulating real-world conditions. Regarding the latter, the emerging needs of markets for employees competent in collaborating render ESPs particularly significant courses among tertiary language courses, but also burden them with increased responsibilities. The potential of the collaborative-oriented ESP classroom to mirror the real world (through pre-formed groups, peer feedback, task authenticity, collaboration, use of technologies) has repercussions for ESP curricula. These need to be designed so as to hand students full advantage of what ESPs can offer to them, both in terms of linguistic competency as well as in terms of skills-oriented preparation for their future. To that end, teachers employing CL need to find the right balance within groups so that these operate smoothly.

(4) This thesis does not wish to discount other pedagogies which can be effectively employed in ESP classrooms. Having said that, findings here suggest that a collaborative pedagogy can cater to ESP’s curricular objectives and as such, it can be regarded as a sound alternative to such other pedagogies. Nonetheless, it can be a challenging one for students and teachers more accustomed to other pedagogies, especially those immersed in instructivist epistemologies (e.g., Ruys *et al*., 2010; Fullan & Stiegelbauer, 1991). To be able to successfully implement CL and provide proper support to students, teachers need to understand (a) the general framework of constructivism (upon which CL is based), (b) how constructivist curricula are to be developed, and in the case they wish to integrate CTs as scaffolds, (c) they also need to keep up with any accompanying technological innovations. A full understanding of what constructivism is and of guidance mechanisms to lead students toward it, hence proper adaptations of classrooms to gain maximum benefits from its pedagogical applications, are needed so that the danger of applying constructivism naïvely, hence non-effectively is avoided (e.g., see Windschitl, 2002).

If CL is to be implemented in ESP, syllabi must cater for it and be adjusted in terms of time and resources. Moreover, careful planning is required when implementing new pedagogies because of the idiosyncratic nature of teaching and learning styles (Ituma, 2011). One implication is that both students and teachers need to adapt to new, integrated models of teaching. However, both the professional development needed and the time-consuming implementation of a demanding pedagogy such as CL have adverse effects on workloads and may force the hand of institutions to steer clear of CL. Having said that, ideally, curricula should evolve according to the market’s needs, and resultant pedagogical shifts should happen irrespective of whether institutions dislike or resist them. As it has been exemplified throughout this thesis, such implications are especially pertinent to skills-oriented ESP curricula.

(5) Although co-existing in the same classrooms, students and teachers do not always share similar perceptions. The dataset has shown that there is convergence on a number of items and divergence on others. What teachers regard as something positive may not be always similarly perceived by students, and vice versa. The implication is that student feedback is essential so that teachers can better assess how a course in its entirety as well as how particular tools have worked. I appreciate that this can be time-consuming and understandably may not find many teachers in agreement given ever-increasing workloads, but I believe it is a step that can lead toward maintaining high standards and improving current practices. Leading to practice improvement is one of the aims of case study research (Luke, 2006, p. 72; Merriam, 1988, p. xiii). Related to that is the fact that however time- and resource-consuming, an ESP curriculum should only serve the particular course it was designed for and reviewing is necessary if the same curriculum is to be employed again. Hence, a need arises for continuous evaluation and reviewing of curricula. Here, too, student feedback would be a valuable source of insight.

This signals the end of this chapter. In the final chapter of the thesis, the research outcomes are recapped and linked to my initial aims. Research quality criteria are assessed. Issues beyond the scope of the study and future research are looked into. Also, limitations and possible criticisms are addressed.

**Chapter 5 - Conclusion**

This chapter is split into four parts. First, I summarize my research outcomes and link those to my initial aims. Then, I assess the quality of my research. In the third part I visit issues that were beyond the scope of this study and suggest future research directions. Finally, I address the study’s limitations and possible criticisms.

**5.1 Research outcomes and initial aims**

This research studied students’ and teachers’ perceptions and practices of the interaction between CL and CTs in an ESP environment. Three major gaps in the relevant tertiary ESP literature were identified, namely a lack of research (a) comparing student and teacher perceptions and practices of collaborative pedagogies, (b) looking at how CL and CTs interact, and (c) examining the above within the Cypriot context. Additionally, a number of related aims were targeted, both at the micro-level of my institution and at the macro-level of ESP teaching, all within the framework of collaborative-oriented ESP. These included informing policymaking and pedagogies, informing the teaching community on related curricular and pedagogical issues, improving students’ and teachers’ classroom experiences, better catering for the learning needs of contemporary students, and rendering teaching and learning more efficient and more effective. To address the aforementioned gaps and aims, a number of research questions were set at the beginning of the thesis and were subsequently addressed comprehensively. Surely, as Chapter 4 shows, some questions were more heavily addressed and did produce more data than others. This is understandable as well as anticipated. Although it could be argued that some questions could have been probed even further, the significance of each question in the context of this thesis in combination with time and space limitations dictated that that certain issues received greater attention than others.

The contribution of this study is visible. My findings have addressed the identified gaps and have largely realized the research aims. The importance of collecting both student and teacher perceptions on pedagogical issues has been well exemplified. Research questions were addressed comprehensively and significant implications have been drawn and discussed. Triangulation served well as a means of corroborating findings. Comparisons between the two samples gave rise to interesting patterns. Findings are encouraging for collaborative-oriented ESP curricula with technology components, as perceived advantages from both samples significantly outweighed perceived disadvantages. Regarding perceived advantages, a number of views recurred in both samples, including (a) the idea that students can learn from each other and improve, linking CL to ZPD, (b) the motivational prowess of CL and CTs, (c) the capacity of a collaborative-oriented ESP as a real-world simulator, linking authentic tasks to the workplace, (d) CL’s potential for more effective, enjoyable, interesting, faster, more organized learning, improved linguistic and social skills, and increased creativity and productivity, (e) CL’s promotion of autonomy, independence and accountability as self-regulated learning parameters, hence aligning with some of tertiary education’s key goals, (f) the expansion of the traditional classroom’s spatiotemporal boundaries, and (g) various other benefits like more active involvement, free speech, more time for teachers to cater to specific student needs and more resources available.

The two samples also addressed a number of challenges that may hinder the smooth implementation of a collaborative pedagogy. These included (a) problematic group dynamics, (b) increased workloads which, along with curriculum pressures to cover content, means additional preparation, leading to excessive time demands, (c) assessment concerns, (d) a challenging pedagogical implementation that carries the need to keep pace with its (pedagogical and technological) developments, (e) the distracting potential of CL, as students may socialize rather than study, (f) challenges to more traditional teacher and student roles, and (g) a debilitating lack of experience in working collaboratively and in using CTs.

It has been found that the teachers in this study possess an average to extensive knowledge of CTs and that they tend to employ CL to varying degrees, through technological and other means, mostly favoring this integration in their syllabi. It has been acknowledged that markets favoring teamwork at the workplace have “forced” a shift in education, giving prominence to collaborative-oriented pedagogies. This happens irrespective of how teachers feel. In any case, teachers expect collaborative pedagogies to dominate curricula in language teaching in the coming years and stated that they would integrate CL in a prospective ESP course, although they would not necessarily consider it disadvantageous if they did not. On their part, students stated that a collaborative pedagogy has somewhat changed their approach to studying, but not greatly, and expressed reserved liking toward CTs, raising concerns over its transient nature. Findings also show that teachers believe that student views should be considered when developing ESP curricula.

Readers should bear in mind that findings and any resulting interpretations are highly contextualized. Any outcomes should be viewed only by taking the elements of ESP, CL and CTs together and do not necessarily reflect the participants’ views regarding other contexts. I need to reiterate that this intrinsic case study was of a relatively small scale seeking to gain a better understanding of a particular setting; hence, generalizing findings was not among my primary intentions. Additionally, as stated in Chapter 1, participants’ views are subjective and multidimensional and can be due to numerous factors (e.g., past/present experiences, beliefs, incentives, cultural preferences, age, gender, academic ability, individual learning styles). These factors can differ, even in classrooms within the same institution. Moreover, it was not feasible to study how each and every one of these had affected the reported outcomes. Also, reported and actual perceptions may differ; findings should thus be received with caution.

**5.2 Research evaluation**

This section assesses the research and its overall soundness via a number of quality parameters.

(1) Originality and uniqueness: this case study is an original piece of research in terms of its scope and viewpoint. It has examined how CL and CTs interact in a tertiary ESP context from the perspectives of both students and teachers and how this interaction shapes their respective practices. Those components have not been studied before in tandem. Moreover, the direct comparison of teacher and student perceptions and practices is well under-researched in the language learning literature, and virtually non-existent in tertiary ESP contexts (Del Puerto & Gamboa, 2009; Lam, 2000; Kern, 1995). The literature also lacks in insider research studies focusing on perceptions of pedagogies or curricular issues, which this study does. It is also innovative empirical work concerning my home university, where the ESP context has never been examined before to such lengths.

(2) Contribution: the thesis does not make generalizability claims but does offer advanced empirical knowledge on practices. Additionally, the implications drawn can inform policies and form the basis for further research. As such, this study has value in and of itself. Continuing from what has been said in (1) above, the thesis has provided a deeper understanding and insight into the workings of a collaborative pedagogy within a specific tertiary ESP context. Overall, it has made a sound contribution to knowledge by sufficiently addressing and filling the aforementioned identified gaps to a large extent. It has provided a comparative account of student and teacher perceptions and practices of collaborative pedagogies, drawing important implications, and has explored how CL and CTs interact in an ESP context. Findings from this thesis can lead to a review of ESP curricula at my workplace. This is also a contribution since there have been no previous studies in the Cypriot context exploring the linkages between a collaborative pedagogy, tertiary ESP, and teacher/student perceptions.

The thesis has also added to theory by exploring the application of a collaborative pedagogy in a tertiary ESP context within a social constructivist framework. More specifically, the thesis has provided a novel theoretical perspective within that framework by relating the ZPD construct to tertiary ESP. Both the theoretical underpinnings of this study and the practices that have surfaced following the study are seriously under-researched in the literature. To that end, I believe that the current thesis has contributed to the research literature and to knowledge in general.

(3) Research quality: based on the principle that qualitative inquiry should be assessed “on its ‘own terms’ within premises…central to its purpose, nature and conduct” (Spencer *et al*., 2003, p. 17) and given the constructivist perspective’s proclivity for “pluralistic, interpretive, open-ended, and contextualized perspectives toward reality” (Creswell & Miller, 2000, pp. 125-6), the following markers pertaining to research soundness have been applied rigorously throughout the study. Much of the following directly aim at combating bias, which stands at the centre of qualitative inquiry’s “interpretive crisis” (Denzin, 1994, p. 501). Hence, to minimize biases and errors, *trustworthiness* and *dependability* were established via a case study protocol[[125]](#footnote-125) and a case study database, including organized, categorized and complete physical archives of all data, consent forms, handwritten notes, etc. (Marshall & Rossman, 2011, p. 254; Yin, 2009, pp. 118-120). These are available for access if requested. Similarly, to establish *authenticity* of findings and safeguard case study against accusations of selectivity and bias, several procedures were applied (Creswell & Miller, 2000, p. 129): (a) triangulation of research instruments;[[126]](#footnote-126) (b) disconfirming evidence: thematic analysis catered for this, with the continuous back and forth examination of data; (c) a chain of evidence: interpretations are well-linked to the parts of the dataset they emanated from; (d) peer-review or debriefing: two critical friends helped with this and made suggestions as to possible changes; (e) reflexivity: acknowledgement of biases and assumptions was applied throughout the study, with the constant documentation of my decisions and the rationale behind every step of this study, including an acknowledgment of limitations; (f) external audits: all databases are available in electronic and hard-copy forms for external checks if requested; and (g) thick, rich descriptions: these were provided by the latent thematic analysis conducted.[[127]](#footnote-127) Provision was also taken to allow for member checks.

To achieve *credibility*, I rendered all procedures transparent, by being detailed, by outlining the study in terms of boundaries, limitations, and biases and also by defending the importance of my findings. *Transferability* is exhibited in discussing implications. Finally, given the originality of this case study, *confirmability* can only be retrospectively tested. Overall, the study has exhibited rigor, by systematically and transparently collecting, analyzing and interpreting data. Furthermore, the criteria employed make explicit the philosophical foundations upon which the research is built.

(4) Research tools: measures have been taken to strengthen the trustworthiness and authenticity of my tools (piloting, triangulation).[[128]](#footnote-128) Such measures ensured that the topics under research have been comprehensively covered based on their weight in this research, keeping in mind that full coverage of every issue is highly unlikely (Cohen *et al*., 2005, p. 110).

Also, my personal entries in the reflective journal, although not intended to quote from, were used as means of reflecting upon the research process and provided a valuable outlet at times of stagnated thought. The reflective journal also served well as a device prompting critical self-reflection, leading me to various changes in research design, as these have been documented elsewhere (Ortlipp, 2008, pp. 669-704).

(5) Reflexivity: knowledge construction is a reflexive process, governed by choices that reveal and shape a researcher’s ontological and epistemological values and perspectives. Research can be neither depersonalized nor value-free. Reflexivity was hence adopted throughout the study, to enhance quality, ensure rigor and account for those values and biases. In all, reflexivity here entails a critical reflection of what influenced knowledge construction and how these influences materialized in the various stages of research (Guillemin & Gillam, 2004, pp. 274-5). This includes an awareness of the limitations and ethical considerations of this study, explicit acknowledgment of, and criticality on how my positionality influenced the research process and outcomes, and transparency as to how bias sources were counteracted. Self-reflection prompted me to reevaluate my use of methods and make changes to my research design and analysis.[[129]](#footnote-129) Engaging in reflexivity and acknowledging the subjectivity of interpretations subjects one’s research to critical analysis, leading (a) to increased awareness of what is done in the research and why (Farrell, 2011, p. 266) and (b) to increased research credibility (Roberts, Priest, & Traynor, 2006, p. 44). Overall, this study has rendered all employed reflexivity measures available to readers, so that they can better evaluate findings (Watt, 2007, p. 84).

**5.3 Issues beyond the scope of the study and future research**

A number of issues were raised in this study, which were beyond my immediate scope, hence they were not pursued further (i.e. distance learning, student autonomy, independence, self-regulation). The study also gave rise to issues that can be further researched so that broader conclusions and implications are reached.

(1) Given the ever-changing nature of pedagogies and the resulting change in perceptions, collecting and assessing student and teacher perceptions and practices should be pursued continuously at the micro-level of individual classrooms as case studies, by teachers-researchers. Moreover, longitudinal studies on how perceptions shift and because of which factors would provide insight into what is effective and what is not in ESP contexts (Brown, 2009, pp. 57-8). In addition to that, longitudinal research should be carried out on the strategies learners employ in order to cope with the various idiomorphic challenges a collaborative pedagogy presents to them in terms of mental preparation, study, application inside and outside the classroom and use of the knowledge learned, as these have been addressed throughout the thesis. Learners’ process information and coping mechanisms in collaborative- and digital technology-oriented ESP contexts can have significant repercussions for ESP curriculum development, especially given that learner strategies in this specific context may be different to those employed in other learning contexts (e.g. in classes which employ different pedagogies or which do not implement new technologies). In essence, such continuity in researching the above would inform teachers, institutions and policymakers and would render future curricula more responsive to the dynamic ESP context.

From a more theoretical perspective, a further line of research could look at how learner strategies for the ESP context relate to Vygotskian theorizing on social interactionism and whether these differ compared to learner strategies occurring in the brain (for discussions on how various learning models view learner strategies, see Chamot & O’Malley, 1994; Oxford, 1990).

(2) Research should be carried out with respect to the participation and contribution of individual students in a collaborative-oriented ESP context. Each student should be located within that context in terms of their contribution and in terms of what they get out of this. This would mean studying (a) students’ actual participation within a collaborative classroom (e.g. whether they fulfil their assigned roles in terms of support, task execution and completion), and (b) their achievements within each collaborative group (e.g. in terms of reaching particular learning objectives, or in terms of their individual assessment results). This information would be valuable in order to address the concerns of senior managers and policymakers who may be inclined or called upon to apply changes which would shift curricula and teaching practices toward more collaborative-oriented pedagogies but who, in order to do this, need evidence that such changes would actually benefit students on an individual basis. To this end, case studies within and across institutions could provide the information needed.

(3) Outcomes here are not intended for generalization. To render findings generalizable so that they can be applied in wider contexts, the scope of this case study can be broadened either by investigating ESP students’ and teachers’ perceptions and practices in studies involving greater numbers of participants, with wider triangulations, or by investigating the same issues longitudinally.

(4) Conducting studies to analyze the language needs of students by paying visits to workplace environments could further optimize CL’s integration in ESP curricula. On-site needs analyses would provide valuable insights into how the pedagogical implementation of CL could better prepare students for the professional arena. For example, prospective ESP courses on Nursing English would benefit from curriculum developers doing field trips and having discussions with nursing professionals *before* developing the curriculum, so that it focuses on the actual collaborative or other language-related skills that will be needed in the real *contemporary* workplace setting, including written and spoken skills, interpersonal skills and register. Emphasis here is on *contemporary*. My personal experience tells me that this does not always happen as new ESP courses are many times developed based on previously designed similar courses, disregarding the fact that the needs of a given workplace may have changed since.

Regarding my local context, this can relate to further research following a review of currently employed ESP curricula, as this has been suggested in Section 5.2 above. Which changes such a review would lead to, what the repercussions would be of any such changes (e.g., in academic performance, in theoretical and pedagogical foundations and in the perceptions of those by the agents involved) and how curricula post-review would compare to existing curricula in realizing the ESP teaching and learning outcomes, are all issues that can be researched in the future.

(5) Comparative research is needed to study student achievements with and without CL. This would provide vital information for institutions and would help in justifying CL’s integration. Moreover, CL’s impact on content learning *per se* could be measured, so that the pedagogical effectiveness of CL is evaluated more roundly. This would provide policymakers and curriculum designers with more in-depth knowledge into how best to take advantage of collaborative pedagogies. This is particularly pertinent to the ESP context. As already mentioned, markets place emphasis on collaborative-oriented skills, hence the greater need for this pedagogy to be extensively researched so to yield maximum benefits for students.

(6) More systematic investigation of how expert-novice scaffolding interaction works in tertiary and further education would be beneficial for the collaborative-oriented ESP context, given its links to ZPD and scaffolding. Specific areas could be targeted, such as vocabulary, writing skills and spoken language, to see whether scaffolding is equally effective in each or whether students benefit more in some tasks and less in others. Findings would further improve how curricula employ CL.

**5.4 Limitations and criticisms**

Interpretations in a constructivist framework are subjective (Taft, 1999, p. 117). Hence, qualitative research can be open to alternative interpretations and open to criticism and refutations. Given the value-laden nature of research, coding and analysis in this study could be criticized as being slanted. The emic approach adopted here (allowing empirical evidence to produce themes and categories) served as a counter-measure against such criticism. Marshall and Rossman (2011) questioned how researchers can be sure that findings are a true account of participants and not a result of preexisting biases (p. 251). This issue has been covered above and the numerous techniques employed to counteract it have been extensively discussed. Although I did acknowledge the subjectivity of interpretations and employed various means to enhance the study’s trustworthiness and authenticity, I am aware that data could be read in different ways. A related limitation is that there were no member checks (although participants were given that option). It is impossible to interpret all data in every way possible, much like it is impossible to study every research question to its full depth; in any case, every effort was made for the questions to be examined adequately and for the interpretations provided to have a sound basis in the dataset and to abide by the research purposes and philosophical viewpoints underpinning this study.

Second, the use of a single case study does not allow for the applicability of findings to other contexts. Indeed, the scope of this research was limited. That, however, should not necessarily be seen as a disadvantage. My aim here was an in-depth exploration of a particular setting rather than the production of generalizable and testable findings. For the latter to happen, accompanying or entirely different research methods (e.g., quantitative) and larger samples should have been used. There was neither the space nor the need here to do so. This is something that can be pursued in the future.

A further limitation would be the number of participants making up the teacher sample. The fact that no saturation was achieved can be a source of criticism. This however was beyond my control; I approached all teachers who were eligible to participate and given their workloads, I consider the 50% participation rate as satisfactory. Although there was relative consensus in the teacher sample concerning a number of the perceptions voiced, a larger sample would have provided me with more representative findings for the teacher sample.

**5.5 Final reflections**

Picking on from the issue just raised, I should briefly consider a couple of things I would do differently were I to start the thesis again. In retrospect, the timing of questionnaire administration was probably not great since mid- to end-of-semester is a busy period for teachers. I would have then scheduled the administration to last longer, maybe stretching into holidays. That could have raised participation rates and may also have allowed for member checks; in effect, it could have yielded more conclusive results from the teacher sample.

Going back to the scope of this study, I could also have examined autonomy (and space permitting, independence and self-regulation) in more detail. Of the three, only autonomy was probed for in student and teacher interviews, and only to a limited degree. Even so, it still emerged recurrently in both samples. Due to time and space limitations, I had to make decisions regarding what would be included and what not. With hindsight, given the overall occurrence of these notions in the study, an in-depth exploration of autonomy would have provided me with an even richer database, further enhancing the study’s scope and outcomes.

Regarding now the implications this thesis has for me personally, in its totality it has certainly enriched my understanding of the theoretical and practical issues under discussion. In doing so, it has benefitted me in my teaching capacity. At the same time, problematizing issues like assessment and group dynamics and considering the potential of collaboration, of ZPD and of scaffolding has led me to realign my perspective of the constructivist-oriented ESP context and to adapt my teaching practices accordingly.

Having taken place at my home university, this research now gives rise to the need to review ESP curricula and adjust them in order to reflect the market’s needs. This is easier said than done as findings from the teacher sample show; not all teachers appear to share the same zest for constructivism/CL, and not all teachers are in the mood for reviewing and/or re-designing curricula. Time restrictions, curricular pressures, personal preferences and other internal and external factors can affect one’s stance. In this sense, it may be unrealistic to think that this thesis alone is enough to bring about a pedagogical shift, either at my workplace or elsewhere. What I can do though in order to inform others of the suggested changes and of the theory and findings lending support to these changes, is to render the thesis available. To that end, I aim at producing shorter articles out of the thesis and submitting those in peer-reviewed journals shortly after the thesis has been approved. Publication should allow me to increase the reach of my findings and add to the existing research corpus. Concurrently, I aim to build on the knowledge gained here and pursue the research areas which have been outlined in Section 5.3, in order to further enhance the contribution of this study.

**5.6 Rounding off**

This study has shed light on the crucial role collaboration and the social context play in language learning. The increasing popularity of constructivist-oriented pedagogies in the field is testament to that. The social constructivist framework this study has operated in, presented specific conceptualizations of notions such as CL, scaffolding, ZPD, co-construction of meaning, interaction, active learning, language’s mediational role, student-centred approaches and new roles for teachers and students; the ESP context needs to heed such conceptualizations, as they have been found here to meet and facilitate its specialized demands. The capacity of these notions to cater to the ESP setting is enhanced by considering both student and teacher perceptions, which is not often the case in the literature and is therefore one of the innovations of this research.

This case study is of a relatively small scale and has presented results within a particular context. Through an inductive analytic process, every effort was made so that interpretations are sensitive to the participants’ perspectives. At the same time, findings and interpretations are context-dependent and contingent. Hence, although my findings are particularly important for my context, the implications presented have a wider reach. In all, this study has made a sound contribution to the ESP research body by examining an aspect of this complex language learning domain in an original way and by presenting findings that are of value in and of themselves.

**References**

Abednia, A. (2012). Teachers’ professional identity: Contributions of a critical EFL teacher education course in Iran. *Teaching and Teacher Education*, 28, 706-717.

Abrami, P., Poulsen, C., & Chambers, B. (2004). Teacher motivation to implement an educational innovation: Factors differentiating users and non-users of cooperative learning. *Educational Psychology*,24, 201-216.

Adam, S. & Nel, D. (2009). Blended and online learning: Student perceptions and performance. *Interactive Technology and Smart Education*, 6(3), 140-155.

Adams, P. (2006). Exploring social constructivism: Theories and practicalities, Education 3-13. *International Journal of Primary, Elementary and Early Years Education*, 34(3), 243-257.

Ade-ojo, G. O. (2005). The predisposition of adult ESOL learners in a FE college towards autonomy. *Journal of Further and Higher Education*, 29(3), 191-210.

Adler, P. A. & Adler, P. (1994). Observational techniques. In N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 377-392). Thousand Oaks, CA: Sage.

Aggarwal, P. & O’Brien, C. L. (2008). Social loafing on group projects: Structural antecedents and effect on student satisfaction. *Journal of Marketing Education*,30(3), 255-264.

Aiguo, W. (2007). Teaching aviation English in the Chinese context: Developing ESP theory in a non-English speaking country. *English for Specific Purposes*, 26, 121-128.

Alavi, M. (1994). Computer-mediated collaborative learning: An empirical evaluation. *MIS Quarterly*, 18(3), 159-174.

Aldridge, J. M., Fraser, B. J., Bell, L., & Dorman, J. (2012). Using a new learning environment questionnaire for reflection in teacher action research. *Journal of Science Teacher Education*, 23, 259-290.

Alexander, B. (2006). Web 2.0: A new wave of innovation for teaching and learning? *EDUCAUSE Review*,41, 32-44.

Aljaafreh, A. & Lantolf, J. P. (1994). Negative feedback as regulation and second language learning in the zone of proximal development. *Modern Language Journal*, 78, 465-483.

Allen, J. P. B. & Widdowson, H. (Eds.) (1974). *English in focus series*. Oxford: Oxford University Press.

Allen, L. Q. (2006). Investigating culture through cooperative learning. *Foreign Language Annals*, 39(1), 11-21.

Alvarez, I., Espasa, A., & Guasch, T. (2011). The value of feedback in improving collaborative writing assignments in an online learning environment. *Studies in Higher Education*, 37(4), 387-400.

Anfara, V. A. Jr., Brown, K. M., & Mangione, T. L. (2002). Qualitative analysis on stage: Making the research process more public. *Educational Researcher*, 31,28-38.

Antil, L., Jenkins, J., Wayne, S., & Vadasy, P. (1998). Cooperative learning: Prevalence, conceptualizations, and the relation between research and practice. *American Educational Research Journal*, 35(3), 419-454.

Arnold, N., Ducate, L., & Kost, C. (2012). Collaboration or cooperation? Analyzing group dynamics and revision processes in wikis. *CALICO Journal*, 29(3), 431-448.

Ashraft, B. (2009). Educating the Google-eyed generation. *Journal of Education and Training*, 51(5/6), 343-352.

Astin, A. (1993). *What matters in college: Four critical years revisited*. San Francisco: Jossey-Bass.

Attard, A. & Coulson, N. S. (2012). A thematic analysis of patient communication in Parkinson’s disease online support group discussion forums. *Computers in Human Behavior*, 28, 500-506.

Attride-Stirling, J. (2001). Thematic networks: An analytic tool for qualitative research. *Qualitative Research*, 1(3), 385-405.

Atweh, B., Bleicker, R. E., & Cooper T. J. (1998). The construction of the social context of mathematics classroom: A sociolinguistic analysis. *Journal for Research in Mathematics Education*, 29(1), 63-82.

Austin, R., Smyth, J., Rickard, A., Quirk-Bolt, N., & Metcalfe, N. (2010). Collaborative digital learning in schools: Teacher perceptions of purpose and effectiveness. *Technology, Pedagogy and Education*, 19(3), 327-343.

Axinn, W. G. & Pearce, L. D. (2006). *Mixed method data collection strategies*. New York: Cambridge University Press.

Ayres, R. (2002). Learner attitudes towards the use of CALL. *Computer Assisted Language Learning*, 15, 241-249.

Azevedo, R., Cromley, J. G., & Seibert, D. (2004). Does adaptive scaffolding facilitate students’ ability to regulate their learning with hypermedia? *Contemporary Educational Psychology*,29, 344-370.

Baarts, C. (2009). Stuck in the middle: research ethics caught between science and politics. *Qualitative Research*, 9(4), 423-439.

Bachman, L. F. (1990). *Fundamental considerations in language testing*. New York: Oxford University Press.

Bacon, D. R. (2005). The effect of group projects on content-related learning. *Journal of Management Education*, 29, 248-267.

Bacon, D. R., Stewart, K. A., & Silver, W. S. (1999). Lessons from the best and worst student team experiences: How a teacher can make the difference. *Journal of Management Education*, 23, 467-488.

Bacon, D. R., Stewart, K. A., & Stewart-Belle, S. (1998). Exploring predictors of student team project performance. *Journal of Marketing Education*, 20, 63-71.

Bahous, R. & Nabhani, M. (2011). Assessing education program learning outcomes. *Educational Assessment, Evaluation and Accountability*, 23, 21-39.

Baines, L. A. & Stanley, G. (2000). We want to see the teacher: Constructivism and the rage against expertise. *Phi Delta Kappan*, 82, 327-330.

Baines, E., Blatchford, P., & Kutnick, P. (2003). Changes in grouping practices over primary and secondary school. *International Journal of Educational Research*, 39, 9-34.

Baker, M., Bernard, F. X., & Dumez-Féroc, I. (2012). Integrating computer-supported collaborative learning into the classroom: The anatomy of a failure. *Journal* *of Computer Assisted Learning*, 28(2), 161-176.

Baker, M, Levy Cohen, J. E., & Moeller, B. (1997). Kidcode: Using email to structure interactions for elementary mathematics instruction. In R. Hall, N. Miyake, & N. Enyedy (Eds.), *Computer support for collaborative learning*: Proceedings of the Second International Conference on Computer Support for Collaborative Learning (pp. 1-9). Canada: University of Toronto.

Ballantine, J. & McCourt Larres, P. (2007). Cooperative learning: A pedagogy to improve students’ generic skills? *Education and Training*, 49(2), 126-137.

Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.

Barber, C. L. (1962). Some measurable characteristics of modem scientific prose. In *Contributions to English syntax and phonology* (Gothenberg Studies in Linguistics 14), Stockholm Ahnquist und Wiksell, Reprinted in Swales (1988) pp. 1-14, *Episodes in ESP*. Hemel Hempstead: Prentice Hall International.

Barr, R. B. & Tagg, J. (1995). From teaching to learning: A new paradigm for undergraduate education. *Change*, 27(6), 13-25.

Barrows, H. S. & Tamblyn, R. (1980). *Problem-based learning: An approach to medical education*. New York: Springer.

Bassey, M. (1999). *Case study research in educational settings*. Buckingham: Open University Press.

Basturkmen, H. (2003). Specificity and ESP course design. *RELC Journal*, 34(1), 48-63.

Battaglia, M. (2008). Nonprobability sampling. In P.J. Lavrakas (Ed.), *Encyclopedia of survey research methods* (pp. 523-526). Thousand Oaks, CA: Sage Publications, Inc.

Beatty, K. & Nunan, D. (2004). Computer-mediated collaborative learning. *System*, 32, 165-183.

Belcher, D. D. (2004). Trends in teaching English for Specific Purposes. *Annual Review of Applied Linguistics*, 24, 165-186.

Bennett, S. (2003). Supporting collaborative project teams using computer-based technologies. In T.S. Roberts (Ed.), *Online collaborative learning: Theory and practice* (pp. 1-26)., Hershey, PA: Information Science Publishing.

Bennett, S. & Lockyer, L. (2004). Becoming an online teacher: Adapting to a changed environment for teaching and learning in Higher Education. *Educational Media* *International*, 41(3), 231-248.

Benson, P. (2001). *Teaching and researching autonomy in language learning*. Harlow, Essex: Longman.

Benson, P. & Voller, P. (Eds.) (1997). *Autonomy and independence in language learning*. London: Longman.

Bento, R. & Schuster, C. (2003). Participation: The online challenge. In A. Aggarwal (Ed.), *Web-based education: learning from experience* (pp. 156-164). Hershey, PA: Information Science Publishing.

BERA (2010). *Interviews in research*, British Educational Research Association online resources. Retrieved October 5, 2011 from: <http://www.bera.ac.uk/data-collection-interviews-in-research/>

BERA (2011). *Ethical guidelines for educational research*. London: BERA.

Bernard, R. M., Rubalcava, B. R., & St-Pierre, D. (2000). Collaborative online distance learning: Issues for future practices and research. *Distance Education*, 21(2), 260-277.

Biber, D. (1988). *Variation across speech and writing*. New York: Cambridge University Press.

Biggs, J. (1999). *Teaching for quality learning at university*. Buckingham: Open University Press.

Bisman, J. (2011). Engaged pedagogy: A study of the use of reflective journals in accounting education. *Assessment & Evaluation in Higher Education*, 36(3), 315-330.

Blatchford, P., Kutnick, P., Baines, E., & Galton, M. (2003). Toward a social pedagogy of classroom group work. *International Journal of Educational Research*, 39, 153-172.

Blin, F. (2004). CALL and the development of learner autonomy: Towards an activity –theoretical perspective. *ReCALL*, 16(2), 377-395.

Bliuc, A. M., Goodyear, P., & Ellis, R. A. (2007). Research focus and methodological choices in studies into students’ experiences of blended learning in higher education. *Internet and Higher Education*, 10, 231-244.

Blumenfeld, P. C., Marx, R. W., Soloway, E., & Krajcik, J. (1996). From small group cooperation to collaborative communities. *Educational Researcher*, 25(8), 37-40.

Bobbitt, L. M., Inks, S. A., Kemp, K. J., & Mayo, D. T. (2000). Integrating marketing courses to enhance team-based experiential learning. *Journal of Marketing Education*, (21)2, 15-24.

Bogdan, R. G. & Biklen, S. K. (1992). *Qualitative research for education* (3rd ed.). Boston, MA: Allyn & Bacon.

Bolton, G. (2009). Write to learn: Reflective practice writing. *InnovAiT*, 2(12), 752-754.

Borg, S. (2001). The research journal: A tool for promoting and understanding researcher development. *Language Teaching Research*, 5, 156-177.

Bostock, S. J. (1998). Constructivism in mass higher education: A case study. *British Journal of Educational Technology*, 29(3), 225-240.

Boulos, M. N. K., Maramba, I. & Wheeler, S. (2006). Wikis, blogs and podcasts: A new generation of web-based tools for virtual collaborative clinical practice and education. *BMC Medical Education*, 6. Retrieved November 23, 2012 from: <http://www.biomedcentral.com/content/pdf/1472-6920-6-41.pdf>

Boulos, M. N. K. & **Wheeler, S.** (2007). The emerging Web 2.0 social software: An enabling suite of sociable technologies in health and healthcare education. [*Health Information and Libraries Journal*](http://www.blackwellpublishing.com/journal.asp?ref=1471-1834), 24(1), 2-23.

Bowman, B. T., Donovan, M. S., & Burns, M. S. (Eds.) (2000). Eager to learn: Educating our pre-schoolers. Washington, DC: National Academy Press.

Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. Thousand Oaks, London: SAGE Publications.

Bradley, L., Lindström, B., & Rystedt, H. (2010). Rationalities of collaboration for language learning in a wiki. *ReCALL*, 22(2), 247-265.

Brannick, T. & Coghlan, D. (2007). In defense of being ‘native’: The case for insider academic research. *Organizational Research Methods*, 10(1), 59-74.

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77-101.

Bremner, S. (2010). Collaborative writing: Bridging the gap between the textbook and the workplace. *English for Specific Purposes*, 29, 121-132.

Brett, P. & Nagra, J. (2005). An investigation into students’ use of a computer-based social learning space: Lessons for facilitating collaborative approaches to learning. *British Journal of Educational Technology*, 36(2), 281-292.

Brooks, J. G. & Brooks, M. G. (1999). *In search of understanding: The case for constructivist classrooms.* Alexandria, VA: Association for Supervision and Curriculum Development.

Brown, A. L. & Palincsar, A. S. (1989). Guided cooperative learning and individual knowledge acquisition. In L. Resnick (Ed.), *Knowing, learning, and instruction* (pp. 393-452). Hillsdale, NJ: Lawrence Erlbaum and Associates.

Brown, A. V. (2009). Students’ and teachers’ perceptions of effective foreign language teaching: A comparison of ideals. *The Modern Language Journal*, 93(i), 46-60.

Brown, G., Bull, J., & Pendlebury, M. (1997). *Assessing student learning in Higher Education*. London and New York: Routledge.

Brown, T. P. & Lewis, M. (2003). As ESP project: Analysis of an authentic workplace conversation. *English for Specific Purposes*, 22, 93-98.

Bruner, J. (1978). The role of dialogue in language acquisition. In S.R.J. Jarvella & W.J.M. Levelt (Eds.), *The child’s conception of language* (pp. 214-256). New York: Max-Plank-Institut for Psycholinguistik.

Bruner, J. (1986). *Actual minds, possible worlds*. Cambridge, MA: Harvard University Press.

Brush, T. (1998). Embedding cooperative learning into the design of integrated learning systems: Rationale and guidelines. *Educational Technology Research and Development*, 46(3), 5-18.

Bruton, D. (2011). Learning creativity and design for innovation. *International Journal of Technology and Design Education*, 21, 321-333.

Brutt-Griffler, J. (2002). *World English*. Clevedon: Multilingual Matters.

Bryman, A. (1988). *Quantity and quality in social research*. London: Unwin Hyman.

Burns, R. (2000). *Introduction to research methods*. London: Sage.

Butler, D. L. & Winne, P. H. (1995). Feedback and self-regulated learning: A theoretical synthesis. *Review of Educational Research*, 65, 245-281.

Butrime, E., Marciulyniene, R., & Valteryte, R. (2010). Research on computer-supported collaborative learning in transdisciplinary groups. In J.M. Spector (Ed.), *Learning and instruction in the digital age* (pp. 159-174). Springer Science + Business Media, LLC.

Cabrera, A. F., Crissman, J. L., Bernal, E. M., Nora, A., Terenzini, P. T., & Pascarella, E. T. (2002). Collaborative learning: Its impact on college students’ development and diversity. *Journal of College Student Development*, 43, 20-36.

Calvani, A., Sorzio, P., & Varisco, B. M. (1997). Inter-university cooperative learning: An exploratory study. *Journal of Computer Assister Learning*, 13, 271-280.

Canale, M. & Swain, M. (1980). Theoretical bases of communicative approaches to second language teaching and testing. *Applied Linguistics*, 1(1), 1-47.

Carr-Chellman, A., Dyer, D., & Breman, J. (2000). Burrowing through the network wires: Does distance detract from collaborative authentic learning? *Journal of Distance Education*, 15(1), 39-62.

Cavanagh, M. (2011). Students’ experiences of active engagement through cooperative learning activities in lectures. *Active Learning in Higher Education*, 12(1), 23-33.

Caverly, D. C. & MacDonald, L. (2004). Techtalk: Keeping up with technology. *Journal of Developmental Education*, 28(2), 38-39.

Celani, M. A. A. (2008). When myth and reality meet: Reflections on ESP in Brazil. *English for Specific Purposes*, 27, 412-423.

Chien, C. & Hsu, M. (2010). A case study of incorporating ESP instruction into the university English course. *Procedia Social and Behavioral Sciences*, 9, 1885-1888.

Chomsky, N. (1965). *Aspects of the theory of syntax*. Cambridge, MA: MIT Press.

Christmann, E. P. & Badgett, J. L. (2003). A meta-analytic comparison of the effects of computer-assisted instruction on elementary students’ academic achievement. *Information Technology in Childhood Education Annual*, 15, 91-104.

Churchill, D. & Churchill, N. (2008). Educational affordances of PDAs: A study of a teacher’s exploration of this technology. *Computers & Education*, 50, 1439-1450.

Ciani, K. D., Summers, J. J., Easter, M. A., & Sheldon, K. M. (2008). Collaborative learning and positive experiences: Does letting students choose their own groups matter? *Educational Psychology*, 28(6), 627-641.

Cillessen, A. H. N. & Lafontana, K. M. (2002). Children’s perceptions of popular and unpopular peers: A multimethod assessment. *Developmental Psychology*, 38(5), 635-647.

Clark, C. R. (2005). Multimedia learning in e-courses. In R. Mayer (Ed.), *The Cambridge handbook of multimedia learning* (pp. 589-616). New York: Cambridge University Press.

Cobb. P. (1994). Where is the mind? A coordination of sociocultural and cognitive constructivist perspectives. In C.T. Fosnot (Ed.), *Constructivism: Theory, perspectives, and practice* (pp. 34-52). New York: Teachers College Press.

Coghlan, D. (2007). Insider action research doctorates: Generating actionable knowledge. *Higher Education*, 54, 293-306.

Coghlan, D. & Brannick, T. (2005). *Doing action research in your own organization* (2nd ed.). London: Sage.

Coghlan, D. & Holian, R. (2007). Editorial: Insider action research. *Action Research*, 5(1), 5-10.

Cohen, E. G., Lotan, R. A., Scarloss, B. A., & Arellano, A. R. (1999). Complex Instruction: Equity in cooperative learning classrooms. *Theory into Practice*, 38(2), 80-86.

Cohen, J. H. (2000). Problems in the field: Participant observation and the assumption of neutrality. *Field Methods*, 12(4), 316-333.

Cohen, L., Manion, L., & Morrison, K. (2005). *Research methods in education* (5th ed.). London: RoutledgeFalmer.

Cole, M. (2009). Using Wiki technology to support student engagement: Lessons from the trenches. *Computers & Education*, 52, 141-146.

Collet, B. A. (2008) Confronting the insider-outsider polemic in conducting research with diasporic communities: Towards a community-based approach. *Refuge*, 25(1), 77-83.

Collins, A. (2006). Cognitive apprenticeship. In R. Sawyer (Ed.), *The Cambridge handbook of the learning sciences* (pp. 47-60). New York: Cambridge University Press.

Collins, A., Brown, J. S., & Newman, S. E. (1989). Cognitive apprenticeship: Teaching the craft of reading, writing, and mathematics. In L.B. Resnick (Ed.), *Knowing, learning, and instruction: Essays in honor of Robert Glaser* (pp. 453-494). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Collis, B. & Moonen, J. (2008). Web 2.0 tools and processes in higher education: Quality perspectives. *Educational Media International*, 45(2), 93-106.

Cook, G. (1990). Transcribing infinity: Problems of context representation. *Journal of Pragmatics*, 14, 1-24.

Cooper, J. L., Robinson, P., & McKinney, M. (1994). Cooperative learning in the classroom. In D.F. Halpern (Ed.), *Changing college classrooms: New teaching and learning strategies for an increasingly complex world* (pp. 74-92). San Francisco, CA: Jossey-Bass.

Cooper, M. A. (1999). Classroom choices from a cognitive perspective on peer learning. In A.M. O’Donnell & A. King (Eds.), *Cognitive perspectives on peer learning. The Rutgers Invitational Symposium on Education Series* (pp. 215-233). Mahwah, NJ: Lawrence Erlbaum.

Corbin Dwyer, S. & Buckle, J. L. (2009). The space between: On being an insider-outsider in qualitative research. *International Journal of Qualitative Methods*,8(1), 54-63.

Cordova, D. I. & Lepper, M. R. (1996). Intrinsic motivation and the process of learning: Beneficial effects of contextualization, personalization and choice. *Journal of Educational Psychology*, 88, 715-730.

Council of Europe (2001). *Common European Framework of Reference for Languages: Learning, teaching, assessment*. Cambridge: Cambridge University Press.

Crawford, S. D., Couper, M. C., & Lamais, M. J. (2001). Web surveys: Perceptions of burden. *Social Science Computer Review*, 19, 146-162.

Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five*

*traditions.* Thousand Oaks, CA: Sage.

Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage.

Creswell, J. W. & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into practice*, 39(3), 124-130.

Crow, G., Wiles, R., Heath, S., & Charles, V. (2006). Research ethics and data quality: The implications of informed consent. *International Journal of Social Research Methodology*, 9(2), 83-95.

Crystal, D. (2003). *English as a global language*. Cambridge: Cambridge University Press.

Cyprus Pedagogical Institute (2010). *National curricula for the public schools in the Republic of Cyprus*. Nicosia: CPI Press.

Dalgarno, B. (2001). Interpretations of constructivism and consequences for Computer Assisted Learning. *British Journal of Educational Technology*, 32(2), 183-194.

Dansie, B. (2001). Scaffolding oral language: ‘The hungry giant’ retold. In J. Hammond (Ed.), *Scaffolding: Teaching and learning in language and literacy education* (pp. 49-68)*.* Newtown, Sydney: PETA.

Darlington, Y. & Scott, D. (2002). *Qualitative research in practice: Stories from the field*. Crow’s Nest, Australia: Allen & Unwin.

David, M., Edwards, R., & Alldred, P. (2001). Children and school-based research: ‘Informed consent’ or ‘educated consent’? *British Educational Research Journal*, 27(3), 347-365.

Davies, C. A. (1999). *Reflexive ethnography: A guide to researching selves and others.* London: Routledge.

Davis F.D. & Venkatesh V. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*,46, 186-204.

Davis, K. A. (1995). Qualitative theory and methods in applied linguistics research. *TESOL Quarterly*, 29(3), 427-253.

Deaney, R. & Hennessy, S. (2007). Sustainability, evolution and dissemination of information and communication technology-supported classroom practice. *Research Papers in Education*, 22(1), 65-94.

De Guerrero, M. C. M. & Villamil, O. S. (2000). Activating the ZPD: Mutual scaffolding in L2 peer revision. *The Modern Language Journal*, 84(i), 51-68.

De León, L. (2012). Model of models: Preservice teachers in a Vygotskian scaffold. *The Educational Forum*, 76(2), 144-157.

del Puerto, F. G. & Gamboa, E. (2009). The evaluation of computer-mediated technology by second language teachers: Collaboration and interaction in CALL. *Educational Media International*, 46(2), 137-152.

Denscombe, M. (2008). The length of responses to open-ended questions: A comparison of online and paper questionnaires in terms of a mode effect. *Social Science Computer Review*, 26, 359-368.

Denzin, N. K. (1978). *Sociological methods: A source book* (2nd ed.). New York: McGraw-Hill.

Denzin, N. K. (1994). The art and politics of interpretation. In N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 500-515). Thousand Oaks, CA: Sage.

Derry, S. J. (1996). Cognitive schema theory in the constructivist debate. *Educational Psychologist*, 31(3/4), 163-174.

De Simone, C., Schmid, R. F., & McEwen, L. A. (2001). Supporting the learning process with collaborative concept mapping using computer-based communication tools and processes. *Educational Research and Evaluation: An International Journal on Theory and Practice*, 7(2/3), 263-283.

Deutsch, C. P. (1981). The behavioral scientists: Insider and outsider. *Journal of Social Issues*,37, 172-91.

Dewiyanti, S., Brand-Gruwel, S., Jochems, W., & Broers, N. J. (2007). Students’ experiences with collaborative learning in asynchronous computer-supported collaborative learning environments. *Computers in Human Behavior*, 23, 496-514.

Dillenbourg, P. (2002). Over scripting CSCL: The risks of blending collaborative learning with instructional design. In P.A. Kirschner, W. Jochems, P. Dillenbourg, & G. Kanselaar (Eds.), *Three worlds of CLCL: Can we support CSCL?* (pp. 61-91). Heerlen, Nederland: Open Universiteit.

Dillenbourg, P., Baker, M., Blaye, A., & O’Malley, C. (1996). The evolution of research on collaborative learning. In E. Spada & P. Reiman (Eds.), *Learning in humans and machine: Towards an interdisciplinary learning science* (pp. 189-211). Oxford, UK: Elsevier.

Dippold, D. (2009). Peer feedback through blogs: Student and teacher perceptions in an advanced German class. *ReCALL*, 21(1), 18-36.

Dommeyer, C. & Moriarty, E. (2000). Comparing two forms of an e-mail survey: Embedded vs. attached. *Journal of the Market Research Society*, 42, 39-53.

Donato, R. (1994). Collective scaffolding in second language learning. In J.P. Lantolf & G. Appel (Eds.), *Vygotskian approaches to second language research* (pp. 33-56)*.* Norwood, NJ: Ablex.

Donato, R. (2004). Aspects of collaboration in pedagogical discourse. *Annual Review of Applied Linguistics*, 24, 284-302.

Dowling, C., Godfrey, J., & Gyles, N. (2003). Do hybrid flexible delivery methods improve accounting students’ learning outcomes? *Accounting Education*,12(4), 373-391.

Drever, E. (1995). *Using semi-structured interviews in small-scale research*. Edinburgh: SCRE.

Drisko, J. W. (1997). Strengthening qualitative studies and reports: Standards to promote academic integrity. *Journal of Social Work Education*, 33(1), 185-97.

Dudley-Evans, T. & St John, M. J. (1998). *Developments in ESP: A multi-disciplinary approach*. Cambridge: Cambridge University Press.

Duff, P. (2006). Beyond generalizability: Contextualization, complexity, and credibility in applied linguistics research. In M. Chalhoub-Deville, C. Chapelle & P. Duff (Eds.), *Inference and generalizability in applied linguistics: Multiple perspectives* (pp. 65-95). Amsterdam: Benjamins.

Dunn, W. E. & Lantolf, J. P. (1998). Vygotsky’s Zone of Proximal Development and Krashen’s *i* + 1: Incommensurable constructs; Incommensurable theories. *Language Learning*, 48(3), 411-442.

Dyment, J. E. & O’Connell, T. S. (2010). The quality of reflection in student journals: A review of limiting and enabling factors. *Innovative Higher Education*, 35, 233-244.

Eastman, J. K. & Swift, C. O. (2002). Enhancing collaborative learning: Discussion boards and chat rooms as project communication tools. *Business Communication Quarterly*, 65(3), 29-41.

Egbert, J., Paulus, T. M., & Nakamichi, Y. (2002). The impact of CALL in instruction on classroom computer use: A foundation for rethinking technology in teacher education. *Language, Learning & Technology*, 6(3), 108-126.

Eisner, E. (1991). *The enlightened eye: Qualitative inquiry and the enhancement of educational practice*. New York: Macmillan.

Eley, M. G. (2006). Teachers’ conceptions of teaching, and the making of specific decisions in planning to teach. *Higher Education*, 51, 191-214.

English, S. & Yazdani, M. (1999). Computer-supported cooperative learning in a virtual university. *Journal of Computer Assisted Learning*, 15, 2-13.

Eraut, M. (2007). Learning from other people in the workplace. *Oxford Review of Education*, 33(4), 403-422.

Ernest, P. (1995). The one and the many. In L. Steffe & J. Gale (Eds.), *Constructivism in education* (pp. 459-486). Mahwah, NJ: Lawrence Erlbaum.

Ertmer, P. A. & Newby, T. J. (1993). Behaviorism, cognitivism, constructivism: Comparing critical features from a design perspective. *Performance Improvement Quarterly*, 6(4), 50-72.

European Commission (2009). *ECTS users’ guide*. Luxembourg: Office for Official Publications of the European Communities. Retrieved July 24, 2013 from: <http://ec.europa.eu/education/lifelong-learning-policy/doc/ects/guide_en.pdf>.

Evered, R. & Louis, M. R. (1981). Alternative perspectives in the organizational sciences: ‘Inquiry from the inside’ and ‘inquiry from the outside.’ *Academy of Management Review*, 6, 385-395.

Ewer, J. R. & Hughes-Davies, E. (1971). Further notes on developing an English programme for students of science and technology. *English Language Teaching*, 20(1). Reprinted in Swales, J. (1985). *Episodes in ESP* (pp. 47-55). Oxford: Pergamon.

Falchikov, N. (1993). Group process analysis: Self and peer assessment of working together in a group. *Educational Technology and Training International*, 30(3), 275-283.

Fanning, P. (1993). Broadening the ESP umbrella. *English for Specific Purposes*, 12, 159-170.

Farrell, T. S. C. (2011). ‘Keeping SCORE’: Reflective practice through classroom observations. *RELC Journal*, 42(3), 265-272.

Fasick, F. A. (2001). Some uses of untranscribed tape recordings in survey research. *Public Opinion Quarterly*, 41, 549-552.

Feagan, R. & Rossiter, K. (2011). University-community engagement: A case study using popular theatre. *Education + Training*, 53(2), 140-154.

Felix, U. (2001). The web’s potential for language learning: The student’s perspective. *ReCALL*, 13, 47-58.

Felix, U. (2002). The web as a vehicle for constructivist approaches in language teaching. *ReCALL*, 14(1), 2-15.

Felix, U. (2004). A multivariate analysis of secondary students’ experience of Web-based language learning. *ReCALL*, 16(1), 129-141.

Felix, U. (2005). E-learning pedagogy in the third millennium: The need for combining social and cognitive constructivist approaches. *ReCALL*, 17(1), 85-100.

Felix, U. (2008). The unreasonable effectiveness of CALL: What have we learned in two decades of research? *ReCALL*, 20(2), 141-161.

Fernandez, J. M. P. (2000). Learner autonomy and ICT: A web-based course of English for Psychology. *English Media International*, 37(4), 257-261.

Findlay, N., Dempsey, S., & Warren-Forward, H. (2010). Validation and use of the Newcastle Reflective Analysis Tool: A three-year longitudinal study of RT students’ reflective journals. *Reflective Practice*, 11(1), 83-94.

Flink, C., Boggiano, A. K., & Barrett, M. (1990). Controlling teaching styles: Undermining children’s self-determination and performance. *Journal of Personality and Social Psychology*, 59, 916-924.

Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative Inquiry*, 12(2), 219-245.

Foley, J. (1994). Key concepts in ELT: Scaffolding. *ELT Journal*, 48(1), 101-102.

Fosnot, C. (1993). Preface. In J. Grennon Brooks & M. Brooks (Eds.), *The Case for Constructivist Classrooms* (pp. vii-viii)*.* Alexandria, VA: Association for Supervision and Curriculum Development.

Foster, J. (2009). Insider research with family members who have a member living with rare cancer. *International Journal of Qualitative Methods*,8(4), 16-26.

Foster, P. (1999). Task-based learning and pedagogy. *ELT Journal*, 53(1), 69.

Fox, E. (2006). Constructing a pragmatic science of learning and instruction with functional contextualism. *Educational Technology, Research and Development*, 54(1), 5-36.

Fox, R. (2001). Constructivism examined. *Oxford Review of Education*, 27(1), 23-35.

Fox, R. J. (2010). Nonprobability sampling. In J. Sheth & N. Malhotra (Eds.), *Wiley international encyclopedia of marketing* (pp. 462-470). Georgia, Athens: John Wiley & Sons, Inc.

Francescato, D., Porcelli, R., Mebane, M., Cuddetta, M., Klobas, J., & Renzi, P. (2006). Evaluation of the efficacy of collaborative learning in face-to-face and computer-supported university contexts. *Computers in Human Behavior*, 22, 163-176.

Freire, P. (1994). *Pedagogy of the oppressed* (M.B. Ramos, Trans.). New York: Continuum.

Fullan, M. & Stiegelbauer, S. (1991). *The New Meaning of Educational Change*. New York: Teachers College Press.

Gage, N. (1989). The paradigm wars and their aftermath. *Educational Researcher*, 18, 4-10.

Garrison, D. R. (1993). A cognitive constructivist view of distance education: An analysis of teaching-learning assumptions. *Distance Education*, 14(2), 199-211.

Garrison, D. R., Anderson, T., & Archer, W. (2001). Critical thinking and computer conferencing: A model and tool to access cognitive presence. *American Journal of Distance Education*, 15(1), 7-23.

Garrison, D. R. & Kanuta, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet and Higher Education*,7(2), 95-105.

Geer, R. & Barnes, A. (2007). Beyond media stickiness and cognitive imprinting: Rethinking creativity in cooperative work and learning with ICTs. *Education and Information Technologies*, 12, 123-136.

Geertz, C. (1973). Thick description: Toward an interpretive theory of culture. In *The interpretation of cultures: Selected essays* (pp. 3-30). New York: Basic Books, Inc.

Gibbs, G. (1995). *Assessing student-centered courses*. Oxford: Centre for Staff Learning and Development.

Gildberg, F. A., Elverdam, B., & Hounsgaard, L. (2010). Forensic psychiatric nursing: A literature review and thematic analysis of staff-patient interaction. *Journal of Psychiatric and Mental Health Nursing*, 17, 359-368.

Gillen, J. (2000). Versions of Vygotsky. *British Journal of Educational Studies*,48(2), 183-198.

Gillespie, J. (2008). Mastering multimedia: Teaching languages through technology. *ReCALL*, 20(2), 121-123.

Gillies, R. (2003). Structuring cooperative group work in classrooms. *International Journal of Educational Research*, 39(1), 35-49.

Gillies, R. (2004). The effects of cooperative learning on junior high school students during small group learning. *Learning and Instruction*, 14, 197-213.

Gillies, R. (2008). The effects of cooperative learning on junior high school students’ behaviours, discourse, and learning during a science-based learning activity. *School Psychology International*, 29, 328-347.

Gillies, R. M. & Boyle, M. (2008). Teachers’ discourse during cooperative learning and their perceptions of this pedagogical practice. *Teaching* *and Teacher Education*, 24, 1333-1348.

Gillies, R. M. & Boyle, M. (2010). Teachers’ reflections on cooperative learning: Issues of implementation. *Teaching* *and Teacher Education*, 26, 933-940.

Ginns, P. & Ellis, R. (2007). Quality in blended learning: Exploring the relationships between on-line and face-to-face teaching and learning. *Internet and Higher Education*, 10, 53-64.

Godwin-Jones, R. (2003). Emerging technologies. Blogs and wikis: Environments for online collaboration. *Language Learning and Technology*, 7(2), 12-16.

Godwin-Jones, R. (2006). Emerging technologies. Tag clouds in the blogosphere: Electronic literacy and social networking. *Language Learning & Technology*, 10(2), 8-15.

Gordon, M. (2008). Between constructivism and connectedness. *Journal of Teacher Education*, 59, 322-331.

Gray R. (2002). Assessing students written projects. *New Directions for Teaching and Learning*,91, 37-42.

Gremler, D. D., Hoffman, K. D., Keaveney, S. M., & Wright, L. K. (2000). Experiential learning exercises in services marketing courses. *Journal of Marketing Education*, 21, 325-344.

Griffin, P., Coates, H., McInnis, C., & James, R. (2003). The development of an extended course experience questionnaire. *Quality in Higher Education*, 9(3), 259-266.

Griffith, A. I. (1998). Insider/outsider: Epistemological privilege and mothering work. *Human Studies*,21(4), 361-376.

Griffiths, C. A., Ryan, P., & Foster, J. H. (2011). Thematic analysis of Antonovsky’s sense of coherence theory. *Scandinavian Journal of Psychology*, 52, 168-173.

Groves, R., Fowler, F., Couper, M., Lepkowski, J., Singer, E., & Tourangeau, R. (2004). *Survey Methodology*. Hoboken, NJ: John Wiley.

Guba, E. G. & Lincoln, Y. S. (1981). *Effective evaluations*. San Francisco: Jossey-Bass.

Guba, E. G. & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105-117). Thousand Oaks, CA: Sage.

Guillemin, M. & Gillam, L. (2004). Ethics, reflexivity, and ‘ethically important moments’ in research. *Qualitative Inquiry*, 10, 261-280.

Gutwin, C. & Greenberg, S. (2004). The importance of awareness for team cognition in distributed collaboration. In E. Salas & S. M. Fiore (Eds.), *Team cognition: Understanding the factors that drive processes and performance* (pp. 177-201). Washington DC: American Psychological Association.

Gwyn-Paquette, C. & Tochon, F. V. (2002). The role of reflective conversations and feedback in helping preservice teachers learn to use cooperative activities in their second language classrooms. *The Modern Language Journal*, 86(2), 204-226.

Haig, B. D. (1999). Feminist research methodology. In J.P. Keeves & G. Lakomski (Eds.), *Issues in educational research* (pp. 222-231)*.* Amsterdam: Pergamon.

Hakkarainen, K., Lipponen, L., & Jarvela, S. (2002). Epistemology of inquiry and computer-supported collaborative learning. In T. Koschmann, R. Hall, & N. Miyake (Eds.), *CSCL 2: Carrying forward the conversation* (pp. 129-156). Mahwah, New Jersey: Lawrence Erlbaum.

Halcomb, E. J. & Davidson, P. M. (2006). Is verbatim transcription of interview data always necessary? *Applied Nursing Research*, 19, 38-42.

Hall, D. & Buzwell, S. (2013). The problem of free-riding in group projects: Looking beyond social loafing as reason for non-contribution. *Active Learning in Higher Education*, 14(1), 37-49.

Hall, A. H. & Grisham-Brown, J. (2011). Writing development over time: Examining preservice teachers’ attitudes and beliefs about writing. *Journal of Early Childhood Teacher Education*, 32(2), 148-158.

Halverson, E. R. (2011). Do social networking technologies have a place in formal learning environments? *On the Horizon*, 19(1), 62-67.

Hammersley, M. (1990). *Reading ethnographic research: A critical guide*. London: Longmans.

Hammersley, M. (1992). *What’s wrong with ethnography? Methodological explorations*. London: Routledge.

Hammersley, M. (2007). The issue of quality in qualitative research. *International Journal of Research & Method in Education*, 30(3), 287-305.

Hammond, M. (2000). Communication within on-line forums: The opportunities, the constraints and the value of a communicative approach. *Computer and Education*, 35, 251-262.

Hanrahan, S. J. & Isaacs, G. (2001). Assessing self- and peer-assessment: the students’ views. Higher Education and Development, 20(1), 53-70.

Hansen, R. (2006). Benefits and problems with student teams: Suggestions for improving team projects. *The Journal of Education for Business*,82(1), 11-19.

Hanson, J. M. & Sinclair, K. E. (2008). Social constructivist teaching methods in Australian universities – reported update and perceived effects: A survey of lecturers. *Higher Education Research & Development*, 27(3), 169-186.

Harding, K. (2007). *English for Specific Purposes*. Oxford: Oxford University Press.

Hardy, M. D. & Taylor, P. C. (1997). Von Glasersfeld’s radical constructivism: A critical review. *Science & Education*, 6, 135-150.

Harland, T. (2003). Vygotsky’s Zone of Proximal Development and problem-based learning: Linking a theoretical concept with practice through action research. *Teaching in Higher Education*, 8(2), 263-272.

Harrison, J., MacGibbon, L., & Morton, M. (2001). Regimes of trustworthiness in qualitative research: The rigors of reciprocity. *Qualitative Inquiry*, 7(3), 323-345.

Hartshorne, R. & Ajjan, H. (2009). Examining student decisions to adopt Web 2.0 technologies: Theory and empirical tests. *Journal of Computers in Higher Education*, 21, 183-198.

Harvey, L. (2001). *Student feedback: a report to the higher education funding council for England*. Centre for Research and Quality, The University of Central England, Birmingham.

Hasse, C. (2001). Institutional creativity: The relational Zone of Proximal Development. *Culture Psychology*, 7, 199-221.

Hawkey, K. (2003). Social constructivism and asynchronous text-based discussion: A case study with trainee teachers. *Education and Information Technology*, 8(2), 165-177.

Heath, S., Charles, V., Crow, G., & Wiles, R. (2007). Informed consent, gatekeepers and go-betweens: Negotiating consent in child- and youth-oriented institutions. *British Educational Research Journal*, 33(3), 403-417.

Hellawell, D. (2006). Inside-out: Analysis of the insider-outsider concept as a heuristic device to develop reflexivity in students doing qualitative research. *Teaching in Higher Education*, 11(4), 483-494.

Herman, E. D., Keldsen, S. Z., & Miller, J. G. (2001). *States of development in collaborative learning: Administrative perspectives on teaming in MBA programs*. Boston: Boston University School of Management Centre for Team Learning.

Heywood, J. (2000). *Assessment in Higher Education*. London and Philadelphia: Jessica Kingsley Publishers.

Hitchcock, G. & Hughes, D. (1995). *Research and the teacher* (2nd ed.). London: Routledge.

Hmelo, C. E., Gotterer, G. S., & Bransford, J. D. (1997). A theory-driven approach to assessing the cognitive effects of problem-based learning. *Instructional Science*, 25, 387-408.

Hodgson, V. & McConnell, D. (1995). Co-operative learning and development networks. *Journal of Computer Assisted Learning*, 11(4), 210-224.

Holec, H. (1981). *Autonomy and foreign language learning*. Oxford: Pergamon.

Holec, H. (Ed.) (1988). *Autonomy and self-directed learning: present fields of application.* Strasbourg: Council of Europe.

Holland, D. & Quinn, N. (1987). *Cultural Models in Language and Thought*.Cambridge: Cambridge University Press.

Holstein, J. A. & Gubrium, J. F. (1997). Active interviewing. In D. Silverman (Ed.), *Qualitative research: Theory, method and practice* (pp. 113-129). London: Sage.

Holstein, J. A. & Gubrium, J. F. (2011). Animating interview narratives. In D. Silverman (Ed.), *Qualitative research* (3rd ed.) (pp. 149-167). London: Sage.

Horwitz, E. K. (1985). Using student beliefs about language learning and teaching in the foreign language methods course. *Foreign Language Annals*, 18, 333-340.

Horwitz, E. K. (1988). The beliefs about language learning of beginning university foreign language students. *Modern Language Journal*, 72, 283-294.

Horwitz, E. K. (1999). Cultural and situational influences on foreign language learners’ beliefs about language learning: a review on BALLI studies. *System*, 27, 557-576.

Howitt, D. & Cramer, D. (2011). *Introduction to research methods in psychology*. London: Prentice Hall.

Howe, K. R. & Moses, M. S. (1999). Chapter 2: Ethics in educational research. *Review of Research in Education*, 24(1), 21-59.

Huang, H. T. & Hung, S. T. (2009). Implementing electronic speaking portfolios: perceptions of EFL students. *British Journal of Educational Technology*, 41(5), 84-88.

Hubbs, D. & Brand, C. F. (2010). Journals in the college classroom. *Journal of Experiential Education*, 33(1), 56-71.

Hume, L. & Mulcock, J. (2004). Introduction: Awkward spaces, productive places. In L. Hume & J. Mulcock (Eds.), *Anthropologists in the field: Cases in participant observation* (pp. xi-xxvii). New York: Columbia University Press.

Hung, S. T. (2011). Pedagogical applications of Vlogs: An investigation into ESP learners’ perceptions. *British Journal of Educational Technology*, 42(5), 736-746.

Hung, W., Bailey, J. H., & Jonassen, D. H. (2003). Exploring the tensions of problem-based learning: Insights from research. *New Directions for Teaching and Learning*, 95, 13-23.

Hunter, D. (2006). Assessing collaborative learning. *British Journal of Music Education*, 23(1), 75-89.

Hutchinson, T. & Waters, A. (1981). Performance and competence in ESP. *Applied Linguistics*, 2, 56-69.

Hutchinson, T. & Waters, A. (1987). *English for specific purposes: A learning-centered approach*. Cambridge: Cambridge University Press.

Hutchison, A. & Rea, T. (2011). Transforming learning and identity formation on the ‘smiling coast’ of West Africa. *Teaching and Teacher Education*, 27, 552-559.

Hüttner, J., Smit, U., & Mehlmauer-Larcher, B. (2009). ESP teacher education at the interface of theory and practice: Introducing a model of mediated corpus-based genre analysis. *System*, 37, 99-109.

Hyland, K. & Hyland, F. (Eds.) (2006).*Feedback in Second Language Writing: Contexts and Issues Applied Linguistics Series.* Cambridge: Cambridge University Press.

Hymes, D. (1972). On communicative competence. In J.B. Pride & J. Holmes (Eds.), *Sociolinguistics: Selected readings* (pp. 269-293). Harmondsworth: Penguin.

Ituma, A. (2011). An evaluation of students’ perceptions and engagements with e-learning components in a campus based university. *Active Learning in Higher Education*, 12(1), 57-68.

Jackson, J. (1998). Reality-based decision cases in ESP teacher education: Windows on practice. *English for Specific Purposes*, 17(2), 151-167.

Jacob, E., Rottenberg, L., Patrick, S., & Wheeler, E. (1996). Cooperative learning: Context and opportunities for acquiring academic English. *TESOL Quarterly*, 30(2), 253-279.

Jacobs, G. M. (1998). Cooperative learning or just grouping students: The difference makes a difference. In W.A. Renandya & G.M. Jacobs (Eds.), *Learners and language learning* (pp. 172-193). Singapore: SEAMEO Regional Language Centre.

Jacobs, G., Curtis, A., Braine, G., & Huang, S. (1998). Feedback on student writing: Taking the middle path. *Journal of Second Language Writing*, 7(3), 307-317.

Janesick, V. J. (1999). A journal about journal writing as a qualitative research technique: History, issues, and reflections. *Qualitative Inquiry*, 5, 505-524.

Janssen, J., Erkens, G., Kanselaar, G., & Jaspers, J. (2007). Visualization of participation: Does it contribute to successful computer-supported collaborative learning? *Computers & Education*, 49(4), 1037-1065.

Jarvis, J. (1983). Two core skills for ESP teachers. *The ESP Journal*, 2, 45-48.

Jefferies, P. (2003). ICT in supporting collaborative learning: Pedagogy and practice. *Journal of Educational Media*, 28(1), 35-48.

Jelfs, A. & Colbourn, C. (2002). Do students’ approaches to learning affect their perceptions of using computing and information technology? *Journal of Educational Media*, 27(1-2), 41-53.

Jelfs, A., Nathan, R., & Barrett, C. (2004). Scaffolding students: Suggestions on how to equip students with the necessary study skills for studying in a blended learning environment. *Journal of Educational Media*, 29(2), 85-96.

Jennings, G. R. (2005a). Theoretical paradigms that inform. In K. Kempf-Leonard (Ed.), *Encyclopedia of social measurement, Vol. 1* (pp. 211-217). Elsevier Academic Press.

Jennings, G. R. (2005b). Social science methods used in business. In K. Kempf-Leonard (Ed.), *Encyclopedia of social measurement, Vol. 1* (pp. 218-230). Elsevier Academic Press.

Jiménez Raya, M., Lamb, T., & Vieira, F. (2007). *Pedagogy for autonomy in language education in Europe – Towards a framework for learner and teacher development*. Dublin: Authentik.

Johnson, D. W. & Johnson, F. P. (1994). *Joining together: Group theory and group skills*. Boston: Allyn and Bacon.

Johnson, D. W. & Johnson, R. T. (1999a). *Learning together and alone: Cooperative, competitive, and individualistic learning* (5th ed.). Boston: Allyn & Bacon.

Johnson, D. W. & Johnson, R. T. (1999b). Making cooperative learning work. *Theory into Practice*, 38(2), 67-73.

Johnson, D. W. & Johnson, R. T. (2003). Student motivation in cooperative groups: Social interdependence theory. In R. Gillies and A. Ashman (Eds.), *Cooperative learning: The social and intellectual outcomes of learning in groups* (pp. 136-176). London: Routledge Falmer.

Johnson, D. W. & Johnson, R. T. (2009). An educational psychology success story: Social interdependence theory and cooperative learning. *Educational Researcher*, 38(5), 365-379.

Johnson, D. W., Johnson, R. T., & Smith, K. A. (1991). *Cooperative learning: Increasing college faculty instructional productivity* (ASHE-ERIC Higher Education Report No. 4). Washington, DC: George Washington University, School of Education and Human Development.

Johnson, D. W., Johnson, R. T., & Smith, K. A. (1995). Cooperative learning and individual student achievement in secondary schools. In J.E. Pederson & A.D. Digby (Eds.), *Secondary schools and cooperative learning: Theories, models, and strategies* (pp. 3-54). New York: Garland Publishing.

Johnson, J. C., Avenarius, C., & Weatherford, J. (2006). The active participant-observer: Applying social role analysis to participant observation. *Field Methods*, 18(2), 111-134.

Johnson, P. & Duberley, J. (2000). *Understanding management research*. London: Sage.

Jonassen, D. H. (1991). Objectivism versus constructivism: Do we need a new philosophical paradigm? *Educational Technology, Research and Development*, 39(3), 5-14.

Jonassen, D. H. (1997). Instructional design models for well-structured and ill-structured problem-solving learning outcomes. *Educational Technology: Research and Development*, 42(2), 31-39.

Jonassen, D. H., Cernusca, D., & Ionas, G. (2007). Constructivism and instructional design: The emergence of the learning sciences and design research. In R. Reiser & J.V. Dempsey (Eds.), *Trends and issues in instructional design and technology* (2nd ed.) (pp. 45-52). Upper Saddle River, NJ: Prentice-Hall.

Jonassen, D. H., Mayes, T., & McAleese, R. (1993). A manifesto for a constructivist approach to uses of technology in higher education. In T.M. Duffy, J. Lowyck, & D.H. Jonassen (Eds.), *Designing environments for constructive learning* (pp. 231-247). Berlin: Springer.

Jones, M. C., MacGillivray, S., Kroll, T., Zohoor, A. R., & Connaghan, J. (2011). A thematic analysis of the conceptualization of self-care, self-management and self-management support in the long-term conditions management literature. *Journal of Nursing and Healthcare of Chronic Illness*, 3, 174-185.

Jones, S. R. G. (1992). Was there a Hawthorne effect? *American Journal of Sociology*, 98(3), 451-468.

Kagan, S. (1992). *Cooperative learning*. CA: San Juan Capistrano.

Kagan, S. (1994). *Cooperative learning* (2nd ed.). San Clemente, CA: Kagan Publishing.

Kahn, W. (1995). Group process checkpoints for team learning in the classroom. *Journal of Policy Analysis and Management*, 14, 310-326.

Kanselaar, G. (1993). The didactics of foreign language teaching with multimedia. *Technology, Pedagogy and Education*, 2(2), 251-265.

Kanuha, V. K. (2000). ‘Being’ native versus ‘going native’: Conducting social work research as an insider. *Social Work*, 45(5), 439-447.

Kaplan, A. (1999). Scientific methods in educational research. In J.P. Keeves & G. Lakomski (Eds.), *Issues in educational research* (pp. 79-91)*.* Amsterdam: Pergamon.

Kaufman, D. & Grennon Brooks, J. (1996). Interdisciplinary collaboration in teacher education: Aconstructivist approach. *TES0L Quarterly*,30(2), 231-251.

Keller, C. & Cernerud, L. (2002). Students’ perceptions of e‐learning in university education. *Journal of Educational Media*, 27(1-2), 55-67.

Kemp, N. (Ed.) (2011). Special section on mobiles and literacy. *Journal of Computer Assisted Learning*,27, 1-75.

Kennedy, D., Hyland, Á., & Ryan, N. (2009). Writing and using learning outcomes: A practical guide. *Journal of the European Higher Education Area*, C3.4-1, 1-30.

Kenny, W. R. & Grotelueschen, A. D. (1980). *Making the case for case study*. Occasional paper, Office for the Study of Continuing Professional Education. Urbana-Champaign: College of Education, University of Illinois.

Kern, R. G. (1995). Students’ and teachers’ beliefs about language learning. *Foreign Language Annals*, 28, 71-92.

Kerr, N. (1983). The dispensability of member effort and group motivation losses: Free-rider effects. *Journal of Personality and Social Psychology*, 44, 78-94.

Kessler, G. & Bikowski, D. (2010). Developing collaborative autonomous learning abilities in computer mediated language learning: attention to meaning among students in wiki space. *Computer Assisted Language Learning*, 23(1), 41-58.

Khosa, D. K. & Volet, S. E. (2011). Promoting effective collaborative case-based learning at university: A metacognitive intervention. *Studies in Higher Education*, 1, 1-20.

Kim, D. (2011). Incorporating podcasting and blogging into a core task for ESOL teacher candidates. *Computers & Education*, 56, 632-641.

Kim, H-K. (2008). Beyond motivation: ESL/EFL teachers’ perceptions of the role of computers. *CALICO Journal*, 25(2), 241-259.

Kim, J., Kang, J., Kim, S., Smith, T. W., Son, J., & Berktold, J. (2010). Comparison between self-administered questionnaire and computer-assisted self-interview for supplemental survey nonresponse. *Field Methods*, 22(1), 57-69.

Kinginger, C. (2001). i + 1 ≠ ZPD. *Foreign Language Annals*, 34(5), 417-425.

Kinginger, C. (2002). Defining the Zone of Proximal Development in US foreign language education. *Applied Linguistics*, 23(2), 240-261.

Kirschner, P. A. (2001). Using integrated electronic environments for collaborative teaching/learning. *Research Dialogue in Learning and Instruction*, 2(1), 1-10.

Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). Why minimal guidance during instruction does not work: An analysis of the failure of constructivist, discovery, problem-based, experiential, and inquiry-based teaching. *Educational Psychologist*, 41(2), 75-86.

Kitade, K. (2000). L2 learners’ discourse and SLA theories in CMC: Collaborative interaction in Internet chat. *Computer Assisted Language Learning*, 13(2), 143-166.

Kitchen, D., & McDougall, D. (1998). Collaborative learning on the Internet. *Journal of Educational Technology Systems*, 27(3), 245.

Klassen, R. D. & Jacobs, J. (2001). Experimental comparison of web, electronic and mail survey technologies in operations management. *Journal of Operations Management*, 19, 713-728.

Knowles, M. S., Holton, E. F., & Swanson, R. A. (1998). *The adult learner: The definitive classic in adult education and human resource development* (5th ed.). Houston, TX: Gulf Professional Publishing.

Kohn, A. (1992). Resistance to cooperative learning: Making sense of its deletion and dilution. *Journal of Education*, 17(4), 38-55.

Kollias, V., Mamalougos, N., Vamvakoussi, X., Lakkala, M., & Vosniadou, S. (2005). Teachers’ attitudes to and beliefs about web-based collaborative learning environments in the context of an international implementation. *Computers & Education*, 45, 295-315.

Koppenhaver, G. D. & Shrader, C. B. (2003). Structuring the classroom for performance: Cooperative learning with instructor-assigned teams. *Decision Sciences Journal of Innovative Education*, 1(1), 1-21.

Koschmann, T. (1996). Paradigm shifts and instructional technology: An introduction. In T. Koschmann (Ed.), *CSCL theory and practice of an emerging paradigm* (pp. 1-24). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Kracker, J. & Pollio, H. R. (2003). The experience of libraries across time: Thematic analysis of undergraduate recollections of library experiences. *Journal of the American Society for Information Science and Technology*, 54(12), 1104-1116.

Kramarski, B. & Feldman, Y. (2000). Internet in the classroom: Effects on reading comprehension, motivation and metacognitive awareness. *Educational Media International*, 37(3), 149-155.

Krashen, S. (1981). *Second language acquisition and learning*. Oxford: Pergamon.

Kreijns, K., Kirschner, P. A., & Jochems, W. (2003). Identifying the pitfalls for social interaction in computer-supported collaborative learning environments: A review of the research. *Computers in Human Behavior*, 19, 335-353.

Krickova, Z. & Polackova, G. (2010). Meeting ESP needs of nursing students at university level: Theory and practice of ESP language teaching in nursing students at Jennesius Faculty of Medicine in Martin, Slovakia. *The International Journal of Interdisciplinary Social Sciences*, 5(5), 1833-1882.

Kvale, S. (1996). *InterViews: An introduction to qualitative research interviewing*. Thousand Oaks, CA: Sage Publications, Inc.

Kwak, N. & Radler, B. (2002). A comparison between mail and web surveys: Response pattern, respondent profile, and data quality. *Journal of Official Statistics*, 18, 257-73.

Labaree, R. V. (2002). The risk of ‘going observationalist’: Negotiating the hidden dilemmas of being an insider participant observer. *Qualitative Research*, 2(1), 97-122.

Labour, M. (2001). Social constructivism and CALL: evaluating some interactive features of network-based authoring tools. *ReCALL*, 13(1), 32-46.

Lackstrom, J., Selinker, L., & Trimble, L. (1973). Technical rhetorical principles and grammatical choice. *English Teaching Forum,* 1-7.

Lai, G. & Calandra, B. (2010). Examining the effects of computer-based scaffolds on novice teachers’ reflective journal writing. *Educational Technology, Research and Development*, 58, 421-437.

Lam, T. C. M., Green, K. E., & Bordignon, C. (2002). Effects of item grouping and position of the ‘Don’t Know’ option on questionnaire response. *Field Methods*, 14(4), 418-432.

Lam, Y. (2000). Technophilia vs technophobia: A preliminary look at why second-language teachers do or do not use technology in their classrooms. *The Canadian Modern Language Review*, 56(3), 389-420.

Lamb, T. & Reinders, H. (2007). Learner and teacher autonomy: Concepts*, realities* *and responses*. Amsterdam: John Benjamins.

Lantolf, J. P. & Pavlenko, A. (1995). Sociocultural theory and second language acquisition. *Annual Review of Applied Linguistics*, 15, 108-124.

Lantolf, J. P. & Poehner, M. E. (Eds.) (2008). *Sociocultural theory and the teaching of second languages*. London: Equinox.

Lantolf, J. P. & Thorne, S. L. (2006). *Sociocultural theory and the genesis of second language development*. Oxford: Oxford University Press.

Larusson, J. A. & Alterman, R. (2009). Wikis to support the ‘collaborative’ part of collaborative learning. *Computer-Supported Collaborative Learning*, 4, 371-402.

Lave, J. & Wenger, E. (1991). *Situated learning*. Cambridge: Cambridge University Press.

Lazaraton, A. (1995). Qualitative research in applied linguistics: A progress report. *TESOL Quarterly*, 29(3), 455-472.

LeCompte, M. & Preissle, J. (1993). *Ethnography and qualitative design in educational research* (2nd ed.). London: Academic Press.

Lee, L. (2002). Synchronous online exchanges: A study of modification devices on non-native discourse. *System*, 30, 275-288.

Lehtonen, T. & Tuomainen, S. (2003). CSCL - a tool to motivate foreign language learners: The Finnish application. *ReCALL*, 15(1), 51-67.

Lejk, M., Wyvill, M., & Farrow, S. (1999). Group assessment in systems analysis and design: A comparison of the performance of streamed and mixed ability groups. *Assessment and Evaluation in Higher Education*, 24(1), 5-14.

Lemke, J. L. (1998). [Analysing verbal data: Principles, methods, and problems](http://www-personal.umich.edu/~jaylemke/papers/handbook.htm). In K. Tobin & B. Fraser (Eds.), *International handbook of science education* (pp. 1175-1189). Netherlands: Kluwer.

Leuf, B. & Cunningham, W. (2001). *The wiki way: Quick collaboration on the web*. Boston, MA: Addison-Wesley Longman Publishing Co.

Lew, M. D. N. & Schmidt, H. G. (2007). Online reflection journals: Learning through assessment. *Proceedings ascilite Singapore: Concise paper* (pp. 578-582).

Lewis, M. (1993). The lexical approach. Hove: Language Teaching Publications.

Li, D. (2012). Scaffolding adult learners of English in learning target form in a Hong Kong EFL university classroom. *Innovation in Language Learning and Teaching*, 6(2), 127-144.

Lin, M. & Bates, A. B. (2010). Home visits: How do they affect teachers’ beliefs about teaching and diversity. *Early Childhood Education Journal*, 38, 179-185.

Lincoln, Y. S. & Guba, E. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.

Lipponen L., Rahikainen M., Hakkarainen K., & Palonen T. (2003). Effective participation and discourse through a computer network: Investigating elementary students’ computer-supported interaction. *Journal of Educational Computing Research*,27, 355-384.

Little, D. (1991). *Learner autonomy 1: Definitions, issues and problems*. Dublin: Authentik.

Little, J. W. (2003). Inside teacher community: Representations of classroom practice. *Teachers College Record*, 105, 913-945.

Lockhart, C. & Ng, P. (1993). How useful is peer response? *Perspectives: Working papers of the Department of English, City Polytechnic of Hong Kong*, 5(1), 17-29.

Lofland, J. & Lofland, L. H. (1995). *Analyzing social settings: A guide to qualitative observation and analysis*. Belmont, CA: Wadsworth

Lopata, C., Miller, K., & Miller, R. (2003). Survey of actual and preferred use of cooperative learning among exemplar teachers. *The* *Journal of Educational Research*,96(4), 232-239.

Loschky, L. (1994). Comprehensible input and second language acquisition: What is the relationship? *Studies in Second Language Acquisition*, 16, 303-323.

Lou, Y., Abrami, P., Spence, J., Poulsen, C., Chambers, B., & d’Apollonia, S. (1996). Within-class grouping: A metaanalysis. *Review of Educational Research*, 66, 423-458.

Luborsky, M. (1994). The identification and analysis of themes and patterns. In J.F. Gubrium & A. Sankar (Eds.), *Qualitative methods in aging research* (pp. 189-210). Thousand Oaks, CA: Sage.

Luke, C. L. (2006). Fostering learner autonomy in a technology-enhanced, inquiry-based foreign language classroom. *Foreign Language Annals*, 39(1), 71-86.

Lunenberg, M. & Korthagen, F. (2005). Breaking the didactic circle: A study on some aspects of the promotion of student-directed learning by teachers and teacher educators. *European Journal of Teacher Education*,28, 1-22.

Macdonald, J. (2003). Assessing online collaborative learning: Process and product. *Computers & Education*, 40, 377-391.

MacInnerney, J. & Roberts, T. (2004). Cooperative or collaborative learning? In T. Roberts (Ed.), *Online collaborative learning: Theory and practice* (pp. 203-214). Hershey, PA: Information Science.

Maclntyre, A. (1982). Risk, harm, and benefit assessments as instruments of moral evaluation. In T. Beauchamp, R. Faden, R. Wallace, & L. Walters (Eds.), *Ethical issues in social science research* (pp. 175-192). Baltimore: Johns Hopkins University Press.

Mack, N., Woodsong, C., MacQueen, K. M., Guest, G., & Namey, E. (2005). *Qualitative research methods: A data collector’s field guide*. North Carolina, USA: Family Health International.

Mackay, R. (1981). Accountability in ESP programs. *The ESP Journal*, 1(2), 107-122.

Maloch, B. (2002). Scaffolding student talk: One teacher’s role in literature discussion groups. *Reading Research Quarterly*, 37, 94-112.

Many, J. E. (2002). An exhibition and analysis of verbal tapestries: Understanding how scaffolding is woven into the fabric of instructional conversations. *Reading Research Quarterly*, 37, 376-407.

Many, J. E., Dewberry, D., Taylor, D. L., & Coady, K. (2009). Profiles of three preservice ESOL teachers’ development of instructional scaffolding. *Reading Psychology*, 30(2), 148-174.

Marjanovic, O. (1999). Learning and teaching in a synchronous collaborative environment. *Journal of Computer Assisted Learning*, 15, 129-138.

Markoff, J. (2007, October 19). What I meant to say was semantic web. *The New York Times*. Retrieved from <http://bits.blogs.nytimes.com/2007/10/19/what-i-meant-to-say-was-semantic-web/>

Marshall, C. & Rossman, G. B. (2011). *Designing qualitative research* (5th ed.). Thousand Oaks, CA: Sage.

Matheson, J. L. (2007). The voice transcription technique: Use of voice recognition software to transcribe digital interview data in qualitative research. *The Qualitative Report*, 12(4), 547-560.

Mathison, S. (1988). Why triangulate? *Educational Researcher*, 17(2), 13-17.

Matthews, W. J. (2003). Constructivism in the classroom: Epistemology, history and empirical evidence. *Teacher Education Quarterly*, 30, 51-64.

Maxwell, J. A. (2005). *Qualitative research design: An interactive approach* (2nd ed.). Thousand Oaks, CA: Sage.

Mayer, R. E. (2004). Should there be a three-strikes rule against pure discovery learning? *American Psychologist*, 59(1), 14-19.

Mccaferty, S. G. (2002). Gesture and creating Zones of Proximal Development for second language learning. *The Modern Language Journal*, 86(ii), 192-203.

McDonough, J. (2010). English for specific purposes: A survey review of current materials. *ELT Journal*, 64(4), 462-477.

McEnery, A. & Wilson, A. (2001). *Corpus linguistics* (2nd ed.). Edinburgh: Edinburgh University Press.

McGroarty, M. (1992). Cooperative learning: The benefits for content area teaching. In P.A. Richard & M.A. Snow (Eds.), *The multicultural classroom: Readings for content-area teachers* (pp. 58-69). White Plain, NY: Longman.

McGroarty, M. (1993). Cooperative learning and second language acquisition. In D.D. Holt (Ed.), *Cooperative learning: A response to linguistic and cultural diversity* (pp. 19-46). McHenry, IL: Center for Applied Linguistics and Delta Systems.

McIntosh, S., Braul, B., & Chao, T. (2001). A case study in asynchronous voice conferencing for language instruction. *Educational Media International*, 40(1), 63-74.

McKeachie, W, (1999). *Teaching tips* (10th ed.). Massachusetts: Heath and Co.

McKeachie, W. J., Pintrich, P. R., Lin, Y., Smith, D. A. F., & Sharma, R. (1990). *Teaching and learning in the college classroom: A review of the research literature* (2nd ed.). Ann Arbor, MI: National Center for Research to Improve Post-Secondary Teaching and Learning.

McLellan, E., MacQueen, K. M., & Neidig, J. L. (2003). Beyond the qualitative interview: Data preparation and transcription. *Field Methods*, 15(1), 63-84.

McRobbie, C. J., Ginns, I. S., & Stein, S. J. (2000). Preservice teachers’ thinking about technology and technology education. *International Journal of Technology and Design Education*, 10, 81-101.

Meirink, J. A., Imants, J., Meijer, P. C., & Verloop, N. (2010). Teacher learning and collaboration in innovative teams. *Cambridge Journal of Education*, 40(2), 161-181

Mello, J. A. (1993). Improving individual member accountability in small work group settings. *Journal of Management Education*, 17(2), 253-259.

Meloth, M. S. & Deering, P. D. (1992). The effects of two cooperative conditions on peer group discussions, reading comprehension, and metacognition. *Contemporary Educational Psychology*, 17, 175-193.

Meloth, M. S. & Deering, P. D. (1999). The role of the teacher in promoting cognitive processing during collaborative learning. In O.M. O’Donnell & A. King (Eds.), *Cognitive perspectives on peer learning* (pp. 235-255). Mahwah, NJ: Lawrence Erlbaum.

Mercer, J. (2007). The challenges of insider research in educational institutions: Wielding a double-edged sword and resolving delicate dilemmas. *Oxford Review of Education*, 33(1), 1-17.

Merriam, S. B. (1988). *Case study research in education. A qualitative approach*. San Francisco, CA: Jossey-Bass Inc.

Merton, R. (1972). Insiders and outsiders: A chapter in the sociology of knowledge. *American Journal of Sociology*,78, 9-47.

Mesch, D. J. (1991). The jigsaw technique: Away to establish individual accountability in group work. *Journal of Management Education*, 15, 355-358.

Michaelsen, L. K. & Black, R. H. (1994). Building learning teams: The key to harnessing the power of small groups in higher education. In S. Kadel & J. Keehner (Eds.), *Collaborative learning: A sourcebook for higher education* (Vol. 2) (pp. 65-81). State College, PA: National Center for Teaching Learning and Assessment.

Miles, M. B. & Huberman, A. M. (1994). *An expanded sourcebook: Qualitative data analysis*. Thousand Oaks, CA: Sage Publications.

Miller, J. & Glassner, B. (2011). The ‘inside’ and the ‘outside’: Finding realities in interviews. In D. Silverman (Ed.), *Qualitative research* (3rd ed.) (pp. 131-148). London: Sage.

Miller, L. & Olson, J. (1994). Putting the computer in its place: A study of teaching with technology. *Journal of Curriculum Studies*, 26(1), 121-141.

Millis, B. J. & Cottell, P. G. (1998). *Cooperative learning for higher education faculty*. Phoenix, AZ: Oryx Press.

Minocha, S. (2009). An empirically grounded study on the effective use of social software in education. *Journal of Education and Training*, 51(5/6), 381-394.

Mitchell, T. J. F., Chen, S. Y., & Macredie, R. D. (2005). The relationship between web enjoyment and student perceptions and learning using a web‐based tutorial. *Learning, Media and Technology*, 30(1), 27-40.

Moir, J. & Abraham, S. C. (1995). Talking realistically about nursing: A thematic analysis of nursing course selection interview discourse. *Journal of Advanced Nursing*, 21, 778-782.

Monaghan, C. H. (2011). Communities of practice: A learning strategy for management education. *Journal of Management Education*, 35(3), 428-453.

Montgomery, A. C. & Crittenden, K. S. (1977). Improving coding reliability for open-ended questions. *The Public Opinion Quarterly*, 41(2), 235-243.

Moreno, L., Gonzalez, C., Castilla, I., Gonzalez, E., & Sigut, J. (2007). Applying a constructivist and collaborative methodological approach in engineering education. *Computers & Education*, 49, 891-915.

Morris, R. & Hayes, C. (1997). Small group work: Are group assignments a legitimate form of assessment? In R. Pospisil & L. Willcoxson (Eds.), *Learning through Teaching* (pp. 229-233). Proceedings of the 6th Annual Teaching Learning Forum, Murdoch University, Perth, Australia.

Morse, J. M. (1998). Designing funded qualitative research. In N. Denzin & Y. Lincoln (Eds.), *Strategies of qualitative inquiry* (pp. 56-85). Thousand Oaks, CA: Sage.

Mulryan, C. (1994). Perceptions of intermediate students’ cooperative small-group work in mathematics. *Journal of Educational Research*, 87, 280-291.

Munby, J. (1978). *Communicative syllabus design*. Cambridge: Cambridge University Press.

Murphy, L. (2008). Supporting learner autonomy: Developing practice through the production of courses for distance learners of French, German and Spanish. *Language Teaching*, 12(1), 83-102.

Muukkonen, H., Hakkarainen, K., & Lakkala, M. (2004). Computer-mediated progressive inquiry in higher education. In T.S. Roberts (Ed.), *Online collaborative learning: Theory and practice* (pp. 28-53). London: Information Science Publishing.

Naismith, L., Lee, B-H., & Pilkington, R. M. (2011). Collaborative learning with a wiki: Differences in perceived usefulness in two contexts of use. *Journal of Computer Assisted Learning*, 27, 228-242.

Nash, J. (1950). Equilibrium points in n-person games. [*Proceedings of the National Academy of Sciences*](https://en.wikipedia.org/wiki/Proceedings_of_the_National_Academy_of_Sciences), 36(1), 48-49.

Nassaji, H. & Cumming, A. (2000). What’s in a ZPD? A case study of a young ESL student and teacher interacting through dialogue journals. *Language Teaching Research*, 4(2), 95-121.

Newman, D., Griffin, P., & Cole, M. (1989). *The construction zone: Working for cognitive change in school*. Cambridge: Cambridge University Press.

Newman, F. & Holzman, L. (1993). *Lev Vygotsky: revolutionary scientist.* London: Routledge.

Nichols, E. & Childs, J. H. (2009). Respondent debriefings conducted by experts: A technique for questionnaire evaluation. *Field Methods*, 21(2), 115-132.

Noddings, N. (1986). Fidelity in teaching, teacher education, and research on teaching. *Harvard Educational Review*, 56, 496-510.

Northcott, J. & Brown, G. (2006). Legal translator training: Partnership between teachers of English for legal purposes and legal specialists. *English for Specific Purposes*, 25, 358-375.

Nunan, D. (1988). *The learner-centered curriculum*. Cambridge: Cambridge University Press.

Nussbaum, M., Alvarez, C., McFarlane, A., Gomez, F., Claro, S., & Radovic, D. (2009). Technology as small group face-to-face collaborative scaffolding. *Computers & Education*, 52, 147-153.

Nyikos, M. & Hashimoto, R. (1997). Constructivist theory applied to collaborative learning in teacher education: In search of ZPD. *The Modern Language Journal*, 81(iv), 506-517.

Oakley, B., Felder, R. M., Brent, R., & Elhajj, I. (2004). Turning student groups into effective teams. *Journal of Student Centered Learning*, 2(1), 9-34.

O’Connell, T. S. & Dyment, J. E. (2011). The case of reflective journals: Is the jury still out? *Reflective Practice*, 12(1), 47-59.

Office for National Statistics (2008). *Purposive Sampling*. Retrieved July 24, 2013, from: <http://www.ons.gov.uk/ons/guide-method/method-quality/general-methodology/data-collection-methodology/services-available-from-dcm/purposive-sampling/index.html>.

Ohta, A. (1995). Applying sociocultural theory to an analysis of learner discourse: Learner-learner collaborative interaction in the zone of proximal development. *Issues in Applied Linguistics*, 6(2), 93-121.

Olsen, W. (2004). Triangulation in social research: Qualitative and quantitative methods can really be mixed. In M. Holborn & M. Haralambos (Eds.), *Developments in Sociology* (pp. 103-118). Ormskirt: Causeway Press.

Olson, K. (2010). An examination of questionnaire evaluation by expert reviewers. *Field Methods*, 22(4), 295-318.

Olssen, M. (1996). Radical constructivism and its failings: Anti-realism and individualism. *British Journal of Educational Studies*, 44(3), 275-295.

O’Neill, F. (2011). From language classroom to clinical context: The role of language and culture in communication for nurses using English as a second language. A thematic analysis. *International Journal of Nursing Studies*, 48, 1120-1128.

Oppenheim, A. N. (1992). *Questionnaire design, interviewing and attitude measurement.* London: Pinter Publishers Ltd.

O’Reilly, T. (2005). *What is Web 2.0: Design patterns and business models for the next generation of software.* Retrieved December 27, 2012 from: <http://oreilly.com/web2/archive/what-is-web-20.html>

Ortlipp, M. (2008). Keeping and using reflective journals in the qualitative research process. *The Qualitative Report*, 13(4), 695-705.

Packer, M. J. & Goicoechea, J. (2000). Sociocultural and constructivist theories of learning: Ontology, not just epistemology. *Educational Psychologist*, 35(4), 227-241.

Palincsar, A. S. (1986). The role of dialogue in providing scaffolded instruction. *Educational Psychologist*,21(1&2), 73-98.

Palincsar, A. S. (1998). Social constructivist perspectives on teaching and learning. *Annual Review of Psychology*, 49, 345-375.

Palinscar, A. S. (2002). Designing collaborative learning contexts. *Theory into Practice*,41, 26-32.

Pardo-Ballester, C. (2012). CALL evaluation: Students’ perception and use of LoMásTV. *CALICO Journal*, 29(3), 532-547.

Park, J. & Zeanah, A. E. (2005). An evaluation of voice recognition software for use in

interview-based research: A research note. *Qualitative Research*, 5(2), 245-251.

Park, M., Butcher, H. K., & Maas, M. L. (2004). A thematic analysis of Korean family caregivers’ experiences in making the decision to place a family member with dementia in a long-term care facility. *Research in Nursing & Health*, 27, 345-356.

Pascarella, E. T. & Terenzini, P. T. (2005). *How college affects students (Vol. 2): A third decade of research*. San Francisco: Jossey-Bass.

Patton, M. W. (1980). *Qualitative evaluation methods* (3rd ed*.*). Beverly Hills, CA: Sage.

Patton, M. W. (2002). *Qualitative evaluation and research methods* (3rd ed*.*). Thousand Oaks, CA: Sage.

Pea, R. D. (2004). The social and technological dimensions of scaffolding and related theoretical concepts for learning, education, and human activity. *Journal of the Learning Sciences*, 13(3), 423-451.

Peacock, M. (2001). Pre-service ESL teachers’ beliefs about second language learning: A longitudinal study. *System*, 29(2), 177-195.

Pear, J. & Crone-Todd, D. E. (2002). A social constructivist approach to computer-mediated instruction. *Computers and Education*, 38, 221-231.

Pedersen, S. & Liu, M. (2003). Teachers’ beliefs about issues in the implementation of a student-cen­tered learning environment. *Education Technology Research & Development*, 51(2), 57-76.

Pennington, D.C. (2002). *The social psychology of behaviour in small groups.* Hove: Psychology Press.

Perkins, D. (1992). What constructivism demands of the learner. In T. Duffy & D. Jonassen (Eds.), *Constructivism and the technology of instruction* (pp. 161-165). Lawrence Erlbaum, Hillsdale, NJ.

Perry, L., Lennie, C., & Humphrey, N. (2008). Emotional literacy in the primary classroom: teacher perceptions and practices. *Education 3-13*, 36(1), 27-37.

Persico, D., Pozzi, F., & Sarti, L. (2010). Monitoring collaborative activities in computer supported collaborative learning. *Distance Education*, 31(1), 5-22.

Peterson, M. (1999). World wide web resources for the ESP practitioner. *English for Specific Purposes*, 18, S75-S80.

Peterson, S. H. & Miller, J. A. (2004). Quality of college students’ experiences during cooperative learning. *Social Psychology of Education*, 7, 161-183.

Petraglia, J. (1998). The real world on a short leash: The (mis)application of constructivism to the design of educational technology. *ETR&D*, 46(3), 53-65.

Phillips, D. C. (1995). The good, the bad, and the ugly: The many faces of constructivism. *Educational Researcher*, 24(7), 5-12.

Phipps, M., Phipps, C., Kask, S., & Higgins, S. (2001). University students’ perceptions of cooperative learning: Implications for administrators and instructors. *The Journal of Experiential Education*, 24(1), 14-21.

Piaget, J. (1985). *Equilibration of cognitive structures* (T. Brown & K.J. Thampy, Trans.). Chicago, IL: University of Chicago Press.

Pianta, Rc. C. & Hamre, B. K. (2009). Conceptualization, measurement, and improvement of classroom processes: Standardized observation can leverage capacity. *Educational Researcher*, 38, 109-119.

Pica, T., Young, R., & Doughty, C. (1987). The impact of interaction on comprehension. *TESOL Quarterly*, 21, 737-758.

Pittam, G., Elander, J., Lusher, J., Fox, P., & Payne, N. (2009). Student beliefs and attitudes about authorial identity in academic writing. *Studies in Higher Education*, 34(2), 153-170.

Poehner, M. E. & Lantolf, J. P. (2005). Dynamic assessment in the language classroom. *Language Teaching Research*, 9, 233-265.

Poland, B. D. (1995). Transcription quality as an aspect of rigor in qualitative research. *Qualitative Inquiry*, 1, 290-310.

Porcaro, D. (2011). Applying constructivism in instructivist learning cultures. *Multicultural Education and Technology Journal*, 5(1), 39-54.

Porto, M. (2008). Learning diaries in the English as a foreign language classroom: A tool for assessing learners’ perceptions of lessons and developing learner autonomy and reflection. *Foreign Language Annals*, 40(4), 672-696.

Powers, W. R. (2005). *Transcription techniques for the spoken word*. Lanham: AltaMira Press.

Preedy, M. & Riches, C. (1988). Practitioner research in school management: An analysis of research studies undertaken for an Open University course. In J. Nias & S. Groundwater-Smith (Eds.), *The enquiring teacher: supporting and sustaining teacher research*. Lewes, Falmer Press.

Prinsen, F. R., Volman, M. L. L., & Terwel, J. (2007). Gender-related differences in computer-mediated communication and computer-supported collaborative learning. *Journal of Computer Assisted Learning*, 23, 393-409.

Quantz, R. A. (1992). On critical ethnography (with some postmodern considerations). In M. LeCompte, W.L. Millroy, & J. Preissle (Eds.), *The Handbook of qualitative research in education* (pp. 447-506)*.* London: Academic Press Ltd.

Quarstein, V. A. & Peterson, P. A. (2001). Assessment of cooperative learning: A goal-criterion approach. *Innovative Higher Education*, 26(1), 59-77.

Rabinow, P. & Sullivan, W. (1987). The interpretive turn: Emergence of an approach. In P. Rabinow & W. Sullivan (Eds.), *Interpretive social science* (pp.1-21). Los Angeles: University of California Press.

Race, P. (2000). Task-based learning. *Medical Education*, 34, 335-336.

Ragin, C. C. (1992). ‘Casing’ and the process of social inquiry. In C.C. Ragin & H.S. Becker (Eds.), *What is a case? Exploring the foundations of social inquiry* (pp. 217-226). Cambridge, UK: Cambridge University Press.

Ramsden, P. (2003). *Learning to teach in higher education*. New York: RoutledgeFalmer.

Ranalli, J. (2008). Learning English with The Sims: Exploiting authentic computer simulation games for L2 learning. *Computer Assisted Language Learning,* 21(5), 441-455.

Ravenscroft, S. P. (1997). In support of cooperative learning. *Issues in Accounting Education*, 12(1), 187-190.

Ravenscroft, S., Buckless, F., & Hassall, T. (1999). Cooperative learning: A literature guide. *Accounting Education*, 8(2), 163-176.

Ravenscroft, S., Buckless, F., McCombs, G., & Zuckerman, G. (1995). Incentives in student team learning: An experiment in cooperative group learning. *Issues in Accounting Education*, 10, 97-109.

Ravitch, S. M. & Wirth, K. (2007). Developing a pedagogy of opportunity for students and their teachers. *Action Research*, 5(1), 75-91.

Raya, M. J. & Fernandez, M. P. (2002). Learner autonomy and new technologies. *Education Media International*, 39(1), 61-68.

Reagan, T. (1999). Constructivist epistemology and second/foreign language pedagogy. *Foreign Language Annals*, 32(4), 413-425.

Reason, P. (1998). Three approaches to participative inquiry. In N.K. Denzin & Y.S. Lincoln (Eds.), *Strategies of qualitative inquiry* (1st ed.) (pp. 261-291). Thousand Oaks, CA: SAGE.

Redding, N. (1992). Assessing the big outcomes. *Educational Leadership*, 49, 49-53.

Reja, U., Lozar Manfreda, K., Hlebec, V., & Vehovar, V. (2003). Open-ended vs. close-ended questions in web questionnaires. *Advances in Methodology and Statistics*, 19,159-177.

Remedios, L., Clarke, D., & Hawthorne, L. (2008). The silent participant in small group collaborative learning contexts. *Active Learning in Higher Education*, 9(3), 201-216.

Reynolds, P. L. & Symons, S. (2001). Motivational variables and children’s text search. *Journal of Educational Psychology*, 93, 14-22.

Richardson, V. (1996). The role of attitudes and beliefs in learning to teach. In J. Sikula, T.J. Buttery, & E. Guyton (Eds.), *Handbook of research on teacher education* (pp. 102-119). New York: Macmillan Library Reference.

Rick, J. & Guzdial, M. (2006). Situating CoWeb: A scholarship of application. International Journal of Computer-Supported Collaborative Learning, 1(1):89-115.

Riley, P. (1989). Keeping secrets: ESP/LSP and the sociology of knowledge. *European Journal of Teacher Education*, 12(2), 69-80.

Roberts, P., Priest, H., & Traynor, M. (2006). Reliability and validity in research. *Nursing Standard*, 20(44), 41-45.

Robinson, P. (1991). *ESP Today: A practitioner’s guide.* Hemel Hempstead: Prentice Hall.

Robinson, P. (2011). Task-based language-learning: A review of issues. *Language Learning*, 61(1), 1-36.

Robson, C. (2002). *Real world research: a resource for social scientists and practitioner researchers* (2nd ed.). Oxford: Blackwell.

Rogerson-Revell, P. (2007). Using English for international business: A European case study. *English for Specific Purposes*, 26(1), 103-120.

Rollinson, P. (2005). Using peer feedback in the ESL writing class. *ELT Journal*, 59(1), 23-30.

Roschelle, J. & Teasley, S. D. (1995). The construction of shared knowledge in collaborative problem solving. In C.E. O’Malley(Ed.), *Computer Supported Collaborative Learning* (pp. 69-97). Heidelberg: Springer-Verlag, Heidelberg.

Rose, M. (2004). Comparing productive online dialogue in two group styles: Cooperative and collaborative. *American Journal of Distance Education*,18, 73-88.

Rosell-Aguilar, F. (2007). Top of the pods - In search of a podcasting ‘podagogy’ for language learning. *Computer Assisted Language Learning*, 20(5), 471-492.

Roskams, T. (1999). Chinese EFL students’ attitudes to peer feedback and peer assessment in an extended pairwork setting. *RELC Journal*, 30(1), 79-123.

Roulston, K. (2001). Data analysis and ‘theorizing as ideology’. *Qualitative Research*, 1(3), 279-302.

Rovai, A. P. (2004). A constructivist approach to online college learning. *Internet and Higher Education*, 7, 79-93.

Rubin, H. J. & Rubin, I. S. (1995). *Qualitative interviewing; The art of hearing data*. California: Sage Publications, Inc.

Rüschoff, B. & Ritter, M. (2001). Technology-enhanced language learning: Construction of knowledge and template-based learning in the foreign language classroom. *Computer Assisted Language Learning*, 14(3), 219-232.

Russell, D. R. (1993). Vygotsky, Dewey, and externalism: Beyond the student/discipline dichotomy. *Journal of Advanced Composition*, 13, 173-197.

Ruys, I., Van Keer, H., & Aelterman, A. (2010). Collaborative learning in pre‐service teacher education: an exploratory study on related conceptions, self‐efficacy and implementation. *Educational Studies*, 36(5), 537-553.

Ryan, R. M. & Powelson, C. L. (1991). Autonomy and relatedness as fundamental to motivation in education. *Journal of Experimental Education*, 60, 49-66.

Ryen, A. (2010). Ethics and qualitative research. In D. Silverman (Ed.), *Doing qualitative research: a practical handbook* (pp. 416-438). Thousand Oaks, CA: SAGE.

Sachs, G. T., Candlin, C. N., Rose, K. R., & Shum, S. (2003). Developing cooperative learning in the EFL/ESL secondary classroom. *RELC*, 34(3), 338-369.

Sagarra, N. & Zapata, G. C. (2008). Blending classroom instruction with online homework: A study of student perceptions of computer-assisted L2 learning. *ReCALL*, 20(2), 208-224.

Salmon, G. (2004). *E-moderating: The key to teaching and learning online.* London: Taylor & Francis.

Samaras, A. & Gismond, S. (1998). Scaffolds in the field: Vygotskian interpretation in a teacher education program. *Teaching and Teacher Education*, 14, 715-733.

Sanders, R. (2006). A comparison of chat room productivity: In-class versus out-of-class. *CALICO Journal*, 24(1), 59-76.

Savery, J. R. (2006). Overview of problem-based learning: Definitions and distinctions. *Interdisciplinary Journal of Problem-Based Learning*, 1(1), 11-20. Retrieved October 7, 2012 from: <http://docs.lib.purdue.edu/ijpbl/vol1/iss1/3/>

Sawkill, S., Sparkes, E., & Brown, K. (2013). A thematic analysis of causes attributed to weight gain: A female slimmer’s perspective. *Journal of Human Nutrition and Dietetics*, 26, 78-84.

Schacter, J. & Fagnano, C. (1999). Does computer technology improve student learning and achievement? How, when, and under what conditions? *Journal of Educational Computing Research*,20(4), 329-343.

Schank, R. C. (2006). Epilogue: The fundamental issue in the learning sciences. In R.K. Sawyer (Ed.), *The Cambridge handbook of the learning sciences* (pp. 587-592). Cambridge: Cambridge University Press.

Schinke, R. J., Bonhomme, J., McGannon, K. R., & Cummings, J. (2012). The internal adaptation processes of professional boxers during the Showtime Super Six Boxing Classic: A qualitative thematic analysis. *Psychology of Sport and Exercise*, 13, 830-839.

Schofield, J. & Davidson, A. (2002). *Bringing the Internet to school: Lessons from an urban district*. San Francisco: Jossey-Bass.

Schunk, D. H. & Zimmerman, B. J. (Eds.) (1994). *Self-regulation of learning and performance: Issues and educational applications.* Hillsdale, NJ: Erlbaum.

Scott, P. (1987). *A constructivist view of learning and teaching science*. Children’s Learning in Science Project, Centre for Studies in Science and Mathematics Education. UK: University of Leeds.

Seidman, I. (2006). *Interviewing as qualitative research: A guide for researchers in education and the social sciences* (2nd ed.). New York: Teachers College Press.

Sharan, Y. (2010). Cooperative learning for academic and social gains: Valued pedagogy, problematic practice. *European Journal of Education*, 45(2), 300-313.

Sharpe, T. (2006). ‘Unpacking’ scaffolding: Identifying discourse and multimodal strategies that support learning. *Language and Education*, 20(3), 211-231.

Shaw, I. (2008). Ethics and the practice of qualitative research. *Qualitative Social Work*, 7(4), 400-414.

Shawer, S. F. (2010). Classroom-level curriculum development: EFL teachers as curriculum-developers, curriculum-makers and curriculum-transmitters. *Teaching and Teacher Education*, 26, 173-184.

Sheldon, K. M. & Bettencourt, B. A. (2002). Psychological needs and subjective well-being in social groups. *British Journal of Social Psychology*, 41, 25-38.

Sikes, P. (2006). On dodgy ground? Problematics and ethics in educational research. *International Journal of Research & Method in Education*, 29(1), 105-117.

Silverman, D. (1993). *Interpreting qualitative data*. London: Sage.

Silverman, D. (2005). *Doing qualitative research* (2nd ed.). London: Sage.

Sinclair, J. (1991). *Corpus, concordance, collocation*. Oxford: Oxford University Press.

Skehan, P. (1996). Second language acquisition research and task-based instruction. In J. Willis & D. Willis (Eds.), *Challenge and change in language teaching* (pp. 17-30). Oxford: Heinemann English Language Teaching.

Skehan, P. (2003). Focus on form, tasks, and technology. *Computer Assisted Language Learning*, 16(5), 391-411.

Slavin, R. E. (1988). Cooperative learning and student achievement. *Educational Leadership*, 46, 31-33.

Slavin, R. E. (1996). Research on cooperative learning and achievement: What we know, what we need to know. *Contemporary Educational Psychology*, 21(1), 43-69.

Smith, B. L. & MacGregor, J. T. (1992).What is collaborative learning?In A.S. Goodsell, M.R. Maher, & V. Tinto (Eds.), *Collaborative learning: A sourcebook for Higher Education*. National Center on Postsecondary Teaching, Learning, & Assessment, Syracuse University.

Smith, K. A. (1996). Cooperative learning: making ‘groupwork’ work. *New Directions for Teaching and Learning*, 67, 71-82.

Smyth, M. & Williamson, W. (Eds.) (2004). *Researchers and their ‘subjects’: Ethics, power, knowledge and consent.* Bristol: Policy Press.

So, H-J. & Brush, T. A. (2008). Student perceptions of collaborative learning, social presence and satisfaction in a blended learning environment: Relationships and critical factors. *Computers & Education*, 51, 318-336.

Solimeno, A., Mebane, M. E., Tomai, M., & Francescato, D. (2008). The influence of students and teachers characteristics on the efficacy of face-to-face and computer supported collaborative learning. *Computers & Education*, 51, 109-128.

Son, J.-B. (2002). Online discussion in a CALL course for distance language teachers. *CALICO Journal*,20(1), 127-144.

Song, B. (2006). Content-based ESL instruction: Long-term effects and outcomes. *English for Specific Purposes*, 25, 420-437.

Spencer, L., Ritchie, J., Lewis, J., & Dillon, L. (2003). *Quality in qualitative evaluation: A framework for assessing research evidence*. The Government Chief Social Researcher’s Office: National Centre for Social Research. Retrieved January 10, 2013 from: <http://www.civilservice.gov.uk/wp-content/uploads/2011/09/Quality-in-qualitative-evaulation_tcm6-38739.pdf>

Stainback, S. & Stainback, W. (1988). *Understanding and conducting qualitative research*. Dubuque, Iowa : Kendall/Hunt Pub.

Stake, R. E. (1994). Case studies. In N.K. Denzin and Y.S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 236-247)*.* London: Sage Publications.

Stake, R. E. (1995). *The art of case study research.* Thousand Oaks, CA: Sage.

Stake, R. E. (1998). Grounded theory methodology: An overview. In N.K. Denzin & Y.S. Lincoln (Eds.), *Strategies of qualitative inquiry* (1st ed.) (pp. 86-109). Thousand Oaks, CA: SAGE.

Stapleton, E. & Mills, R. (2008). Role of open-ended questionnaires in patients with balance symptoms. *The Journal of Laryngology & Otology*, 122, 139-144.

Steffe, L. P. & Thompson, P. W. (Eds.) (2000). *Radical constructivism in action: Building on the pioneering work of Ernst von Glasersfeld*. New York: Routledge Falmer.

Steffens, K. (2008). Technology enhanced learning environments for self-regulated learning: A framework for research. *Technology, Pedagogy and Education*, 17(3), 221-232.

Stepp-Greany, J. (2002). Student perceptions on language learning in a technological environment: Implications for the new millennium. *Language Learning & Technology*, 6(1), 165-180.

Stevens, D. D., Emil, S., & Yamashita, M. (2010). Mentoring through reflective journal writing: A qualitative study by a mentor/professor and two international graduate students. *Reflective Practice*, 11(3), 347-367.

Stevens, K. (2007). The development of virtual educational environments to support interschool collaboration. *The Turkish Online Journal of Distance Education, 8*(2), 29-37. Retrieved December 29, 2012 from: <http://tojde.anadolu.edu.tr/tojde26/pdf/article_2.pdf>

Stevenson, M. P. & Liu, M. (2010). Learning a language with Web 2.0: Exploring the use of social networking features of foreign language learning websites. *CALICO Journal*, 27(2), 233-259.

Storch, N. (2005). Collaborative writing: Product, process, and students’ reflections. *Journal of Second Language Writing*, 14(3), 153-173.

Stracke, E. (2007). A road to understanding: A qualitative study into why learners drop out of a blended language learning (BLL) environment. *ReCALL*, 19, 57-78.

Strauss, A. & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, CA: Sage.

Strevens, P. (1971). Alternatives to daffodils. In *Science and Technology in a Second Language* (pp. 7-11). C.I.L.T. Report 7. London: Centre for Information on Language Teaching and Research.

Strevens, P. (1977). Special-purpose language learning: A perspective. *Language Teaching & Linguistics: Abstracts*,10(3), 145-163.

Strijbos, J-W. & Fischer, F. (2007). Methodological challenges for collaborative learning research. *Learning and Instruction*, 17, 389-393.

Strong, J. T., & Anderson, R. E. (1990). Free-riding in group projects: Control mechanisms and preliminary data. *Journal of Marketing Education*, 12, 61-67.

Sturman, A. (1994). Case study methods. In J.P. Keeves (Ed.), *Educational research, methodology, and measurement: An international handbook* (2nd ed.).(pp. 61-6)*.* Oxford: Pergamon.

Sturman, A. (1999). Case study methods. In J.P. Keeves & G. Lakomski (Eds.), *Issues in educational research* (pp. 103-112). Amsterdam: Pergamon.

Sturman, L. & Taggart, G. (2008). The professional voice: comparing questionnaire and telephone methods in a national survey of teachers’ perceptions. *British Educational Research Journal*, 34(1), 117-134.

Stutchbury, K. & Fox, A. (2009). Ethics in educational research: Introducing a methodological tool for effective ethical analysis. *Cambridge Journal of Education*, 39(4), 489-504.

Sudman, S. & Bradburn, N. M. (1982). *Asking questions: A practical guide to questionnaire design.* San Francisco, CA: Jossey-Bass Inc.

Sullivan, A. (2006). Students as rational decision‐makers: The question of beliefs and attitudes. *London Review of Education*, 4(3), 271-290.

Summers, J. J., Beretvas, S. N., Svinicki, M. D., & Gorin, J. S. (2005). Evaluating collaborative learning and community. *Journal of Experimental Education*, 73, 165-188.

Summers, J. J. & Svinicki, M. D. (2007). Investigating classroom community in higher education. *Learning and Individual Differences*, 17, 55-67.

Surra, C. A. & Ridley, C. A. (1991). Multiple perspectives on interaction: Participants, peers, and observers. In B.M. Montgomery & S. Duck (Eds.), *Studying interpersonal interaction* (pp. 25-55). New York: Guilford Press.

Swain, M. (2000). The output hypothesis and beyond: Mediating acquisition through collaborative dialogue. In J. Lantolf (Ed.), *Language learning and sociocultural theory* (pp. 97-114)*.* Oxford: Oxford University Press.

Swain, M. (2001). Integrating language and content teaching through collaborative tasks. *The Canadian Modern Language Review*, 58, 44-63.

Swain, M. & Lapkin, S. (1989). Canadian immersion and adult second language teaching: What is the connection? *Modern Language Journal*, 73, 150-159.

Swales, J. M. (1985). English language papers and author’s first language: Preliminary explorations. *Scientometrics*, 8(1), 91-101.

Swales, J. M. (1988). *Episodes in ESP*. Hemel Hempstead: Prentice Hall International.

Swales, J. M. (2000). Languages for specific purposes. *Annual Review of Applied Linguistics*, 20, 59-76.

Szewkis, E., Abalos, J., & Tagle, A. (2011). Collaboration within large groups in the classroom. *Computer Supported Collaborative Learning*, 6, 561-575.

Taft, R. (1999). Ethnographic research methods. In J.P. Keeves & G. Lakomski (Eds.), *Issues in educational research* (pp. 113-120). Amsterdam: Pergamon.

Tagoe, M. (2012). Students’ perceptions on incorporating e-learning into teaching and learning at the University of Ghana. *International Journal of Education and Development using Information and Communication Technology*, 8(1), 91-103.

ten Have, P. (1998). *Doing conversation analysis: A practical guide*. London: Sage.

Tenenbaum, G., Naidu, S., Jegede, O., & Austin, J. (2001). Constructivist pedagogy in conventional on-campus and distance learning practice: an exploratory investigation. *Learning and Instruction*, 11, 87-111.

Tepper Jacob, R. (2011). An experiment to test the feasibility and quality of a web-based questionnaire of teachers. *Evaluation Review*, 35(1), 40-70.

Thomas, G. (2011). The case: Generalisation, theory and phronesis in case study. *Oxford Review of Education*, 37(1), 21-35.

Thomas, R. M. (2000). *Comparing theories of child development* (5th ed.). Belmont, CA: Wadsworth/Thomson Learning.

Tobias, S. & Duffy, T. M. (Eds.) (2009). *Constructivist instruction: Success or failure*? New York: Routledge.

Tobin, K. (2007). Key contributors: Ernst von Glasersfeld’s radical constructivism. *Cultural Studies of Science Education*, 2, 529-538.

Toepoel, V., Das, M., & Van Soest, A. (2009). Design of web questionnaires: The effects of the number of items per screen. *Field Methods*, 21, 200-213.

Torlakovic, E. & Deugo, D. (2004). Application of a CALL system in the acquisition of adverbs in English. *Computer Assisted Language Learning*, 17, 203-235.

Towndrow, P. (2004). Reflections of an on-line tutor. *ELT Journal*, 58(2), 174-182.

Trentin, G. (2008). Using a wiki to evaluate individual contribution to a collaborative learning project. *Journal of Computer Assisted Learning*, 25, 43-55.

Trimble, L. (1985). *English for science and technology: A discourse approach.* Cambridge: Cambridge University Press.

Trinder, R. (2013). Business students’ beliefs about language learning in a university context. *English for Specific Purposes*, 32, 1-11.

Trowler, P. (2011). *Researching your own institution: Higher Education*, British Educational Research Association online resource. Retrieved October 8, 2011 from: <http://www.bera.ac.uk/files/2011/06/researching_your_own_institution_higher_education.pdf>.

Tsuei, M. (2011). Development of a peer-assisted learning strategy in computer-supported collaborative learning environments for elementary school students. *British Journal of Educational Technology*, 42(2), 214-232.

Tynjala, P. (1999). Towards expert knowledge? A comparison between a constructivist and a traditional learning environment in the university. *International Journal of Educational Research*, 31, 357-442.

University of Sheffield (2011). *Undertaking good research (ethics, integrity, and governance)*. Retrieved May 21, 2011 from: <http://www.sheffield.ac.uk/ris/other/gov-ethics>.

University of Sheffield (2012). *Research ethics and integrity*. Retrieved July 24, 2013 from: <http://www.shef.ac.uk/polopoly_fs/1.92040!/file/EthicsLeaflet.pdf>.

Urhahne, D., Schanze, S., Bell, T., Mansfield, A., & Holmes, J. (2010). Role of the teacher in computer‐supported collaborative inquiry learning. *International Journal of Science Education*, 32(2), 221-243.

Ushida, E. (2005). The role of students’ attitudes and motivation in second language learning in online language courses. *CALICO Journal*, 23, 49-78.

Valsiner, J. & van der Veer, R. (1993). The encoding of distance: The Zone of Proximal Development and its interpretations. In R.R. Cocking & K.A. Renninger (Eds.), *The development and meaning of psychological distance* (pp. 35-62). Hillsdale, NJ: Lawrence Erlbaum.

van Compernolle, R. A. & Williams, L. (2012). Promoting sociolinguistic competence in the classroom zone of proximal development. *Language Teaching Research*, 16(1), 39-60.

Vandergriff, I. (2006). Negotiating common ground in computer-mediated versus face-to-face discussions. *Language Learning & Technology*, 10(1), 110-138.

van der Veer, R. & Valsiner, J. (1993). *Understanding Vygotsky: A quest for synthesis.* Oxford and Cambridge MA: Blackwell.

van Heugten, K. (2004). Managing insider research: Learning from experience. *Qualitative Social Work*, 3, 203-219.

van Lier, L. (1996). *Interaction in the language curriculum: Awareness, autonomy and authenticity*. London: Longman.

van Weert, T. J. & Pilot, A. (2003). Task-based team learning with ICT, design and development of new learning. *Education and Information Technologies*, 8(2), 195-214.

Vaughn, S., Schumm, J. S., & Sinagub, J. (1996). *Focus group interview in education and Psychology*. California: Sage Publications, Inc.

Vavrus, F. (2009). The cultural politics of constructivist pedagogies: Teacher education reform in the United Republic of Tanzania. *International Journal of Educational Development*, 29(3), 303-311.

Veenman, S., van Benthum, N., Bootsma, D., van Dieren, J., & van der Kemp, N. (2002). Cooperative learning and teacher education. *Teaching and Teacher Education*, 18, 87-103.

Vicente, P. & Reis, E. (2010). Using questionnaire design to fight nonresponse bias in web surveys. *Social Science Computer Review*, 28(2), 251-267.

Von Glasersfeld, E. (2001). Radical constructivism and teaching. *Prospects*, 31(2), 161-173.

[von Neumann, J.](http://en.wikipedia.org/wiki/John_von_Neumann) & [Morgenstern, O.](http://en.wikipedia.org/wiki/Oskar_Morgenstern) (1944). [*Theory of games and economic behavior*](http://en.wikipedia.org/wiki/Theory_of_games_and_economic_behavior). Princeton: [Princeton University Press](http://en.wikipedia.org/wiki/Princeton_University_Press).

Vygotsky, L. S. (1978). *Mind in society. The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Wadsworth, B. J. (2003). *Piaget’s theory of cognitive and affective development: Foundations of constructivism* (5th ed.). Boston, MA: Allyn and Bacon.

Waldeck, J. H. & Dougherty, K. (2012). Collaborative communication technologies and learning in college courses: Which are used, for what purposes, and to what ends? *Learning, Media and Technology*, 37(4), 355-378.

Walqui, A. (2006). Scaffolding Instruction for English language learners: A conceptual framework. *International Journal of Bilingual Education and Bilingualism*, 9(2), 159-180.

Wang, S. & Vásquez, C. (2012). Web 2.0 and second language learning: What does the research tell us? *CALICO Journal*, 29(3), 412-430.

Wang, Y. (2008). Collaborate to learn: A case study of technology-enhanced, collaborative language learning. In S-I. Ao, M.A. Amouzegar, & S.-S. Chen (Eds.), *Current Themes in Engineering Technology* (pp. 189-198). American Institute of Physics.

Warschauer, M. (1996a). Comparing face-to-face and electronic communication in the second language classroom. *CALICO Journal*, 13, 7-26.

Warschauer, M. (1996b). Computer assisted language learning: An introduction. In S. Fotos (Ed.), *Multimedia language teaching* (pp. 3-20). Tokyo: Logos International.

Wass, R., Harland, T., & Mercer, A. (2011). Scaffolding critical thinking in the zone of proximal development. *Higher Education Research & Development*, 30(3), 317-328.

Watson, J. (2001). Social constructivism in the classroom. *Support for Learning*, 16(3), 140-147.

Watt, D. (2007). On becoming a qualitative researcher: The value of reflexivity. *The Qualitative Report*, 12(1), 82-101. Retrieved August 15, 2011 from: <http://www.nova.edu/ssss/QR/QR12-1/watt.pdf>.

Webb, M. E. & Cox, M. J. (2004). A review of Pedagogy related to ICT. *Technology, Pedagogy and Education*, 13(3), 235-286.

Webb, N. (1997). Assessing students in small collaborative groups. *Theory into Practice*,36(4), 205-213.

Webb, S. (2006). Can ICT reduce social exclusion? The case of an adults’ English language learning programme. *British Educational Research Journal*, 32(3), 481-507.

Wegerif, R. (1998). The social dimension of asynchronous learning networks. *Journal of Asynchronous Learning Networks*, 2, 34-49.

Weinberger, A., Stegmann, K., & Fischer, F. (2007). Knowledge convergence in collaborative learning: Concepts and assessment. *Learning and Instruction*, 17, 416-426.

Wells, G. (1995). Re-evaluating the IRF sequence: A proposal for the articulation of theories of activity and discourse for the analysis of teaching and learning in classrooms. *Linguistics in Education*,5, 1-37.

Wenden, A. (1991). *Learner strategies for learner autonomy*. London: Prentice Hall International.

Wengraf, T. (2001). *Qualitative research interviewing: Biographic narrative and semi-structured methods*. London: Sage.

Wertsch, J. V.(1985). *Vygotsky and the social formation of mind.* Cambridge, MA: Harvard University Press.

Wertsch, J. V. (1991). *Voices of the mind: A sociocultural approach to mediated action*. Cambridge, MA: Harvard University Press.

Westwood, P. S. (2006). *Teaching and learning difficulties: Cross-curricular perspectives*. Camberwell, VIC: Australian Council for Educational Research.

Wheeler, S. (2001). Information and communication technologies and the changing role of the teacher. *Journal of Educational Media*, 26(1), 7-17.

Widdowson, H. G. (1981). English for specific purposes: Criteria for course design. In L. Selinker, E. Tarone, & V. Hanzeli (Eds.), *English for academic and technical purposes* (pp. 1-11). Rowley, MA: Newbury House.

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

Widdowson, H. G. (1998). Communication and community: The pragmatics of ESP. *English for Specific Purposes*, 17(1), 3-14.

Wiebe, G. & Kabata, K. (2010). Students’ and instructors’ attitudes toward the use of CALL in foreign language teaching and learning. *Computer Assisted Language Learning*, 23(3), 221-234.

Wiles, R., Charles, V., Crow, G., & Heath, S. (2006). Researching researchers: Lessons for research ethics. *Qualitative Research*, 6(3), 283-299.

Williams, D. L., Beard, J. D., & Rymer, J. (1991). Team projects: Achieving their full potential. *Journal of Marketing Education*, 13, 45-53.

Williams, E. (1992). Student attitudes towards approaches to learning and assessment. *Assessment and Evaluation in Higher Education*, 17(1), 45-58.

Williams, M. & Burden, R. (1997). *Psychology for language teachers. A social constructivist approach*. Cambridge: Cambridge University Press.

Willis, J. (1996). *A framework for task-based learning*. London: Longman.

Wilson, K. L., Lizzio, A., & Ramsden, P. (1997). The development, validation and application of the Course Experience Questionnaire. *Studies in Higher Education*, 22(1), 33-53.

Wilson, N. & McLean, S. (1994). *Questionnaire design: A practical introduction*. Newtown Abbey, Co. Antrim: University of Ulster Press.

Wilson, S. & Berne, J. (1999). Teacher learning and the acquisition of professional knowledge: An examination of research on contemporary professional development. *Review of Research in Education*, 24, 173-209.

Wilson, S., Hine, A., Dobbins, R., Bransgrove, E., & Elterman, J. (1995). The use of reflective journals in undergraduate teacher‐education courses: A multi‐campus perspective. *South Pacific Journal of Teacher Education*, 23(2), 165-176.

Windschitl, M. (2002). Framing constructivism in practice as the negotiation of dilemmas: An analysis of the conceptual, pedagogical, cultural, and political challenges facing teachers. *Review of Educational Research*, 72(2), 131-175.

Wood, A. & Head, M. (2004). Just what the doctor ordered: The application of problem-based learning to EAP. *English for Specific Purposes*, 23, 3-17.

Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem-solving. *Journal of Child Psychology and Child Psychiatry*,17, 89-100.

Wozney, L., Venkatesh, V., & Abrami, P. C. (2006). Implementing computer technologies: Teachers’ perceptions and practices. *Journal of Technology and Teacher Education*, 14(1), 173-207.

Wu, H. D. & Badger, R. G. (2009). In a strange and unchartered land: ESP teachers’ strategies for dealing with unpredicted problems in subject knowledge during class. *English for Specific Purposes*, 28, 19-32.

Xiao, Y. & Lucking, R. (2008). The impact of two types of peer assessment on students’ performance and satisfaction within a Wiki environment. *Internet and Higher Education*, 11, 186-193.

Yeager-Woodhouse, D. & Sivell, J. (2006). Prepackaged tour versus personal journey: The meaning of informed consent in the context of the teacher-study group. *Journal of Academic Ethics*, 4, 189-203.

Yin, R. K. (1993). *Applications of case study research*. London: Sage.

Yin, R. K. (1994). *Case study research: Design and methods* (2nd ed.). London: Sage.

Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage.

Yogman, J. & Kaylani, C. T. (1996). ESP program design for mixed level students. *English for Specific Purposes*, 15(4), 311-324.

Yule, G., Powers, M., & MacDonald, D. (1992). The variable effects of some task-based learning procedures on L2 communicative effectiveness. *Language Learning*, 42(2), 249-277.

Zagal, J. P., Rick, J., & Hsi, I. (2006). Collaborative games: Lessons learned from board games. *Simulation and Gaming*, 37(1), 24-40.

Zhang, J. (2011). Collaborative instructors and mixed learners: An English for Specific Purposes teaching model in China. *Canadian Social Science*, 7(5), 144-150.

Zhang, S. (1995). Reexamining the affective advantage of peer feedback in the ESL writing class. *Journal of Second Language Writing*, 4(3), 209-222.

Zimmerman, B. J. & Schunk, D. H. (Eds.) (2001). *Self-regulated learning and academic achievement: Theoretical perspectives*. Hillsdale, NJ: Erlbaum.

Appendices

Appendix 1a – Ethics review application 209

Appendix 1b – Ethics infosheet 219

Appendix 1c – Ethical review application approval 224

Appendix 2 – Permission by Dean to conduct interviews 225

Appendix 3a – Call for participation for pilot student interviews 226

Appendix 3b – Call for participation for pilot teacher interviews/questionnaires 227

Appendix 4a – Revisions on student interview guide following piloting 228

Appendix 4b – Revisions on teacher questionnaire following piloting 230

Appendix 5a – Call for participation for students 235

Appendix 5b – Call for participation for teachers 236

Appendix 6a – Informed consent (students) 237

Appendix 6b – Informed consent (teachers) 238

Appendix 7a – Conversation guide (student interviews) 239

Appendix 7b – Conversation guide (reflective journals) 246

Appendix 7c – Qualitative questionnaire 248

Appendix 7d – Conversation guide (teacher interviews) 253

Appendix 8a – Sample transcription of student interviews 254

Appendix 8b – Sample transcription of teacher interviews 258

Appendix 8c – Sample completed questionnaire 261

Appendix 8d – Sample reflective journal – student entries 265

Appendix 8e – Sample reflective journal – researcher entries 269

Appendix 9a – Initial coding and thematization for student sample 272

Appendix 9b – Initial coding and thematization for teacher sample 279

Appendix 10 – Tables with tentative themes/subthemes for the two samples 285

Appendix 11 – Theme definition and labeling tables 287

**Appendix 1a**

**University of Sheffield School of Education**

**RESEARCH ETHICS APPLICATION FORM**

**Complete this form if** you are planning to carry out research in the School of Education

which will not involve the NHS but which will involve people participating in research either directly (e.g. interviews, questionnaires) and/or indirectly (e.g. people permitting access to data).

**Documents to enclose with this form, where appropriate:**

This form should be accompanied, where appropriate, by an Information Sheet/Covering Letter/Written Script which informs the prospective participants about the a proposed research, and/or by a Consent Form.

Guidance on how to complete this form is at:

<http://www.shef.ac.uk/content/1/c6/11/43/27/Application%20Guide.pdf>

**Once you have completed this research ethics application form in full, and other**

**documents where appropriate email it to the:**

**Either**

Ethics Administrator if you are a member of staff.

**Or**

Secretary for your programme/course if you are a student.

**NOTE**

 Staff and Post Graduate Research (EdDII/PhD) requires 3 reviewers

 Undergraduate and Taught Post Graduate requires 1 reviewer – **low risk**

 Undergraduate and Taught Post Graduate requires 2 reviewers – **high risk**

I am a member of staff and consider this research to be (according to University definitions): **low risk** **high risk** 

I am a student and consider this research to be (according to University definitions): **low risk √ high risk** 

\*Note: For the purposes of Ethical Review the University Research Ethics Committee

considers all research with ‘vulnerable people’ to be ‘high risk’ (eg children under 18 years

of age).

**University of Sheffield School of Education**

**RESEARCH ETHICS APPLICATION FORM**

**COVER SHEET**

|  |  |
| --- | --- |
| **inform prospective participants about the project**  **-W** | |
| **Is relevant** | **Is not relevant** |
| **YES**  (if relevant then this should be enclosed) |  |

|  |  |
| --- | --- |
|  | |
| **Is relevant** | **Is not relevant** |
| **YES**  (if relevant then this should be enclosed) |  |

|  |  |
| --- | --- |
| **(ie does it cover more than one project that is sufficiently similar)** | |
| **Yes** | **No** |
|  | **NO** |

I am a member of staff

I am a PhD/EdD student

I am a Master’s student

I am an Undergraduate student

I am a PGCE student

The submission of this ethics application has been agreed

by my supervisor

Supervisor’s signature/name and date of agreement

9th January 2012

.........................................................................................................................................................................

I have enclosed a signed copy of Part B

**University of Sheffield School of Education**

**RESEARCH ETHICS APPLICATION FORM**

**PART A**

**A1. Title of Research Project**

Blended collaborative learning in ESP courses: instructors’ and students’

perceptions and practices

**A2. Applicant (normally the Principal Investigator, in the case of staff-led research projects, or the student in the case of supervised research projects):**

|  |  |  |
| --- | --- | --- |
| Title: Mr | First Name/Initials: Constantinos | Last Name: Tsouris |
| Post: -- | Department: Education |  |

Email: c[.tsouris@shef.ac.uk](mailto:tsouris@shef.ac.uk) Telephone: +35799494928

**A.2.1. Is this a student project?**

Yes.

Supervisor’s contact details:

Dr Terry Lamb, School of Education

The Education Building

388 Glossop Road

Sheffield

S10 2JA

Tel: [(+)44 (0)114 222 8118](tel:%28%2B%2944%20%280%29114%20222%208118)

Fax: [(+)44 (0)114 279 8631](tel:%28%2B%2944%20%280%29114%20279%208631) [t.lamb@shef.ac.uk](mailto:t.lamb@shef.ac.uk)

**A2.2. Other key investigators/co-applicants (within/outside University), where**

**applicable:**

No.

Please list all (add more rows if necessary)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Title | Full Name | Post | Responsibility  in project | Organisation | Department |
| n/a | n/a | n/a | n/a | n/a | n/a |

**A3. Proposed Project Duration:**

Start date: October 2011 End date: September 2013

**A4. :**

|  |  |
| --- | --- |
|  | Involves children or young people aged under 18 years |
|  | Involves only identifiable personal data with no direct contact with  participants |
| **X** | Involves only anonymised or aggregated data |
|  | Involves prisoners or others in custodial care (eg young offenders) |
|  | Involves adults with mental incapacity or mental illness |
| **X** | Has the primary aim of being educational (eg student research, a project  necessary for a postgraduate degree or diploma, MA, PhD or EdD) |

**University of Sheffield School of Education**

**RESEARCH ETHICS APPLICATION FORM**

**A5. Briefly summarise the** The aim of this study is to gather information on instructors’ and students’

perceptions and practices with regard to the integration of Web 2.0 technologies

(that is, latest generation computer technologies such as Blogs and

Wikis) in collaborative-oriented learning (i.e. students working in groups and

engaging in joint intellectual effort) in University English for Specific Purposes

(ESP) courses at the University of Cyprus.

The study will collect views, opinions and practices via individual and group

interviews with staff and students, with the purpose of informing current/future

practice and curriculum planning and development, with regards to ESP courses.

Various studies have exemplified that students’ and instructors’ perceptions can

have a serious bearing on policy and curriculum development. Current literature

reveals a rising trend to look at student perceptions in relation to the use of

blended learning approaches and the use of computers, the internet and

technology in their education in general (e.g. Adam & Nel, 2009; Bliuc, Ellis,

Goodyear, et al., 2011; Cavanagh, 2011; Chandra & Fisher, 2009; Hartshorne

& Ajjan, 2009; Miyazoe & Anderson, 2010; Neumeier, 2005; Sagarra & Zapata,

2008; Smyth, Houghton, Casey, et al., 2011; S& Brush, 2008; Wiebe & Kabata,

2010; Wu, Tennyson, & Hsia, 2010). Likewise, instructors’ perspectives are

important, since they are the ones who put teaching methodologies into

practice. Hence, their perceptions can shape the way a course is taught

and the imprint it leaves on students’ own views regarding instructional

methodologies. As with student perceptions, there is extensive

research on instructors’ views on the use of technology in their

teaching (e.g. Albirini, 2006; Bai & Ertmer, 2008; Cuckle & Clarke, 2003;

Levin & Watmany, 2006a; Lowther & Sullivan, 1994); however, with regards to

the views of language instructors in particular, the literature is limited (e.g.

Kim, 2008; Zapata, 2004). Therefore, there is a need for further research,

even more so when it comes to language teaching in higher education. This is

a need the suggested research aims to address.

**A6. What is the potential for physical and/or psychological harm / distress to participants?**

There is no potential for physical harm to participants.

Because interviews have the potential of raising difficult issues, inconvenience for

some participants may result. Participants will be informed that they may withhold the right to refuse answering any questions they deem inappropriate.

**A7. Does your research raise any issues of personal safety for you or other**

**researchers involved in the project and, if yes, explain how these issues will be**

**managed?** (Especially if taking place outside working hours or off University premises.)

There are no issues of personal safety. All interviews will be conducted at University premises during working hours. Participants will be allowed to let others know that they are being interviewed, when, where, and for how long so that people know where they are during interview time.

**A8. How will the potential participants in the project be (i) identified, (ii)**

**approached and (iii) recruited?**

Potential participants will be identified by their status as (a) University of Cyprus

full-time language instructors teaching ESP courses and (b) as full-time

students, enrolled in compulsory ESP courses.

I will approach potential participants through my teaching capacity at the University

of Cyprus. Concerning instructors, they will be approached via my capacity as their colleague. Concerning students, these will be approached via my capacity as their

ESP instructor.

Potential participants, both instructors and students, will be recruited exclusively

on a voluntary basis (purposive sampling). It will be made clear to all possible participants that they have the right not to take part in the study and that such a decision will not affect their status or personal relationships with the researcher in a negative way. Likewise, it will be made clear that any decision to take part in

the study will not count favourably towards them with regards to their capacity as

work colleagues or students of the researcher.

**A9. Will informed consent be obtained from the participants?**

**Yes No**

**A.9.1 How do you plan to obtain informed consent? (i.e. the proposed process?):**

An information sheet covering all aspects of the proposed research will be handed to proposed participants at least a month prior to the proposed interview date(s). Participants that opt to take part in this study will sign a supplementary consent form given to them and will be able to do so up to two days before interviews commence. Upon signing the consent form, they will be given a copy of it for their own record.

**A.10 How will you ensure appropriate protection and well-being of participants?**

Sometimes in interviewing, the content and line of questioning may be sensitive,

as it can raise confidential, personal issues and intrude, or be perceived to intrude, upon a participant’s comfort and privacy. Every effort will be made to ensure no such questions are asked. If at any point of the interviews a participant shows signs of discomfort because of the question(s) asked, the line of questioning will not be pursued further. Participants will be informed that they will be able to call the interview off at any stage before or during it.

Participants will be informed that they will be able to contact either the Principal Investigator or the Research Supervisor within a reasonable time period if, following participation, they experience stress, harm or have related concerns.

**A.11 What measures will be put in place to ensure confidentiality of personal data, where appropriate?**

The name of the institution involved in this research (University of Cyprus Language Centre) will be used pending permission from the institution’s Director. In the case such permission is not granted, then the institution will be

anonymized and no reference linking it to the study will be made.

Participant anonymity will be guaranteed. No names of participants will be asked/taken/noted down/recorded. Participants will be coded prior to data collection (e.g. S-001, T-001 a.s.o.) and the replies they give to the interview questions will only be linked to those codes and not to their names. Participants will be informed of this practice via the information sheet handed to them before they give their consent to participate in the study.

I will personally have control of the data generated by the study. Data will be stored and analysed on my personal computer, to which no one else has access.

Access to the data gathered will only be afforded to my thesis supervisor should

he need to see them.

**A.12 Will financial / in kind payments (other than reasonable expenses and compensation for time) be offered to participants?** (Indicate how much and on what basis this has been decided.)

**Yes No**

Refreshments and light snacks will be provided on site to interview participants before

and after the interview.

**A.13 Will the research involve the production of recorded or photographic media such as audio and/or video recordings or photographs?**

**Yes No**

**A.13.1** This question is only applicable if you are planning to produce recorded or visual

media:

**How will you ensure that there is a clear agreement with participants as to how these recorded media or photographs may be stored, used and (if appropriate) destroyed?**

There will be a clear statement on the information sheet which will be given to participants before they give their consent in taking part in the study. The statement will inform the participants about my intention to audio-record the interviews for purposes of subsequent data transcription and coding. Participants will also be informed that besides being used in my thesis, cumulative data may be presented in conference presentations. The statement will also inform participants exactly how the recordings will be used, where they will be stored, that they will be available for them to access should they ask and that they will not be taken into consideration and/or destroyed at any subsequent point before the research is completed, upon their request. Finally, the statement will afford the participants the option not to allow audio-recording of their interview, in which case the alternative of keeping written notes will be suggested.

**PART B - THE SIGNED DECLARATION**

I confirm my responsibility to deliver the research project in accordance with the

University of Sheffield’s policies and procedures, which include the University’s ‘Financial Regulations’, ‘Good research Practice Standards’ and the ‘Ethics Policy for Research Involving Human Participants, Data and Tissue’ (Ethics Policy) and, where externally funded, with the terms and conditions of the research funder.

**In signing this research ethics application I am confirming that:**

**1. The above-named project will abide by the** <http://www.shef.ac.uk/ris/other/gov-ethics/researchethics/index.html>

2. The above-named project will abide by the University’s ‘Good Research Practice

Standards’: [http://www.shef.ac.uk/ris/other/gov-ethics/researchethics/general-](http://www.shef.ac.uk/ris/other/gov-ethics/researchethics/general-principles/homepage.html) [principles/homepage.html](http://www.shef.ac.uk/ris/other/gov-ethics/researchethics/general-principles/homepage.html)

3. The research ethics application form for the above-named project is accurate to

the best of my knowledge and belief.

4. There is no potential material interest that may, or may appear to, impair the independence and objectivity of researchers conducting this project.

5. Subject to the research being approved, I undertake to adhere to the project protocol without unagreed deviation and to comply with any conditions set out in the letter from the University ethics reviewers notifying me of this.

6. I undertake to inform the ethics reviewers of significant changes to the protocol

(by contacting my supervisor or the Ethics Administrator as appropriate

7. I am aware of my responsibility to be up to date and comply with the requirements of the law and relevant guidelines relating to security and confidentiality of personal data, including the need to register when necessary with the appropriate Data Protection Officer (within the University the Data Protection Officer is based in CICS).

8. I understand that the project, including research records and data, may be subject

to inspection for audit purposes, if required in future.

9. I understand that personal data about me as a researcher in this form will be held by those involved in the ethics review procedure (eg the Ethics Administrator and/or ethics reviewers/supervisors) and that this will be managed according to Data Protection Act principles.

10. If this is an application for a ‘generic’/’en block’ project all the individual projects that fit under the generic project are compatible with this application.

11. I will inform the Chair of Ethics Review Panel if prospective participants make a complaint about the above-named project.

**Signature of student (student application):**

**Signature of staff (staff application): Date: 09 January 2012**

**Email the completed application form to the course/programme secretary**

**For staff projects contact the Ethics Secretary, Colleen Woodward**

**Email:** [**c.woodward@sheffield.ac.uk f**](mailto:c.woodward@sheffield.ac.uk)**or details of how to submit**

**Appendix 1b**

**Guidance on completing an Information Sheet**

An information sheet should help a person to make an informed choice regarding whether or not to participate in a research project. Therefore, an information sheet should provide sufficient information to enable potential recruits to make an informed choice and should clearly state that participants are free to withdraw at any time.

Researchers should take the steps necessary to ensure that all participants in the research (a) understand the process in which they are to be engaged, including why their participation is necessary and (b) understand the purpose of the research and how and to whom its research findings will be reported.

**It is recommended that the content of an information sheet is:**

* relevant to the proposed research.
* accurate and concise.
* clear, simple and understandable from a lay person’s perspective (e.g. avoids jargon).
* presented on the headed paper of the institution carrying out the research.
* appropriate for the cultural and social context in which it is being given.

**It is recommended that the content of an information sheet does not include:**

* any abbreviations, jargon or technical terms.
* bias or coercion or any inappropriate inducements.

**How long should an information sheet be?**

Information sheets should only contain relevant information that a reasonable person would want to know (i.e. in order to decide whether or not to participate in a research project). It is recommended that, where appropriate, an information sheet contains information in the order specified under the headings given overleaf.

The length and design of an information sheet should encourage a prospective participant to read it in full. A participant may take more care when reading a concise information sheet and, thereby, be better informed than if s/he has to read an information sheet that runs into several pages. However, with respect to projects that involve ‘particularly vulnerable’ participants and/or which require access to ‘sensitive’ personal data the information sheet may need to be relatively longer in order to cover more detailed information.

**Note on Human Tissue:**

If your research project involves access to and use of human tissue it is advised that you consult the Medical Research Council’s (MRC) guidance fact-sheet ‘Human tissue and biological sampels for use in research’: [www.mrc.ac.uk/pdf-tissue\_guide\_fin.pdf](http://www.mrc.ac.uk/pdf-tissue_guide_fin.pdf)

**Information Sheet**

1. **Research Project Title:**

Blended collaborative learning in ESP courses: Instructors’ and students’ perceptions and practices.

2. **Invitation paragraph**

*‘You are being invited to take part in a research project. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.’*

3. **What is the project’s purpose?**

The purpose of this study is to gather information on instructors’ and students’ perceptions and practices with regard to the integration of Web 2.0 technologies in University ESP courses in order to inform current and future curriculum planning and policy making relating to the use of technology in ESP courses.

The research is expected to be completed by September 2013.

4. **Why have I been chosen?**

For instructors: If you are an instructor, you have been chosen on the basis of your prior experience in designing and/or teaching ESP courses. In total, up to 8 instructors will be recruited.

For students: If you are a student, you have been chosen because you are taking a compulsory ESP course this semester. In total, around 80 students will be recruited.

5. **Do I have to take part?**

*It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and will be asked to sign a consent form. You can still withdraw at any time without it affecting you in any way. Likewise, possible participation will not grant you with favourable treatment with regards to your capacity as student/staff. You do not have to give a reason should you decide to withdraw.*

6. **What will happen to me if I take part?**

*Your participation is in the form of an individual/group interview*.

*Both methods are in-depth, semi-structured interviews. If you participate in an individual interview, only you and I will be present at the time of the interview. You will be asked a number of questions relating to the topic of this research and you will be free to talk and express your views and beliefs with minimal interruptions. If you participate in a group interview, there will be 3 other students with you at the time of the interview. The interview procedure is the same as above with the addition that you will be able to discuss and even debate things with your peers.*

*You will only be involved for the duration of one interview and there are no travel or other expenses involved.*

*I expect simple and honest responses when providing me with your opinions. You should say what you really want to say and not what others may want to hear you say.*

7. **What do I have to do?**

*The only obligation you will have if you participate is to be interviewed at a time of both our convenience.*

8. **Will I be recorded, and how will the recorded media be used?**

*The audio recordings and written notes from the interview will be used only for analysis and for illustration in conference presentations. No other use will be made of them without your written permission, and no one outside the project will be allowed access to the original recordings.*

*You can choose not to be audio-recorded in which case only written notes will be taken. You can also ask for the recording to stop at any point during the interview.*

9.**What are the possible disadvantages and risks of taking part?**

*There are no physical disadvantages/risks.*

*Due to the nature of the interviewing method, inconvenience may result from the issues some questions may raise. You have the right to refuse to answer any/all of the questions in an interview. You also have the right to stop the interview at any point and withdraw your participation.*

10. **What are the possible benefits of taking part?**

*There are no immediate benefits for those people participating in the project. However, it is hoped that this work will inform current and future ESP curriculum planning and development and will help in a better understanding of the role of technology in language teaching. Moreover, interviews are a two-way street, and you can learn a few things yourself about the nature of technology in education.*

11. **What happens if the research study stops earlier than expected?**

*In the unlikely case the research study stops earlier than expected, and should this happens after you have agreed to participate or after you have participated, you will be given the reasons for this. In such a case, all data that you may have provided me with will be dispensed.*

12. **What if something goes wrong?**

Should any issues arise regarding your treatment as a participant or in the event of something serious during or following your participation (e.g. violation of confidentiality etc.), you can raise a complaint by contacting my research supervisor, Dr Terry Lamb at +44 114 222 8118 or by email at [t.lamb@sheffield.ac.uk](mailto:t.lamb@sheffield.ac.uk)

Should you feel that your complaint has not been handled to your satisfaction, you can contact the University of Sheffield’s ‘Registrar and Secretary’.

13. **Will my taking part in this project be kept confidential?**

*All the information that I collect about you during the course of the research will be kept strictly confidential. You will not be able to be identified in any reports or publications. No names will be collected/recorded before/during/after your participation. The data you will provide me with will be coded in a serial way (e.g. S-001, S-002 a.s.o.) for purposes of further analysis, but no data will be related in any way with you as a person.*

14. **What will happen to the results of the research project?**

*The results of the research may be published within the year following your participation as interim results, and towards the end of 2013 following the expected completion of the study.*

*You can obtain a copy of the published results by contacting me directly at any time following your participation.*

*As already stated above, you will not be identified in any report or publication, as results will be analysed and presented collectively.*

*The data collected during the course of the project might be used for additional or subsequent research; in that case, confidentiality and anonymity are again guaranteed.*

15. **Who is organising and funding the research?**

The research is self-funded and is done to fulfil requirements for the EdD in Language Learning and Teaching with the University of Sheffield School of Education.

16. **Who has ethically reviewed the project?**

This project has been ethically approved via the School of Education’s ethics review procedure.

17. **Contact for further information**

For further information, you can contact me at +357 99 49 49 29 or by email at [ctsouris@ucy.ac.cy](mailto:ctsouris@ucy.ac.cy).

You can also conduct my supervisor, Dr Terry Lamb, at +44 114 222 8118 or by email at [t.lamb@sheffield.ac.uk](mailto:t.lamb@sheffield.ac.uk)

**You will be given a copy of the information sheet and a copy of your signed consent form to keep.**

**Thank you for taking part in this study.**

**Appendix 1c**

**Ethics approval letter**

|  |  |  |
| --- | --- | --- |
| Constantinos Tsouris |  | Head of School  Professor Jackie Marsh  Department of Educational Studies  The Education Building  388 Glossop Road  Sheffield S10 2JA |
| 20 January 2014 | **Telephone:** +44 (0114) 222 8096  **Fax:** +44 (0114) 279 6236  **Email:**  [jacquie.gillott@sheffield.ac.uk](mailto:%20jacquie.gillott@sheffield.ac.uk) |

Dear Constantinos

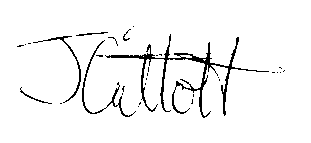
**Re: Blended collaborative learning in ESP courses: instructors’ and students’ perceptions**

**and practices**

Thank you for your application for ethical review for the above project. The reviewers have now considered this and have agreed that your application be approved.

This letter is evidence that your application has been approved and should be included as an appendix in your final submission.

Yours sincerely

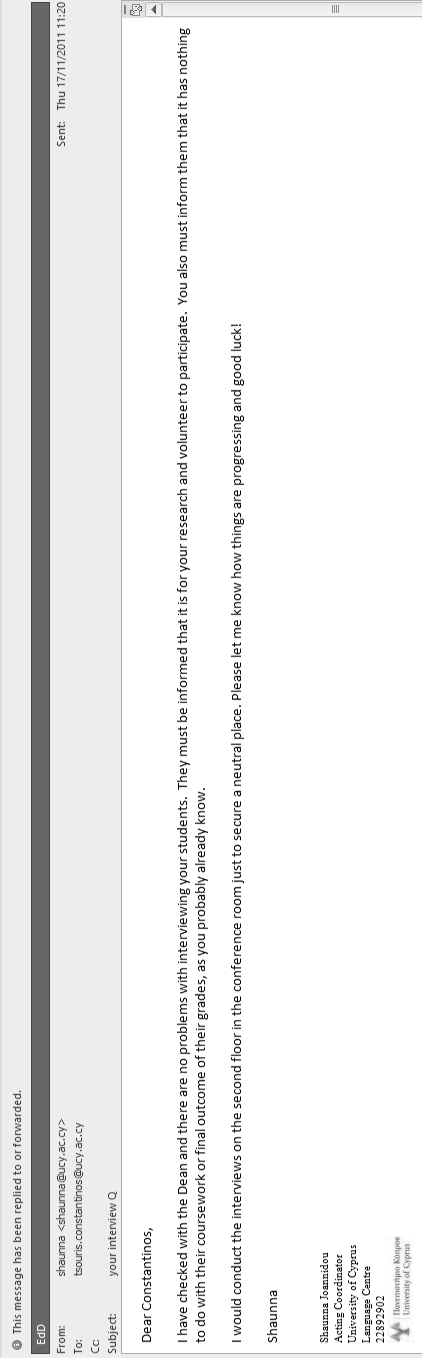


**Mrs Jacquie Gillott**

**Programme Secretary**

**Appendix 2**

**Permission by Dean to conduct student interviews**



**Appendix 3a**

**Call for pilot interview student participants**

Dear all,

I am studying towards my doctorate in education (EdD in Language Learning and Teaching) with the University of Sheffield. My research revolves around the area of collaborative learning in English for Specific Purposes (ESP) courses and involves conducting individual and group interviews with Higher Education ESP students. The main study will take place during the Spring 2012 and Fall 2012 semesters. For purposes of finalizing my research instruments, I am conducting pilot interviews in order to get valuable feedback on issues such as comprehensibility of questions, interview structure, interview setting a.s.o.

All interviews will take place at University of Cyprus premises (you can also suggest an alternative place) between Monday, January 23rd – Friday, February 4th 2012 at a date and time of your convenience and are expected to last between 45-60 minutes.

This research corresponds with the University of Sheffield's School of Education Ethics Policy and Ethics Approval has been granted as of January 12th 2012. Permission to carry the interviews has also been granted by the University of Cyprus Language Centre via the Dean of the School of Humanities. Your participation in this pilot study and any information you provide me with will be kept confidential.

Should you wish to participate in this pilot interview, please respond by return email or by phone no later than Friday January 20th 2012.

For any questions, please feel free to contact me through email at [ctsouris@ucy.ac.cy](mailto:ctsouris@ucy.ac.cy) or my research supervisor Dr Terry Lamb ([t.lamb@sheffield.ac.uk](mailto:t.lamb@sheffield.ac.uk))

Many thanks in advance,

Constantinos Tsouris

Special Teaching Staff

University of Cyprus

The Language Centre

+357 99 49 49 28

**Appendix 3b**

**Call for pilot questionnaire teacher participants**

Dear colleague,

I am studying towards my doctorate in education (EdD in Language Learning and Teaching) with the University of Sheffield. My research revolves around the area of collaborative learning in English for Specific Purposes (ESP) courses. The main study will take place during the Spring 2012 and Fall 2012 semesters. For purposes of finalizing my research instruments, I am piloting a research questionnaire and a follow-up interview in order to get valuable feedback on issues such as comprehensibility of questions, overall structure a.s.o.

Pilot questionnaires will be administered electronically between Saturday, April 14th 2012 – Saturday, April 21st 2012. Follow-up interviews, if requested, will take place in June 2012. More information will be given to you upon agreeing taking part.

This research corresponds with the University of Sheffield's School of Education Ethics Policy and Ethics Approval has been granted as of January 12th 2012. Your participation in this pilot study and any information you provide me with will be kept confidential.

Should you wish to participate, please respond by return email or by phone no later than Friday April 13th 2012.

For any questions, please feel free to contact me ([ctsouris@ucy.ac.cy](mailto:ctsouris@ucy.ac.cy)) or my research supervisor Dr Terry Lamb ([t.lamb@sheffield.ac.uk](mailto:t.lamb@sheffield.ac.uk))

Many thanks in advance,

Constantinos Tsouris

Special Teaching Staff

University of Cyprus

The Language Centre

+357 99 49 49 28

**Appendix 4a**

**Interview Conversation Guide for Student Participants**

**Ice-breaker I: You and ESP courses**

To begin with, let me ask you a couple of questions regarding ESP courses:

Can you tell the difference between an ESP course and other language courses?

How many ESP courses have you been registered for during your HE studies (in your current or in past degrees)?

**Part 1: Collaborative Learning**

Let’s start with a few questions on CL with regards to LLT/ESP instruction.

1. What do you make of the term ‘CL’?
2. Have you experienced CL in other courses in your degree(s) besides this ESP course (not necessarily language courses)? If yes, in how many courses and how extensively?
3. Are there any particular features of collaborative work as applied in your ESP course you liked? If yes, which and why?
4. Overall, do you see any benefits collaborative work brings to LLT/ESP courses? If yes, which?
5. Are there any particular features of collaborative work as applied in your ESP course you did not like? If yes, which and why?
6. Overall, do you see any drawbacks collaborative work has for LLT/ESPs? If yes, which?

**Part 2: Collaborative Technologies**

CL is embedded in the classroom through a number of means. One of such means is technology.

1. What do you make of the term ‘collaborative technologies’ and how would you describe your relation to technology in general?
2. Have you experienced integration of collaborative technologies in other (not necessarily language) courses besides this course? If yes, in what ways and how extensively? Also, if yes, have your perceptions on collaborative technologies in education shifted since these were integrated in your ESP course? If yes, in what way(s)?
3. Are there any particular features of collaborative technology as integrated in your ESP course you liked? If yes, which and why?
4. Overall, do you see any benefits collaborative technologies offer in LLT/ESPs? If yes, which?
5. Are there any particular features of collaborative technology as integrated in your ESP course you did not like? If yes, which and why?
6. Overall, do you see any drawbacks collaborative technologies have for LLT/ESPs? If yes, which?

**Concluding: Wrap-up questions**

I only have a couple more questions left.

1. Has the integration of CL/collaborative technologies in your ESP course affected the way(s) you normally go about a course? If yes, in what way(s)?
2. If you were to take the same ESP course again, would you change anything in the way it was taught in terms of CL and technology integration? If yes, what and why? If not, why?
3. Have you got any further suggestions or comments to make regarding the use of CL or collaborative technologies in future ESP courses from your perspective as a student?

Before we finish, is there anything you would like to add with regards to what we have discussed?

Is there anything else that you want to ask me or would like to know with regards to this interview/research?

**Appendix 4b**

**Questionnaire for Teachers with marked changes following piloting**

Please answer the questions below only with regard to the ESP classroom in Higher Education. Please leave out any questions you feel uncomfortable answering.

**Part 1: Collaborative Learning**

1. How extensively do you tend to employ CL in ESP courses?

* Extensively \_\_\_\_\_
* Somewhat \_\_\_\_\_
* Rarely \_\_\_\_\_
* Never \_\_\_\_\_

1. Have you encountered any of the following issues with regard to applying CL in your ESP classroom?

* Student inability to work in groups \_\_\_\_\_
* Student unwillingness to work in groups \_\_\_\_\_
* Time restrictions \_\_\_\_\_
* CL does not bode well with ESP syllabus \_\_\_\_\_
* Student assessment issues \_\_\_\_\_
* Other (please specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Name the most important benefit(s) that in your opinion CL may bring to the ESP classroom:
   1. for learners (if any).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* 1. for teachers (if any).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Name the most important drawback(s) that in your opinion CL may bring to the ESP classroom:
   1. for teachers (if any).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* 1. for teachers (if any).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Through which means have you integrated CL in your ESP classroom(s)? (please tick all that apply)

* Computer \_\_\_\_\_
* Internet \_\_\_\_\_
* Blackboard \_\_\_\_\_
* Wiki\_\_\_\_\_
* Blog \_\_\_\_\_
* Means other than technology \_\_\_\_\_
* Other (please specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Grouping students (please tick where appropriate):

* I like to group students myself\_\_\_\_\_
* Students are free to form groups on their own \_\_\_\_\_
* This depends on the task at hand \_\_\_\_\_

1. What do you think is the optimal group size for tasks that require students to work in groups?

* 2 students \_\_\_\_\_
* 3 students \_\_\_\_\_
* 4 students and over\_\_\_\_\_
* Depends on the particular task \_\_\_\_\_
* I don’t think group size really matters \_\_\_\_\_

1. How do you normally assess group work (if applicable)?

* Group gets common mark; group members also get separate marks \_\_\_\_\_
* All students in a group get the same mark \_\_\_\_\_
* Students in a group are only assessed individually \_\_\_\_\_

1. Which do you consider to be the main issue(s) with regard to assessing collaborative work?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Part 2: Computer-supported collaborative learning**

1. How would you describe your level of knowledge with regard to instructional technology in general?

Advanced \_\_\_\_\_

Average \_\_\_\_\_

Novice \_\_\_\_\_

1. How do you feel with regards to technology integration in the ESP classroom?

I am in favor \_\_\_\_\_

I am not in favor \_\_\_\_\_

I don’t really care \_\_\_\_\_

I can’t say/I don’t want to say \_\_\_\_\_

1. Do you tend to employ collaborative technologies in your ESP classroom(s)?

Yes \_\_\_\_\_

No \_\_\_\_\_

If Yes, how extensively?

Always \_\_\_\_\_

Often \_\_\_\_\_

Every now and then \_\_\_\_\_

Rarely \_\_\_\_\_

1. Name the most important benefit(s) that in your opinion CT may bring to the ESP classroom:
   1. for learners (if any).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* 1. for teachers (if any).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Name the most important drawback(s) that in your opinion CT may bring to the ESP classroom:
   1. for learners (if any).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* 1. for teachers (if any).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Do you think language teachers should be trying to keep up with the advancements of technology in order to be able to successfully embed CL in their ESP classroom(s)?

Yes \_\_\_\_\_

No \_\_\_\_\_

1. Do you find it necessary for language teachers to be getting training on the actual use of CT in education?

Yes \_\_\_\_\_

No \_\_\_\_\_

**Part 3: Curriculum design**

1. If you were to design an ESP course today, would you embed CL or not?

Yes \_\_\_\_\_

No \_\_\_\_\_

If yes, to what extent?

To a great extent \_\_\_\_\_

Moderately \_\_\_\_\_

Only to a limited extent \_\_\_\_\_

1. Do you think students’ beliefs with regards to collaboration and technology should be taken into consideration when developing the ESP curriculum?

Yes \_\_\_\_\_

No \_\_\_\_\_

Your reasons for this?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What do you imagine our profession to be like in 10 years’ time with regards to:

1. the use of CL?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(b) the use of collaborative technologies?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

This is the end of the questionnaire. Thank you for your participation.

**Appendix 5a**

**Call for participation to students**

Dear all

I am studying towards my doctorate in education (EdD in Language Learning and Teaching) with the University of Sheffield. My thesis is exploring the issue of collaborative learning in English for Specific Purposes (ESP) courses.

I am contacting you because you are underway of completing a compulsory ESP course (LAN 204 – Business English for European and International Relations) which has been designed based on integrated collaborative learning, and your views on my research topic are of great importance. For that reason, I would like to interview you individually/as part of a 4-person group (delete as appropriate). The interview will take place at University of Cyprus premises between Monday March 19th 2012 – Saturday April 7th 2012, at a date and time of your convenience and is expected to last between 45-60 minutes. No preparation is needed on your behalf in order to take part in this study.

This research corresponds with the University of Sheffield's School of Education Ethics Policy. Permission to carry the interviews has also been granted by the University of Cyprus Language Centre via the Dean of the School of Humanities. Your participation and any information you provide me with will be kept confidential. All data collected will be analyzed and reported collectively and no information linking you to the data will be released. You have the right to withdraw at any time before or during your interview and/or ask for any data you provide me with to be discarded after your interview. I shall provide you with a brief summary of my findings once the research is completed should you wish. You can also, should you wish, ask to obtain a copy of the transcribed data in order to verify data accuracy; this however should be done within the next thirty days following your interview.

Interviews will be audio-recorded for ease of access to data. You reserve the right to deny being audio-recorded in which case only written notes will be kept.

Should you wish to participate in an INDIVIDUAL / GROUP INTERVIEW, please respond by return email or by phone no later than March 6th 2012.

For any questions, please feel free to contact me ([ctsouris@ucy.ac.cy](mailto:ctsouris@ucy.ac.cy)) or my research supervisor Dr Terry Lamb ([t.lamb@sheffield.ac.uk](mailto:t.lamb@sheffield.ac.uk)).

Many thanks in advance,

Constantinos Tsouris

**Appendix 5b**

**Call for participation to teachers**

Dear colleagues,

I am studying towards my doctorate in education (EdD in Language Learning and Teaching) with the University of Sheffield. My thesis is exploring the issue of collaborative learning and the use of collaborative technologies in English for Specific Purposes (ESP) courses.

I am contacting you because during the past 7 years you have taught and/or designed one or more ESP courses, and your views on my research topic are of great importance. For this reason, I would like you to take part in a questionnaire survey. A follow-up interview may be requested of you in June 2012. Should you agree to participate, you should return the questionnaire no later than Monday April 30th 2012. No preparation is needed on your behalf in order to take part in this study.

ETHICS, CONFIDENTIALITY AND YOUR RIGHT TO WITHDRAW: This research corresponds with the University of Sheffield's School of Education Ethics Policy. Your participation and any information you provide me with will be kept confidential. All data collected will be analyzed and reported collectively and anonymously and no information linking you to the data will be released. I will be the only person with access to the data. You have the right to withdraw at any time prior to the dissemination of findings. I shall provide you with a brief summary of my findings once the research is completed should you wish.

Questionnaires will be administered electronically. You can either email me your questionnaire or drop it in my office mail box.

Should you wish to participate, please respond by return email or by phone no later than April 24th 2012.

For any questions, please feel free to contact me ([ctsouris@ucy.ac.cy](mailto:ctsouris@ucy.ac.cy)) or my research supervisor Dr Terry Lamb ([t.lamb@sheffield.ac.uk](mailto:t.lamb@sheffield.ac.uk)).

Many thanks in advance,

Constantinos Tsouris

**Appendix 6a**

**Consent to Participate in Research (Students)**

**Title**: Collaborative learning integration in the ESP classroom and curriculum.

**Researcher**: Constantinos Tsouris

**Introduction**

I am studying towards my doctorate in education (EdD in Language Learning and Teaching) with the University of Sheffield. My thesis is exploring the issue of collaborative learning in English for Specific Purposes (ESP) courses.

**Explanation of the study**

I am contacting you because you are underway of completing a compulsory ESP course (LAN 204 – Business English for European and International Relations) designed based on integrated collaborative learning, and your views are of great importance for my research. I would like to interview you either individually or as part of a group. The interview will take place at University of Cyprus premises between March 19th–April 7th 2012, at a date and time of your convenience and is expected to last between 45-60 minutes. No preparation is needed on your behalf in order to take part in this study. Should you decide to participate, please sign and date the last line of this form.

**Confidentiality**

This research corresponds with the University of Sheffield's School of Education Ethics Policy. Your participation and any information you provide me with will be kept confidential. All data collected will be analyzed and reported collectively and no information linking you to the data will be released. You have the right to withdraw at any time before or during your interview and/or ask for any data you provide me with to be discarded after your interview. I shall provide you with a brief summary of my findings once the research is completed should you wish. Interviews will be audio-recorded for ease of access to data. You reserve the right to deny being audio-recorded in which case only written notes will be kept.

**Your participation**

Participating is strictly voluntary, meaning you are not obliged to take part in the study. Participating or not will in no way affect your grade in any class.

**Researcher’s statement**

I have fully explained this study to the students.

Researcher signature …………………………………………………………. Date ………………………………………...

**Student’s consent**

I have read the information provided in this Informed Consent Form. I voluntarily agree to participate in this study.

Student signature ………………………………………………………………. Date …………………………………………

Thank you for your help

For any questions, please feel free to contact me ([ctsouris@ucy.ac.cy](mailto:ctsouris@ucy.ac.cy)) or my research supervisor Dr Terry Lamb ([t.lamb@sheffield.ac.uk](mailto:t.lamb@sheffield.ac.uk))

**Appendix 6b**

**Consent to Participate in Research (Teachers)**

**Title**: Collaborative learning integration in the ESP classroom and curriculum.

**Researcher**: Constantinos Tsouris

**Introduction**

I am studying towards my doctorate in education (EdD in Language Learning and Teaching) with the University of Sheffield. My thesis is exploring the issue of collaborative learning in English for Specific Purposes (ESP) courses.

**Explanation of the study**

I am contacting you because during the past 6 years you have taught and/or designed one or more ESP courses, and your views on my research topic are of great importance. For this reason, I would like you to take part in a questionnaire survey. Further, a follow-up interview may be requested. The questionnaire survey will take place between Monday April 23rd – Monday 30th 2012. Follow-up interviews will take place in June 2012. No preparation is needed on your behalf in order to take part in this study. Should you decide to participate, please sign and date the last line of this form.

**Confidentiality**

This research corresponds with the University of Sheffield's School of Education Ethics Policy. Your participation and any information you provide me with will be kept confidential. All data collected will be analyzed and reported collectively and no information linking you to the data will be released. You have the right to withdraw at any time before data analysis and/or ask for any data you provide me with to be discarded after. I shall provide you with a brief summary of my findings once the research is completed should you wish.

**Your participation**

Participating is strictly voluntary, meaning you are not obliged to take part in the study.

**Researcher’s statement**

I have fully explained this study to the participants.

Researcher signature ………………………………………………………… Date ………………………………………...

**Instructor’s consent**

I have read the information provided in this Informed Consent Form. I voluntarily agree to participate in this study.

Instructor signature ………………………………………………………….. Date …………………………………………

**Thank you for your help**

For any questions, please feel free to contact me ([ctsouris@ucy.ac.cy](mailto:ctsouris@ucy.ac.cy)) or my research supervisor Dr Terry Lamb ([t.lamb@sheffield.ac.uk](mailto:t.lamb@sheffield.ac.uk))

**Appendix 7a**

**Interview Conversation Guide for Student Participants**

**Ice-breaker I: You and ESP courses**

To begin with, let me ask you a couple of questions regarding ESP courses:

How many ESP courses have you been registered for during your HE studies (in your current or in past degrees)?

**Part 1: Collaborative Learning**

Let’s start with a few questions on CL with regards to LLT/ESP instruction.

1. What do you make of the term ‘CL’?
2. Have you experienced CL in other courses in your degree(s) besides this ESP course (not necessarily language courses)? If yes, in how many courses and how extensively?
3. Are there any particular features of collaborative work as applied in your ESP course you liked? If yes, which and why?
4. Overall, do you see any benefits collaborative work brings to LLT/ESP courses? If yes, which?
5. Are there any particular features of collaborative work as applied in your ESP course you did not like? If yes, which and why?
6. Overall, do you see any drawbacks collaborative work has for LLT/ESPs? If yes, which?

**Part 2: Collaborative Technologies**

CL is embedded in the classroom through a number of means. One of such means is technology.

1. What do you make of the term ‘collaborative technologies’ and how would you describe your relation to technology in general?
2. Have you experienced integration of collaborative technologies in other (not necessarily language) courses besides this course? If yes, in what ways and how extensively? Also, if yes, have your perceptions on collaborative technologies in education shifted since these were integrated in your ESP course? If yes, in what way(s)?
3. Are there any particular features of collaborative technology as integrated in your ESP course you liked? If yes, which and why?
4. Overall, do you see any benefits collaborative technologies offer in LLT/ESPs? If yes, which?
5. Are there any particular features of collaborative technology as integrated in your ESP course you did not like? If yes, which and why?
6. Overall, do you see any drawbacks collaborative technologies have for LLT/ESPs? If yes, which?

**Concluding: Wrap-up questions**

I only have a couple more questions left.

1. Has the integration of CL/collaborative technologies in your ESP course affected the way(s) you normally go about a course? If yes, in what way(s)?
2. If you were to take the same ESP course again, would you change anything in the way it was taught in terms of CL and technology integration? If yes, what and why? If not, why?
3. Have you got any further suggestions or comments to make regarding the use of CL or collaborative technologies in future ESP courses from your perspective as a student?

Before we finish, is there anything you would like to add with regards to what we have discussed?

Is there anything else that you want to ask me or would like to know with regards to this interview/research?

**Student interview guide (incl. prompts)**

|  |  |  |  |
| --- | --- | --- | --- |
| **QUESTION** | **PROMPTS/PROBES** | **CHECKLIST** | **MY NOTES ON-THE-FLY** |
| Ice-breaker: You and ESP courses | | | |
| To begin with, let me ask you a couple of questions regarding ESP courses: | | | |
| Can you tell the difference between an ESP course and other language courses? | Provide explanation if needed |  |  |
| How many ESP courses have you been registered for during your HE studies (in your current or in past degrees)? |  |  |  |
| Part 1: Collaborative Learning | | | |
| Let’s start with a few questions on CL with regards to LLT/ESP instruction. | | | |
| What do you make of the term ‘CL’? | Provide explanation if needed |  |  |
| **2.**  Have you experienced CL in other courses in your degree(s) besides this ESP course (not necessarily language courses)? | If yes, in how many courses and how extensively? |  |  |
| **3.**  Are there any particular features of CLBV work as applied in your ESP course you liked? | If yes, which and why? | Possible perceived pros/cons:   * Autonomy (AUT) * Independence (IND) * S-centeredness (S-CE) * Interdependency (INTD) * Peer feedback (PF) * Accountability (ACC) * Motivation (MOT) * Balancing lectures with group activities * Assessment (ASS) * Group dynamics (GDs) (conflicts, loafing, sense of community, competitiveness) |  |
| **4.**  Overall, do you see any benefits CLBV work brings to LLT/ESP courses? | If yes, which? |  |
| Are there any particular features of CLBV work as applied in your ESP course you did not like? | If yes, which and why? |  |
| Overall, do you see any drawbacks CLBV work has for LLT/ESPs? | If yes, which? |  |
|  |  |  |  |
| Part 2: Collaborative Technologies | | | |
| CL is embedded in the classroom through a number of means. One of such means is technology. | | | |
| What do you make of the term ‘CLBV TLGs’ and how would you describe your relation to TLG in general? | Provide explanation/clarification if needed |  |  |
| Have you experienced integration of CLBV TLGs in other (not necessarily lang) courses besides this course?  If yes:  Have your perceptions on CLBV TLGs shifted since these were integrated in your ESP course? | If yes, in what ways, for which purposes and how extensively?  If yes, in what way(s)? (e.g. Do you think they have educational value/not? Should they be used more extensively? |  |  |
| Are there any particular features of CLBV TLG as integrated in your ESP course you liked? | If yes, which and why? | Possible perceived pros/cons:  (focus on the ones pertaining to the use of TLG and less to the use of CL)   * Autonomy (CL) * Independence (CL) * S-centeredness (CL) * Interdependency (CL) * Accountability * Motivation * Assessment * Group dynamics (conflicts, competitiveness, sense of community, loafing) |  |
| Overall, do you see any benefits CLBV TLGs offer in LLT/ESPs? | If yes, which? |  |
| Are there any particular features of CLBV TLG as integrated in your ESP course you didn’t like? | If yes, which and why? |  |
| Overall, do you see any drawbacks CLBV TLGs have for LLT/ESPs? | If yes, which? |  |
|  |  |  |  |
| Concluding: Wrap-up questions | | | |
| I only have a couple more questions left. | | | |
| Has the integration of CL/CLBV TLGs in your ESP course affected the way(s) you normally go about a course? | If yes, in what way(s)? |  |  |
| If you were to take the same ESP course again, would you change anything in the way it was taught in terms of CL/TLG integration? | If yes, what and why? If not, why? |  |  |
| Have you got any further suggestions/comments to make regarding the use of CL or CLBV TLGs in future ESP courses from your perspective as a student? |  |  |  |
|  |  |  |  |
| Before we finish, is there anything you would like to add with regards to what we have discussed? |  |  |  |
| Is there anything else that you want to ask me or would like to know with regards to this interview/research? |  |  |  |

**Appendix 7b**

**Reflective journal probes for students**

1. How much experience did you have of collaborative learning before this course, as a University student? (underline one)

NONE / VERY LIMITED / SOME / QUITE EXTENSIVE

1. What kind of assessment would you say would be most fair in collaborative work? (underline one)
2. Common grade for everyone
3. Individual grade
4. Common plus individual grades
5. Other (please specify)

In between 20-50 words, please justify your answer.

I think it should be a / b / c / d because …

1. To what degree have you experienced the following in the groups you participated in? (underline the degree for each one)

Conflicts: NONE / SOME / A LOT

Competitiveness: NONE / SOME / A LOT

Loafing: NONE / SOME / A LOT

1. What would the ideal group size be for you for the purposes of this course? (underline one)
2. 2
3. 3
4. 4
5. 5+

In between 20-50 words, please justify your answer.

I think the ideal group size is ….. because …

1. Would you prefer to form your own groups or participate in pre-formed groups? (underline one)
2. Form our own groups
3. Pre-formed groups

In between 20-50 words, please justify your answer.

I prefer own groups / pre-formed groups, because …

1. Which advantages/disadvantages you see in collaborative learning? (please write between 50-100 words here; please write in bullet-points)

Advantages:

Disadvantages:

1. Would you suggest any changes in the way this course is run? If yes, which? (bullet points)

**Appendix 7c**

**Questionnaire for Teachers**

Please answer the questions below only with regard to the ESP classroom in Higher Education. Please leave out any questions you feel uncomfortable answering. Also, try to answer the questions in the order they are presented here.

**Part 1: Collaborative Learning**

1. How extensively do you tend to employ CL in ESP courses?

* Extensively \_\_\_\_\_
* Somewhat \_\_\_\_\_
* Rarely \_\_\_\_\_
* Never \_\_\_\_\_

1. Have you encountered any of the following issues with regard to applying CL in your ESP classroom?

* Student inability to work in groups \_\_\_\_\_
* Student unwillingness to work in groups \_\_\_\_\_
* Time restrictions \_\_\_\_\_
* CL does not bode well with ESP syllabus \_\_\_\_\_
* Student assessment issues \_\_\_\_\_
* Other (please specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Name the most important benefit(s) that in your opinion CL may bring to the ESP classroom:
   1. for learners (if any).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* 1. for teachers (if any).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Name the most important drawback(s) that in your opinion CL may bring to the ESP classroom:
   1. for learners (if any).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* 1. for teachers (if any).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Through which means have you integrated CL in your ESP classroom(s)? (please tick all that apply)

* Computer \_\_\_\_\_
* Internet \_\_\_\_\_
* Blackboard \_\_\_\_\_
* Wiki\_\_\_\_\_
* Blog \_\_\_\_\_
* Means other than technology \_\_\_\_\_
* Other (please specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Grouping students (please tick where appropriate):

* I like to group students myself\_\_\_\_\_
* Students are free to form groups on their own \_\_\_\_\_
* This depends on the task at hand \_\_\_\_\_

1. What do you think is the optimal group size for tasks that require students to work in groups?

* 2 students \_\_\_\_\_
* 3 students \_\_\_\_\_
* 4 students and over\_\_\_\_\_
* Depends on the particular task \_\_\_\_\_
* I don’t think group size really matters \_\_\_\_\_

1. How do you normally assess group work (if applicable)?

* Group gets common mark; group members also get separate marks \_\_\_\_\_
* All students in a group get the same mark \_\_\_\_\_
* Students in a group are only assessed individually \_\_\_\_\_

1. Which do you consider to be the main issue(s) with regard to assessing collaborative work?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Part 2: Computer-supported collaborative learning**

1. How would you describe your level of knowledge with regard to instructional technology?

Advanced \_\_\_\_\_

Average \_\_\_\_\_

Novice \_\_\_\_\_

1. How do you feel with regards to technology integration in the ESP classroom?

I am in favor \_\_\_\_\_

I am not in favor \_\_\_\_\_

I don’t really care \_\_\_\_\_

I can’t say/I don’t want to say \_\_\_\_\_

1. Do you tend to employ collaborative technologies in your ESP classroom(s)?

Yes \_\_\_\_\_

No \_\_\_\_\_

If Yes, how extensively?

Always \_\_\_\_\_

Often \_\_\_\_\_

Every now and then \_\_\_\_\_

Rarely \_\_\_\_\_

1. Name the most important benefit(s) that in your opinion CT may bring to the ESP classroom:
   1. for learners (if any).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* 1. for teachers (if any).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Name the most important drawback(s) that in your opinion CT may bring to the ESP classroom:
   1. for learners (if any).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* 1. for teachers (if any).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Do you think language teachers should be trying to keep up with the advancements of technology in order to be able to successfully embed CL in their ESP classroom(s)?

Yes \_\_\_\_\_

No \_\_\_\_\_

1. Do you find it necessary for language teachers to be getting training on the actual use of CT in education?

Yes \_\_\_\_\_

No \_\_\_\_\_

**Part 3: Curriculum design**

1. If you were to design an ESP course today, would you embed CL or not?

Yes \_\_\_\_\_

No \_\_\_\_\_

If yes, to what extent?

To a great extent \_\_\_\_\_

Moderately \_\_\_\_\_

Only to a limited extent \_\_\_\_\_

1. Do you think students’ beliefs with regards to collaboration and technology should be taken into consideration when developing the ESP curriculum?

Yes \_\_\_\_\_

No \_\_\_\_\_

Your reasons for this? (OPTIONAL QUESTION)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What do you imagine our profession to be like in 10 years’ time with regards to (OPTIONAL QUESTION):

1. the use of CL?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(b) the use of collaborative technologies?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

This is the end of the questionnaire. Thank you for your participation.

**Appendix 7d**

**Interview Conversation Guide for Teacher Participants**

**Ice-breaker I: You and ESP courses**

To begin with, let me ask you a couple of questions regarding ESP courses:

How many ESP courses have you been designed and taught in the past 6 years or so?

**Part 1: Collaborative Learning**

Let’s start with a few questions on CL with regards to LLT/ESP instruction.

1. Which is the main issue you have encountered when applying CL in your ESP classroom?
2. What do you think of group work (benefits/drawbacks)?
3. Have your perceptions/practices toward CL in ESP teaching shifted during past 5 years in any way and if yes, in what ways and because of which factors?

**Part 2: Collaborative Technologies**

CL is embedded in the classroom through a number of means. One of such means is technology.

1. Are there any particular features of CTs you like/don’t like?
2. Could you expand on the relationship between technology and language teachers as you have experienced it in the last 6 years or so?

**Part 3: Curriculum Design**

1. Why would you choose to embed/not embed CL/CTs in a new course that you would design?
2. To what extent and in what ways *should* perceptions and practices of university students inform (a) ESP curriculum planning and development and (b) current ESP (teaching) practice? Are there any benefits or drawbacks in considering students’ views when developing the ESP curriculum?

Before we finish, is there anything you would like to add with regards to what we have discussed? Is there anything else that you want to ask me or would like to know with regards to this interview/research?

**Appendix 8a**

**Sample transcript of student interviews**

Are there any particular features of CLBV work as applied in your ESP course you liked? If yes, which/why? Overall, do you see any benefits CLBV work brings to LLT/ESP courses? If yes, which?

S2: it’s always easier to collaborate rather than working alone, people share ideas, help each other, correct each other

S1: I agree. Ppl have different ideas, someone may not think of this or that idea, and ppl combine their ideas in the end

S2: Also it’s more pleasant to CLB with smn else than working alone. I think that the sharing of ideas is the most important point here

S1: and the whole thing is more pleasant

S2: and easier

S1: the result is also more creative

S2: my partner surely has more knowledge in the English lang, more vocabulary, can develop her ideas more easily, so for me it’s easier to CLB with her because I know that I may give my ideas but she will be able to develop them better than I would. For me, it’s an advantage. My partner has certain abilities which I don’t have and hence the outcome is better to the outcome that I would have provided had I been working alone.

S1: the combination of ideas makes our partnership more pleasant, the other person may share ideas with you and combined with your ideas, the outcome will probably be better.

S3: it’s better because we have more ideas when we are in a group, and when we make mistakes someone else in the group can correct them, I think it’s good

S4: yes, it’s better because we can work more easily and faster

S5: we can share the work between us

S6: I agree, it’s better, we share our ideas

S7: when Ss work together they can share ideas, new ideas come to the fore, there’s cooperation between Ss and T, and tasks are easier to do when we work in groups

S8: agree, communication is better this way, you can say what you want, especially in smaller sections. Group tasks are better, you can exchange views

S9: more people means more ideas

S10: it’s a good thing that people work together, it means more ideas

S11: CL means you can learn how to work with others. You also need to learn how to work with people you may not know well, but this will also happen later on in our jobs, so we will need to know how to do it. Working with people I know makes things more comfortable for me, I can express my ideas more easily

S12: CL makes the course more interesting

S13: through collaboration, there are more ideas. Students share responsibility and this means less work for each one. Moreover, students can see how others work and this could lead them adopting new learning methods and become better learners.

S14: CL makes class more pleasant. It also strengthens our group spirit.

S15: CL helps us shape our character for our future conduct

S16: different ideas combine to do a task. You see how others think and how they work. Their comments on how you go about your work are beneficial, be those positive or negative.

Are there any particular features of CLBV work as applied in your ESP course you did not like? If yes, which/why? Overall, do you see any drawbacks CLBV work has for LLT/ESPs? If yes, which?

S2: because of the practice we do following everything taught, no disadvantages for me regarding CL.

S1: because our class has been together for 3 years now, we all know each other very well, it wouldn’t be difficult to CLB with whoever in the class. I am not sure whether things would be so nice if there were other students in our class from other departments. It’s easy for us to CLB between us as things are. So it’s always pleasant.

S5: we can discuss things between us, but sometimes people can disagree

S6: we may not be able to concentrate a lot when we work in large groups

S3: sometimes some people in the group may have more ideas than others

S7: there may be disagreements, maybe certain people may wish to promote their own ideas over those of others

S8: in case you disagree with another member of the group, this is bad for both parties

S9: depending on people’s characters, if one tries to force their ideas then there will be problems in the group. There needs to be compromise.

S10: disagreements and fights may result, which can be overcome though

S11: it’d be a disadvantage if groups are pre-determined. Maybe I’d be more shy or scared, less confident or comfortable expressing your own view

S12: same because personally I’d find it difficult to cooperate with people I don’t really know

S13: if you happen to work with someone who is irresponsible or only looks after themselves, you will find it very difficult. You may fail the task and get a lower mark only because you happened to work with that particular person.

S14: the time we sometimes need to do a task is extended when there is no proper communication between us.

S16: not everyone is doing enough work. Some people are not cooperative and this means not everyone works the same.

Probe: peer feedback

S2: I think it’s best if we have feedback from our peers first and then by the T, so we get the chance to think ourselves

S1: I think this may be a waste of time. When we do something as a group, surely we exchange ideas, agree and disagree, but in the end of the day it’s the T that says ‘yes’ or ‘no’

S2: Yes, but do you really need the T there all the time?

S1: It saves time though to have him there, instead of trying to make corrections between us. T’s opinion is more valid

S4: we can see where we may have failed so PF is good

S6: we can have an idea

S3: and the opinion may differ between T and peers

S5: I agree

S7: I think it’s helpful to get PF, other comments will help us to see more things

S8: I also think it’s helpful and useful, it also prepares us for later on, when we get a job, sometimes we will be criticized by others, so we have the opportunity now to experience this and get the chance to improve

S9: I agree but I would like to get feedback by someone who has the capacity to give feedback, i.e. the T. Some PF may be intended to rile us, it may not be honest. I’d like to get PF but eventually what matters is T feedback

S10: I believe that some comments from peers may annoy us but the purpose is for us to improve so I think this will be achieved in the end

S11: I’d rather have the T give me feedback; I would not want others to give me feedback

S12: PF is just an opinion, and I don’t think they can offer me things that the T can’t

Probe: assessment

S1: as said before, some Ss in groups of 4-5 may not help as much in certain tasks, so I think that it is unfair for those Ss to get the same mark as smn who has tried and worked a lot. But there is no way to be fair unless work is split between Ss. It’s a risk, some are benefitted, others may get a lower mark because the group didn’t do well even though they themselves worked a lot and were due to get a higher mark. This is natural in CL.

S2: I agree but this can also happen when there are only 2 Ss in a group. From personal experience, I once got a low mark because my partner barely collaborated. But also the opposite happened: I got higher marks because the group members were better Ss and helped so that the result was better.

S1: Both can happen.

S2: This injustice can happen, yes.

S1: It’s difficult to be 100% fair in assessing groups. The only way I can think of is that tasks are split equally between group members and the T knows who did what. Then the T would have a more objective picture.

S3: same grade for everyone is good, e.g. when we get a common grade for the work we’ve done together

S5: We’ve done the work together and it’d be unfair if we did not get the same grade

S5: we can split the work and say who has done what

S4: if a project is very good, you can tell if someone has not done much, so I think it’s better if all members get the same grade

S7: I agree that the T cannot know who did what. Some group members may not work at all. I can’t think of ways to improve this but it’s unfair that when one member does not work, they get the same grade as the rest

S8: I agree with this assessment method (i.e. common plus personal grade). The T does not know who did what but it’s only fair each member also gets a separate mark based on what each person shows for their troubles

S9: I also agree with the previous 2 answers. It also happened to me to work with someone not so good. Sometimes you are forced to do it because maybe the group has been determined by the T and it so happens that a weak S is part of it. You are then forced to do everything on your own because you know the other member(s) won’t do much work or is/are too weak to do quality work. However, I also believe that the T can understand whether someone has worked more than others even though the T cannot prove it

S8: The T must be in a position to judge

S10: I also agree that each S should get a separate grade plus a common grade. I know it’s not a solution to tell on others – i.e. that they haven’t worked that much – but it’s up to the T to decide how to go about this

S11: it’s positive and fair to have common as well as individual assessment. Common grade means common ideas are graded but also individual grades assess Ss’ individual skills.

S12: I agree, it’s fair like this. It carries a risk but if we pick our groups ourselves then we can choose to work with people we can cooperate with. It’d be unfair though in cases some people do not do much work but still get the same grade as others who have done all or most of the work

S13: it’s fair as is.

S14: I agree

S15: I agree since each one is getting a separate mark

S16: I agree

**Appendix 8b**

**Sample transcript of teacher interviews**

Collaborative Learning: Which is the main issue you have encountered when applying CL in your ESP classroom?

INT/T1 The main issue is that groups are not always functioning well; some students who haven’t experienced CL before find it difficult to get used to this method, other students who are either not strong enough or don’t care that much just sit back and let others do the job. Essentially, assessment is the biggest issue given that it’s really difficult to know who did what in a group.

INT/T2 Assessment mostly.

INT/T3 How to grade Ss has been by far the most difficult thing for me.

INT/T4 Assessing fairly, I think this is the most obvious one. I’ve had Ss complaining about not getting a high enough grade because of someone else not doing their work, I’ve had students complaining of loafers and I’ve been trying out different ways of assessing CL.

What do you think of group work (benefits/drawbacks)?

INT/T1 I thing CL has more benefits than drawbacks. Obviously assessment can be a real issue, group dynamics can be a headache with students not contributing and students having not experienced CL before needing extra attention and this takes its toll. Also if CL is not integrated in the curriculum then it can take you backwards in terms of covering the syllabus material. But on the other hand, I think benefits outweigh those drawbacks. It is a more realistic situation in class than individualistic learning, these being ESP courses I think authenticity is highly important. Working with others prepares Ss for their future careers. Also, through peer-feedback it allows Ss to be more AUT and IND. The T has time to deal with Ss more efficiently.

INT/T2 It can be time-consuming in terms of implementation and it can mean more preparation on the Ts’ part but it can be satisfactory in terms of outcomes if Ss take to it. Also Ss who are not used to this type of work may shun it or just sit back and allow others to take the mantle. I’ve also had instances of intra-group bullying which can happen when really strong-minded individuals are pitted against really weak Ss. I think the T is responsible of controlling such situations and the way groups are formed can act as a means of controlling or preventing such behaviors in the first place. This can be tough though when it’s the beginning of the course and the T does not really know the Ss too well.

INT/T3 It’s balanced between pluses and minuses. It all depends on the particular section you are teaching I guess. I’ve had groups where CL was a joy to implement and other groups where once was enough and that was it. In terms of preparation it certainly is demanding on the T but I think that once a T designs a number of tasks and perfects them then only minor changes will be needed to use with various groups. Assessment as earlier said is also a major headache; you don’t want Ss to come knocking on your door asking for re-evaluations, that’s the last thing a T would need. I think CL can give ESP Ss a glimpse of what life in a company would be like, we don’t always collaborate with our best friends and we don’t always like the people you have to work with.

INT/T4 Group work and CL should be employed more but a lot of work awaits Ts in preparing for this shift in pedagogy. For ESPs in particular I think assessment certainly is a concern and Ss coming to the class with minimum or no experience of CL can sometimes be difficult to organize. CL offers Ss a chance to see what a professional situation is like.

Have your perceptions/practices toward CL in ESP teaching shifted during past 5 years in any way and if yes, in what ways and because of which factors?

INT/T1 Yes they have changed and they had to. I tend to use CL more and more now compared to 5 years ago. ESP syllabi of the last few years are increasingly more CL-oriented; personally I aim for a CL pedagogy when designing such courses, because of the reasons I said earlier. I think before this period maybe the approach was more individualistic but the reality of the workplace demands a shift in pedagogy as well.

INT/T2 Definitely yes. CL is more integrated in curricula now compared to when I began teaching. This has made me use CL more and the way HE is nowadays, CL is employed increasingly in all fields, not just in language learning. I find that most Ss are quite used to working with others.

INT/T3 CL looks to be on the up when it comes to pedagogies and we see it integrated more and more in HE curricula. Ss come to university without any real experience in working collaboratively, but this changes rapidly the moment they enter HE. Because of that, language learning and the ESP classroom in particular have to follow suit and I think CL is a pedagogy that fits the ESP purposes perfectly well with the group work and the authenticity and the opportunities it lends Ss to be more autonomous. I can’t really say that I have changed my perceptions regarding CL because I hadn’t thought that much about it before but my practices have changed into a more extensive employment of CL in my teaching.

INT/T4 Yes, they have. Being a seasoned language instructor I was more accustomed to the communicative method and to more individual-tailored courses. Lately though, with the emergence of more and more ESPs, CL is increasingly being integrated and this I think suits the futures of these Ss. I tend to integrate it in ESPs I design and even if the syllabus does not impose a certain pedagogy, I try to at least give it a try and see how the class reacts. Different Ss react differently to this and it’s been challenging to say the least for me to manage and implement a pedagogy I was not that much accustomed to before. As times change, so do Ts and their chosen methods. Ss surely need the abilities that CL can pass on so I would say that the transition was troublesome for me but at the same time a necessity.

Curriculum Design: Why would you choose to embed/not embed CL/CTs in a new course that you would design?

INT/T1 Definitely. I would choose to embed both, probably CL primarily and then CTs whenever I would think that these would help. I think that they both offer advantages for Ts and Ss. Teaching models of the 21st century should focus more and more on collaboration as this is what Ss will face in the real world. ESPs need to embed CL.

INT/T2 I’d probably have some components that would require CL/CTs, times are changing and so too syllabi.

INT/T3 I’d choose to embed such components because of the aforementioned benefits. I’d be a bit skeptical though as to the extent of such an integration; I would not like my Ss to suffer from a drastic change in their educational habits.

INT/T4 Yes but not to the detriment of my trusted methods. I recognize their potential but for the time being I do not really wish to make wholesale changes to my syllabi.

To what extent and in what ways *should* perceptions and practices of university students inform (a) ESP curriculum planning and development and (b) current ESP (teaching) practice? Are there any benefits or drawbacks in considering students’ views when developing the ESP curriculum?

INT/T1 This is actually something that is the case in my workplace. S views are taken into consideration when reviewing new curricula and this is the way it should be. No T knows in advance whether a new course will work and getting S feedback can be a valuable source of information on how to go about revising the course in order to be more effective next time it is taught. I can’t really see any drawbacks in this.

INT/T2 S views are heard and are taken into consideration when reviewing courses so yes, they should be heard. I think it’s good that such feedback is given. It may have been more productive and successful even if Ss were required to provide feedback rather than leaving it as optional.

INT/T3 Ss should have a say in how syllabi are formed; obviously pedagogical decisions are down to the T but things like content and methodologies can also be decided after Ss have given their own feedback on prior practices.

INT/T4 Yes they should but you know, success or not of a course depends on the T and on the particular group they teach.

**Appendix 8c**

**Sample completed teacher questionnaire**

Please answer the questions below only with regard to the ESP classroom in Higher Education. Please leave out any questions you feel uncomfortable answering.

**Part 1: Collaborative Learning**

1. How extensively do you tend to employ CL in ESP courses?

* Extensively \_\_\_\_\_
* Somewhat \_\_\_\_\_√
* Rarely \_\_\_\_\_
* Never \_\_\_\_\_

1. Have you encountered any of the following issues with regard to applying CL in your ESP classroom?

* Student inability to work in groups \_\_\_\_\_
* Student unwillingness to work in groups \_\_\_\_\_√
* Time restrictions \_\_\_\_\_√
* CL does not bode well with ESP syllabus \_\_\_\_\_
* Student assessment issues \_\_\_\_\_
* Other (please specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Name the most important benefit(s)that in your opinion CL may bring to the ESP classroom:
   1. for learners (if any).

The fact that students learn from each other.

* 1. for teachers (if any).

Observe how students work together and encourage students to work collaboratively rather than alone as this is normally how it is going to be in their work environment in the future.

1. Name the most important drawback(s) that in your opinion CL may bring to the ESP classroom:
   1. for teachers (if any).

It’s time consuming and it could take you back in the syllabus.

* 1. for teachers (if any).

Shy students don’t normally participate in this type of activities.

1. Through which means have you integrated CL in your ESP classroom(s)? (please tick all that apply)

* Computer \_\_\_\_\_√
* Internet \_\_\_\_\_
* Blackboard \_\_\_\_\_√
* Wiki\_\_\_\_\_
* Blog \_\_\_\_\_
* Means other than technology \_\_\_\_\_
* Other(please specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Grouping students (please tick where appropriate):

* I like to group students myself\_\_\_\_\_
* Students are free to form groupson their own \_\_\_\_\_
* This depends on the task at hand \_\_\_\_\_√

1. What do you think is the optimal group size for tasks that require students to work in groups?

* 2 students \_\_\_\_\_
* 3 students \_\_\_\_\_
* 4 students and over\_\_\_\_\_
* Depends on the particular task \_\_\_\_\_√
* I don’t think group size really matters \_\_\_\_\_

1. How do you normally assess group work (if applicable)?

* Group gets common mark; group members also get separate marks \_\_\_\_\_
* All students in a group get the same mark \_\_\_\_\_√
* Students in a group are only assessed individually \_\_\_\_\_

1. Which do you consider to be the main issue(s) with regard to assessing collaborative work?

The fact that it’s not easy to decide how to mark. I give the same mark to all students in a group but sometimes I feel that some students have worked more than others or that some students are better than others.

**Part 2: Computer-supported collaborative learning**

1. How would you describe your level of knowledge with regard to instructional technology in general?

Advanced \_\_\_\_\_

Average \_\_\_\_\_√

Novice \_\_\_\_\_

1. How do you feel with regards to technology integration in the ESP classroom?

I am in favor \_\_\_\_\_√

I am not in favor \_\_\_\_\_

I don’t really care \_\_\_\_\_

I can’t say/I don’t want to say \_\_\_\_\_

1. Do you tend to employcollaborative technologies in your ESP classroom(s)?

Yes \_\_\_\_\_√

No \_\_\_\_\_

If Yes, how extensively?

Always \_\_\_\_\_

Often \_\_\_\_\_

Every now and then \_\_\_\_\_√

Rarely \_\_\_\_\_

1. Name the most important benefit(s) that in your opinion CT may bring to the ESP classroom:
   1. for learners (if any).

Opportunities to work outside of the classroom in their own time and pace while collaborating.

* 1. for teachers (if any).

Check work in their own time-this could actually be good and bad depending on time restrictions.

1. Name the most important drawback(s) that in your opinion CT may bring to the ESP classroom:
   1. for learners (if any).

It could be problematic to students not familiar with technologies

* 1. for teachers (if any).

It normally creates more work.

1. Do you think language teachers should be trying to keep up with the advancements of technology in order to be able to successfully embed CL in their ESP classroom(s)?

Yes \_\_\_\_\_√

No \_\_\_\_\_

1. Do you find it necessary for language teachers to be getting training on the actual use of CT in education?

Yes \_\_\_\_\_√

No \_\_\_\_\_

**Part 3: Curriculum design**

1. If you were to design an ESP course today, would you embed CL or not?

Yes \_\_\_\_\_√

No \_\_\_\_\_

If yes, to what extent?

To a great extent \_\_\_\_\_

Moderately \_\_\_\_\_

Only to a limited extent \_\_\_\_\_√

1. Do you think students’ beliefs with regards to collaboration and technology should be taken into consideration when developing the ESP curriculum?

Yes \_\_\_\_\_√

No \_\_\_\_\_

Your reasons for this? (OPTIONAL QUESTION)

If students feel that they cannot cope with technology, it could be a waste of time trying to use it in the classroom.

1. What do you imagine our profession to be like in 10 years’ time with regards to (OPTIONAL QUESTION):
2. the use of CL?

I believe that it will be used more

(b) the use of collaborative technologies?

Collaborative technologies will definitely be used more.

This is the end of the questionnaire. Thank you for your participation.

**Appendix 8d**

**Sample student reflective journal**

**RJ/S1** TLG is very useful in ED. First of all, with TLG we have instant access in every info we want (internet). Also, we can make teaching and learning more attractive (sounds, images, videos, e.t.c). Another reason is the practicality. You only need to carry a laptop with you. Last, the expansion of time and place. For example, during a lesson, the T can be in a different place from the S, so the lesson can take place everywhere and anytime. TLG change many things and make the life of Ts/Ss more simple. It makes learning more interesting even with young children.  
Ss have access to a wider range of material. There is an advantage in long distance learning as many older Ss can follow up their ED.  
In general i believe if TLG is used correctly it can be great advantage in ED. My position is positive; I think that all of us should get used to TLG, because we should keep up with the TLG development. Αs a S I am positive because: we learn new things via the internet, it is a way for Ss to communicate easier with Ts.

**RJ/S9** Using TLG in ED nowadays can be positive. TLG can improve EDal opportunities and quality. Also the appropriate TLG use can be very beneficial in increasing EDal productivity. TLG can make the lesson more interesting for Ss and it can provide them with more sources for knowledge. TLG gives Ss the chance to work at their own pace so they are at their own level of learning. In addition to this, multimedia attract Ss’ attention. In this way the lesson is more interesting! By using TLG in ED a student allowed to explore different fields of knowledge which are not included in books. TLGical progress in ED can improve relationships between Ss because they tend to communicate via blogs , emails etc. Due to this, communication skills are developed between Ss and Ts.

**RJ/S10** TLGprovides great sources of information. Also it helps interaction and communication between Ss and Ts. Moreover, you can present a project in a more attractive way. Finally, I believe that using TLG for learning purposes attracts Ss’ interest more because in our days most of them are really familiar with TLG. As a S I find the fact that TLG is used more in ED very interesting and very helpful. I strongly believe that TLG has changed the form of ED and managed to make it easier and more attractive for Ss. It saves time. TLG is a passport nowadays. It can open many doors and give you more opportunities due to the fact that is needed everywhere. Lastly, TLG has managed by being used more in ED to turn knowledge from something boring into something attractive and possible for all. Nowadays more Ss are willing to do a task because they can use the internet for it.

**RJ/S15** Even though I myself enjoy everything TLG offers me, I am neutral with regard to its involvement in ED. I see the benefits which it brings to school such as a larger variety of information and global knowledge a Ss can have access to through the internet. Also in lessons that are usually boring to the Ss with a little use of some audiovisual material, Ss will get more excited and would want to participate more in class. On the other hand though, when it comes to access on internet no one can guarantee that Ss won't take their research beyond boundaries and get distracted by other activities. In addition there might be a lack of balance between the use of TLG and the human dialogue and communication.

**RJ/S20** I am in favor of using TLG because: (a) With TLG the communication between Ts/Ss is very easy. Ts can answer Qs and also they can provide them in advance with the lesson they are about to do. (b) Using projectors, the lesson is more interesting and understandable. (c) Ss can use the internet to do their homework etc. (d) In presentations Ss use powerpoint, pictures and videos so they make their job better and interesting! In all, I believe that TLG is very useful in learning purposes. If Ss were absent from a lesson, they could find the notes online, and not be worried for losing a lesson. Finally, computers are a part of our lives and that makes projects or homework that we may have more interesting because we use computers everyday and we don't consider homework as a chore.

**RJ/S21**

How much experience did you have of collaborative learning before this course, as a University student? (underline one)

NONE / VERY LIMITED / SOME / QUITE EXTENSIVE

What kind of assessment would you say would be most fair in collaborative work? (underline one)

1. Common grade for everyone
2. Individual grade
3. Common plus individual grades
4. Other (please specify)

In between 20-50 words, please justify your answer.

I think it should be c because in my own point of view it is more fair to be graded by individual grade for the work that someone has done and with common plus for the work that have also done concerning a specific assignment that has to do with group work.

To what degree have you experienced the following in the groups you participated in? (underline the degree for each one)

Conflicts: NONE / SOME / A LOT

Competitiveness: NONE / SOME / A LOT

Loafing: NONE / SOME / A LOT

What would the ideal group size be for you for the purposes of this course? (underline one)

1. 2
2. 3
3. 4
4. 5+

In between 20-50 words, please justify your answer.

I think the ideal group size is 4 because in a group like that you have to collaborate with different kinds of people and you have to manage to achieve the best grade excepting the difficulties that maybe these kind of people may cause.

Would you prefer to form your own groups or participate in pre-formed groups? (underline one)

1. Form our own groups
2. Pre-formed groups

In between 20-50 words, please justify your answer.

I prefer form our own groups because it is better to create a group with the abilities that the people of the group can offer.

Which advantages/disadvantages you see in collaborative learning? (please write between 50-100 words here; please write in bullet-points)

Advantages: In my point I believe that there are a lot of advantages that you have gain in collaborative learning. You can learn to work with other and learn from them and also try to manage the task for an assignment. You can also learn to manage the people that expect work only from other without trying and finally to work in groups all together for the best grade.

Disadvantages: I don’t think that there are serious disadvantages in CL. The only case that there is a disadvantage is when you receive a grade for the group and not as a person individual for the work that you have done. I believe that every student must be examinate individually.

Which advantages/disadvantages you see in collaborative learning? (please write between 50-100 words here; please write in bullet-points)

Advantages:

* We learn to collaborative despite the difficulties we are facing
* It’s an opportunity to understand the personality of our colleagues as we don’t know everyone in our class
* Social skills development
* Greater range of information available
* Possibility to win something from the ideas of others, learn new things

Disadvantages:

* Problem of communication
* Conflicts
* Loafing

**Appendix 8e**

**Sample researcher’s reflective journal**

RJ entries were entries that I made throughout the study, documenting reflections, thoughts, ideas, occurring changes, and other considerations. These had a self-reflexive purpose, to keep track of changes in RD, instruments a.s.o., and also aimed at rendering the research process transparent. Frequently revisiting these entries led to certain changes in my research design (documented throughout the thesis) and also made the research process visible to readers. Surely, there is always the question of subjectivity hanging over self-reported instruments; this however is visited elsewhere in the thesis.

**1 / 16 Aug 2011 – first entries**

The research begins in earnest. I’ve spent 2 hours last night re-reading my proposal, trying to somehow shrink it to under 7K words. Only just. I hope the change in focus and methodology is a successful one, and the right one for that matter. I find myself preoccupied with the study’s particulars and I can hardly wait to start, getting excited by simply reading through interviewing techniques. Here we go then, may God be with me and help me.

**4 / 21 Aug 2011**

Minor changes to research proposal following Dr Lamb’s email. The proposal just got a bit more focused I’d say.

**2 / 16 Aug 2011**

The R aims coming up with Ss’/Ts’ beliefs/perceptions/views on the use of TLGs that promote CLB/COOP in ESP environments. There are constants here: TLG in conjunction with CLB/COOP in conjunction with ESPs, and any outcomes should be viewed ONLY taking all constants together. The ppts’ answers do not necessarily reflect their overall attitudes towards instructional TLG used in courses other than ESPs, not towards TLGs that do not quite promote CLB. Had the study explored their perceptions on web tools that were not employed in ESPs (e.g. employed in EAPs, or in non-language courses)/are not CLBV in nature (e.g. searching a database, diary entries that are for personal reflections only etc.), then those perceptions might have been entirely different to the ones obtained via this study.

**5 / 30 Aug 2011**

I need to make sure all factors affecting Ss/Ts’ beliefs around TLG are accounted for in my interviews to the greatest degree possible.

**6 / 19 Sep 2011**

Feedback for Research Proposal received. Pretty satisfied with comments. Room for tweaks here and there that will lead to design improvement. Part I of EdD completed with flying colors. Now go for the real thing.

**7 / 25 Sep 2011**

2 years to go to thesis submission date ☺ I am doing a weekly calendar today covering the next 104 weeks or so. Also I am preparing a few questions for Dr Lamb. I don’t really have any qualms about the whole thesis thing right now, for the time being it’s only time management that is of concern.

**8 / 07 Oct 2011**

A lot of reading lately, and I mean *a lot*. Style, structure etc., which I find increasingly significant for the advancement of my thesis. I’ll start worrying about the actual writing phase after the RW. For now, comments and Qs aplenty on thesis processes and specifics. Viva Qs quite intriguing.

**9 / 28 Oct 2011**

Working on the structure.

**10 / 14 Feb 2012**

PO Ss are split in groups of 3 or 4. I can see at least one person in each group working really hard and there are also instances of social loafing in 2 of the 5 groups formed.

**11 / 16 Feb 2012**

I need to assess Ss on CLBV tasks, both as a group and individually, so that I can get their feedback on assessing CLBV work. I will design their 10% project in such a way so as to achieve this.

PO Disagreement within the groups about certain ideas to be included in the project

PO Some Ss are more active than others (instances of loafing)

POSs were allowed to freely form groups

PO Not all members showed up during Ass.1 so in some groups, Ss needed to work individually

PO In pair work, some Ss had disagreement with one another / instead of resolving the conflict, they decided to split and worked individually

**12 / 2 April 2012**

I’ve had a change of heart regarding instructors. My initial thought was to also interview my colleagues from the English section.  However, I’ve considered turning T interviews into a qualitative questionnaire with open-ended Qs.  I know the data gathered may not be as rich compared to the data collected if I interview them and I lose the chance to probe for more on some of their answers but at least I can get most, if not all of them filling in the questionnaires rather than having half of them not participating at all

Decided to triangulate data with RJ/PO/IDIs/GIs/QQ

Practicality of my R: who is going to benefit from this? I am not only doing this to get a doctorate, I want this to mean something. If you don’t really believe in something, you don’t devote 4 years of your life writing about it.

Power relations with S participants

I expected T ppts to be more supportive of this by filling out QQ. Still, 8 returns are enough for this case study. Would have liked double figures though.

**14 / 10 July 2012**

Been doing extensive reading on PO and RJ.

Renumbered my sections, ethics before tools so that I talk of IR before I visit my tools.

Issues of ethics / subjectivity arise. RJ has to do with documenting those considerations. Not worried about the thesis, I think it is progressing quite well.

**15 / 20 July 2012**

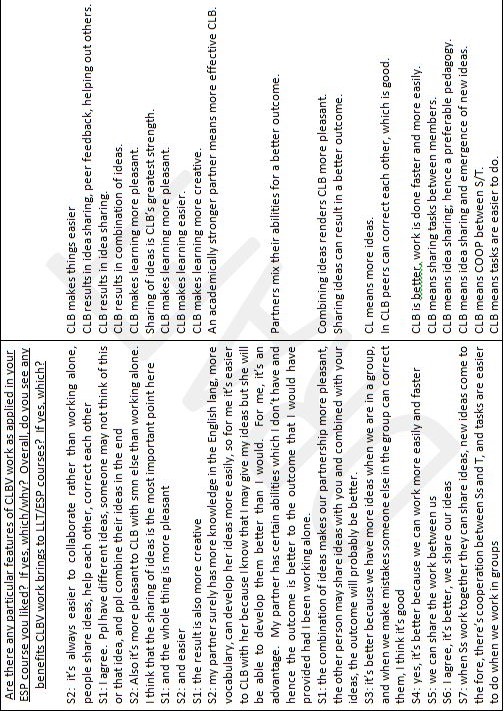
Reading about reflexivity made me think that I should have started writing this journal long before I have. Reflexivity proves to be extremely important, probably the single most important element in ensuring that qualitative research is not accused of bias etc.

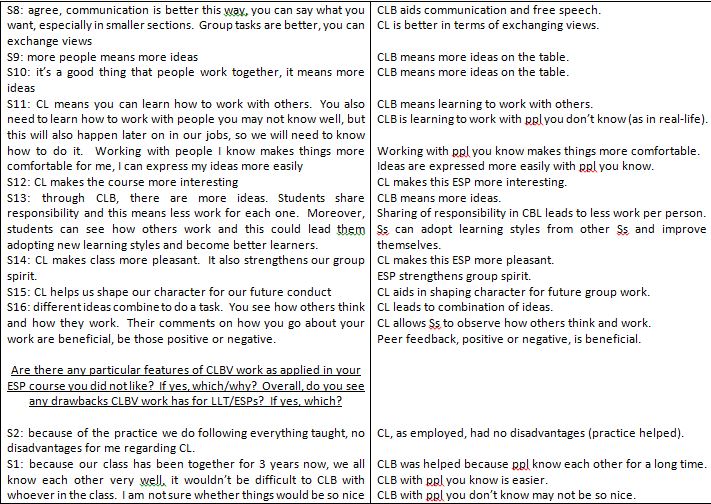
**17 / 20 March 2013**

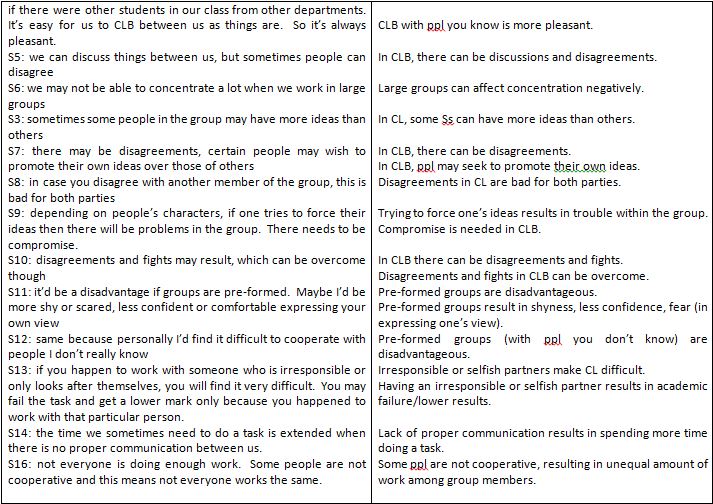
Decided against using NVivo; feel much more comfortable doing my TA manually

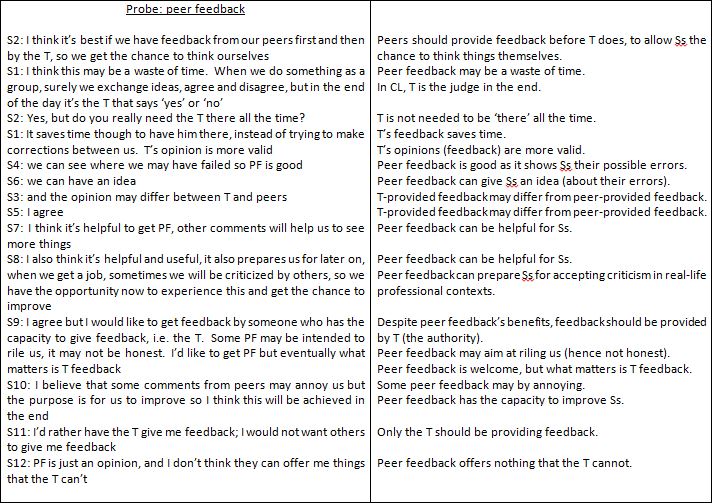
**Appendix 9a**

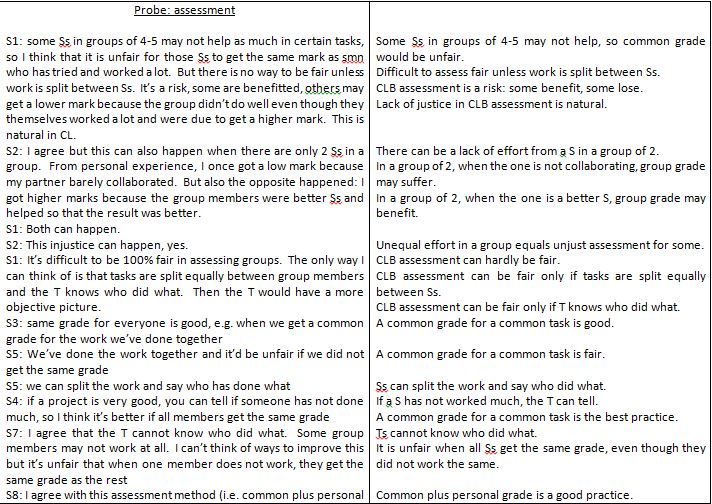
**Sample initial coding and thematization for student interviews**

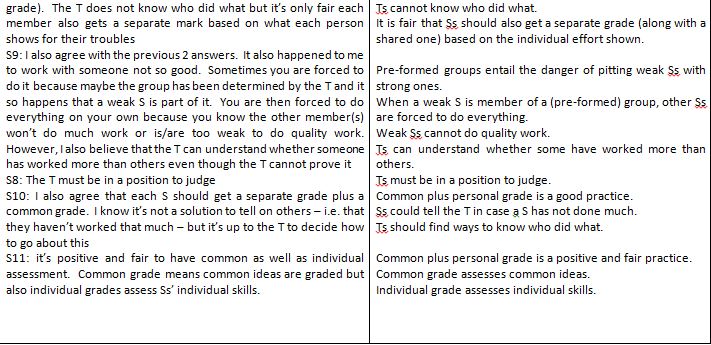












**Sample initial thematization**

|  |
| --- |
| Are there any particular features of CLBV work as applied in your ESP course you liked? If yes, which/why? Overall, do you see any benefits CLBV work brings to LLT/ESP courses? If yes, which?  2 THEME: CL benefits  2.1 SUB-THEME: CL benefits resulting from sharing  Learning through collaboration is **easier** and **faster** since tasks are shared  INT/S2: it’s always easier to collaborate rather than working alone  INT/S2: [makes learning] easier  INT/S4: yes, it’s better because we can work more easily  INT/S7: tasks are easier to do when we work in groups  INT/S5: we can share the work between us  INT/S13: Ss share responsibility and this means less work for each one.  INT/S4: yes, it’s better because we can work faster  INT/S10: it has changed things a bit, making things easier and faster  INT/S5: we have to work faster now as a group compared to when we work alone because there are deadlines to meet between us  INT/S6: I don’t think it has changed a lot but as a group we have to meet all the time and work faster  RJ/S26 The work is distributed between the members of the group so each person has less work to do  RJ/S28 sharing workload means tasks are executed faster  RJ/S30 the work is divided between the members of a group (for a group work for example).  RJ/S33 the work is divided  CLB makes learning **more pleasant** and **more interesting**.  INT/S2: it’s more pleasant to CLB with smn else than working alone.  INT/S1: the whole thing is more pleasant  INT/S1: the combination of ideas makes our partnership more pleasant  INT/S14: CL makes class more pleasant.  INT/S12: CL makes the course more interesting  INT/S1: It makes me joyous  INT/S2: agree  CLB results in **more ideas** and in **idea sharing**  INT/S2: people share ideas  INT/S1: Ppl have different ideas, someone may not think of this or that idea, and ppl combine their ideas in the end  INT/S2: I think that the sharing of ideas is the most important point here  INT/S3: it’s better because we have more ideas when we are in a group,  INT/S9: more people means more ideas  INT/S10: it’s a good thing that people work together, it means more ideas  INT/S13: through CLB, there are more ideas.  INT/S16: Ss combine their different ideas to do a task.  INT/S6: it’s better, we share our ideas  INT/S7: when Ss work together they can share ideas, new ideas come to the fore  INT/S8: Group tasks are better, you can exchange views  RJ/S32 more ideas are generated  RJ/S26 You listen to points that you may have not thought of before  RJ/S28 Different ideas and perspectives arise  CL **eases preparation** and makes learning **more effective**  INT/S1: CL makes things more effective so preparation becomes easier  INT/S2: my partner surely has more knowledge in the English lang, more vocabulary, can develop her ideas more easily, so for me it’s easier to CLB with her because I know that I may give my ideas but she will be able to develop them better than I would. For me, it’s an advantage. My partner has certain abilities which I don’t have and hence the outcome is better to the outcome that I would have provided had I been working alone.  INT/S13: students can see how others work and this could lead them adopting new learning styles and become better learners.  INT/S16: You see how others think and how they work.  INT/S1: the other person may share ideas with you and combined with your ideas, the outcome will probably be better.  INT/S1: the result is also more creative  Ss can learn from each other  RJ/S22 Possibility to win something from the ideas of others, learn new things  RJ/S21 You can learn to work with other and learn from them  RJ/S24 To learn from one another, to imitate someone’s abilities and improve our performance  RJ/S25 When working in groups, people learn from one another, thus they gain more experience.  RJ/S27 You learn from each other  RJ/S30 In CL we can learn from the others and hear different opinions than ours.  RJ/S33 learn from each other to some extent  2.2 SUB-THEME: CL benefits resulting from interpersonal relations  CLB **aids communication** and **free speech**  INT/S8: communication is better this way, you can say what you want, especially in smaller sections.  CLB results in **peer feedback**  INT/S2: people help and correct each other  INT/S3: when we make mistakes someone else in the group can correct them, I think it’s good  INT/S16: [peer] comments on how you go about your work are beneficial, be those positive or negative.  RJ/S24 To avoid someone’s errors and to help him/her correct them  CLB strengthens **group spirit**  INT/S14: It also strengthens our group spirit.  RJ/S24 Get to know each other better  CL-based AUT is good, Ss can learn from their mistakes in a less strict context.  INT/S7: I think AUT is good, we may make mistakes but we learn out of those. We can discover things ourselves  INT/S8: I am in favor of AUT, it makes things a bit more loose, and since you can learn then why not  INT/S12: for me personally, AUT is more convenient, I can work more freely.  CL provides **authenticity** (in working with ppl you don’t know)  INT/S11: You also need to learn how to work with people you may not know well, but this will also happen later on in our jobs, so we will need to know how to do it.  INT/S15: CL helps us shape our character for our future conduct  INT/S1: I am not sure whether things would be so nice if there were other students in our class from other departments.  RJ/S31 It teaches you to work together, and this is important, because in the future when you have your work, you will have to engage with more people.  Ss learn to work with other people and develop social skills  RJ/S25 Learning to work with others (even if you don’t know them very well)  RJ/S29 Learn to work in teams and respect others’ opinions  RJ/S22 Social skills development; We learn to collaborate despite the difficulties we are facing  RJ/S32 social skills developments  CL, as employed, had no disadvantages (practice helped).  INT/S2: because of the practice we do following everything taught, no disadvantages for me regarding CL.  2.3 SUB-THEME: CL raises motivation  Ss are motivated because of the CL pedagogy adopted.  INT/S1: It doesn’t have to do so much with the material we cover rather than with the pedagogy. It’s pleasant to CLB so …  Motivation for this ESP is raised because of the skills taught.  INT/S2: for this particular ESP yes, we are motivated because it relates to our studies. The skills we learn (letters, emails etc.) are related to our studies. I am motivated because of that.  Main features: idea sharing and generation, learning is easier/faster, better outcomes… |

**Appendix 9b**

**Sample initial coding and thematization for teacher sample**

|  |  |
| --- | --- |
| **Part 1: Collaborative Learning**  How much do you tend to employ CL in LSP courses?  Extensively 5  Somewhat 3  Rarely  Never  Have you encountered any of the following issues with regard to applying CL in your LSP classroom?  Student inability to work in groups 2  Student unwillingness to work in groups 4  Time restrictions 6  CL does not bode well with LSP syllabus  Student assessment issues 2  Other (please specify) 1  >> CL is time consuming as far as preparation and explanation of the tasks to Ss are concerned  Name the most important benefit(s) that in your opinion CL may bring to the LSP classroom:  for learners (if any).  QQ/T1: When learners work together on a task they will benefit linguistically and emotionally well beyond the ESP classroom.  QQ/T2: They learn to work in groups, assess each other, learn from each other’s mistakes. They are more motivated.  QQ/T3: The fact that students learn from each other.  QQ/T4: Ss learn from each other, exchange views on things that interest them, share experiences  QQ/T5: Enables them to practise/ use what they have learned before more actively and without the permanent surveillance of the teacher  QQ/T6: One important benefit is the improvement obtained when working with others. The weak students cover their shortcomings, and the good students become more competent by explaining or correcting others.  QQ/T7: make the lesson more interesting, give the students the chance to improve their skills and knowledge  QQ/T8: It makes the task more fun, learners usually like working in groups and most of the time feel comfortable with the other learners. It’s also a way to help them improve their overall communication skills (essential in the real world!) by learning to express and defend their ideas and also by learning to accept others ideas.  for teachers (if any).  QQ/T1: The teacher will be free to circulate and facilitate the work done in the groups.  QQ/T2: Ts avoid talking all the time in class, they engage their Ss in the learning process.  QQ/T3: Observe how students work together and encourage students to work collaboratively rather than alone as this is normally how it is going to be in their work environment in the future.  QQ/T4: makes their class more interesting, hands on  QQ/T5: Gives you short breaks to deal with other issues (walk around and find out difficulties of students and help them, prepare next activity, relax for 2 minutes)  QQ/T6: They help students to act autonomously, be responsible of their learning and become independent learners.  QQ/T7: give the teacher a chance to observe the level of the Ss  QQ/T8: I believe that what is beneficial for the learner is also for the teacher. A big problem for the teacher is always how to best motivate the learners and CL can contribute to increase motivation. | Ts employ CL in LSP courses extensively **5/8**  Ts employ CL in LSP courses often, but now always **3/8**  CL can result in/be hindered by Ss’ inability to work in groups **2**  CL can result in/be hindered by S unwillingness for groupwork **4**  CL can result in/be hindered by time restrictions **7**  Linguistic and emotional benefit for Ss; benefits extent beyond the classroom.  Ss learn to work in groups, assess each other, learn from each other’s mistakes.  CL motivates Ss.  Ss learn from each other.  Ss learn from each other, Ss exchange views on their interests,  Ss share experiences  CL enables Ss to practice and use their knowledge actively and autonomously  Working with others improves Ss through peer-feedback.  Lesson becomes more interesting.  Ss can improve their skills and knowledge.  Makes tasks more fun.  Ss feel more comfortable working with others.  CL improves Ss’ overall communication skills (needed in real-life).  T is free to move around and facilitate group work.  Ts don’t need to talk all the time.  T can prepare Ss for real-life by having them working in groups.  (similarly, CL prepares Ss for real-life)  CL makes class more interesting. CL makes class hands-on.  T gets more time to deal with other issues  T can help Ss who face difficulties  T can prepare for next activity, T can relax  T can help Ss act autonomously , be responsible for their learning and become IND learners  T has chance to observe the level of Ss  CL can increase motivation |

**Sample initial thematization**

|  |
| --- |
| How much do you tend to employ CL in LSP courses and through which means?  1 THEME: extent and means of CL employment in LSP  Amount of CL employment in LSP  Ts employ CL in LSP courses extensively 5/8  Ts employ CL is LSP often, but not always 3/8  Technology-related means  Computers **5**  Internet **4**  Blackboard **3**  Wiki **1**  Blog **3**  Non-technological means  Non-technological means **3**  What are the most important benefit(s) that in your opinion CL may bring to the LSP classroom:  2 THEME: CL benefits  2.1 SUB-THEME: CL benefits for LSP learners  Ss **can learn** from each other  QQ/T3: The fact that students learn from each other.  QQ/T4: Ss learn from each other,  QQ/T2: Ss learn from each other’s mistakes.  QQ/T4: Ss exchange views on things that interest them, share experiences  Ss learn **to work** with each other/collaborate  QQ/T2: They learn to work in groups  QQ/T8: learners usually like working in groups and most of the time feel comfortable with the other learners.  Ss learn **to assess** each other and improve  QQ/T2: assess each other.  QQ/T6: One important benefit is the improvement obtained when working with others. The weak students cover their shortcomings, and the good students become more competent by explaining or correcting others.  QQ/T7: CL gives students the chance to improve their skills and knowledge  CL **improves communication and linguistic skills** (useful in the real-world)  QQ/T8: CL is a way to help Ss improve their overall communication skills (essential in the real world!) by learning to express and defend their ideas and also by learning to accept others ideas.  QQ/T1: When learners work together on a task they will benefit linguistically and emotionally well beyond the ESP classroom.  CL **motivates** Ss  QQ/T2: They are more motivated.  Lesson becomes more **fun** and **interesting**  QQ/T7: CL makes the lesson more interesting  QQ/T8: CL makes the task more fun  CL enables Ss to practice and use their knowledge actively and autonomously  QQ/T5: Enables them to practise/ use what they have learned before more actively and without the permanent surveillance of the teacher  INT/T1: through peer-feedback it allows Ss to be more AUT and IND.  CL provides authenticity  INT/T1: It is a more realistic situation in class than individualistic learning, these being ESP courses I think authenticity is highly important. Working with others prepares Ss for their future careers.  INT/T3 I think CL can give ESP Ss a glimpse of what life in a company would be like, we don’t always collaborate with our best friends and we don’t always like the people you have to work with.  INT/T4 Ss coming to the class with minimum or no experience of CL can sometimes be difficult to organize. CL offers Ss a chance to see what a professional situation is like.  2.2 SUB-THEME: CL benefits for LSP teachers  CL allows Ts the time to move around, help Ss and relax  QQ/T1: The teacher will be free to circulate and facilitate the work done in the groups.  QQ/T5: Gives you short breaks to deal with other issues (walk around and find out difficulties of students and help them, prepare next activity, relax for 2 minutes)  QQ/T7: give the teacher a chance to observe the level of the Ss  QQ/T2: Ts avoid talking all the time in class, they engage their Ss in the learning process.  INT/T1: The T has time to deal with Ss more efficiently.  CL can help T motivate Ss  QQ/T8: I believe that what is beneficial for the learner is also for the teacher. A big problem for the teacher is always how to best motivate the learners and CL can contribute to increase motivation.  T can prepare Ss for real-life by having them working in groups, hands-on practice  QQ/T3: Observe how students work together and encourage students to work collaboratively rather than alone as this is normally how it is going to be in their work environment in the future.  QQ/T4: [CL offers] hands on [practice]  CL makes class more interesting  QQ/T4: makes their class more interesting  CL aids T in leading Ss towards AUT, accountability and IND  QQ/T6: They help students to act autonomously, be responsible of their learning and become independent learners.  What are the most important drawback(s)/issues that in your opinion CL may bring to the LSP classroom:  3 THEME: CL drawbacks  3.1 SUB-THEME: CL drawbacks for LSP learners  CL can be time-consuming  QQ/T1: CL may be more time consuming  QQ/T3: It’s time consuming  CL can prove problematic for Ss not understanding a task  QQ/T1: CL may be tedious for those who don’t have a good understanding of the task.  Strong Ss usually avoid weak Ss (hence not everyone is engaged)  QQ/T2: not all Ss are engaged in the tasks since strong Ss usually avoid weak ones  INT/T2 Also Ss who are not used to this type of work may shun it or just sit back and allow others to take the mantle. I’ve also had instances of intra-group bullying which can happen when really strong-minded individuals are pitted against really weak Ss.  Ss can be quiet/reserved/feel uncomfortable working with others, esp. with strong-minded ones  QQ/T8: Some students are quiet or reserved and feel uncomfortable working with other students especially if there are some strong personalities in the group.  Hard-working Ss can feel bad in case of common grade (knowing that loafers, weak Ss will benefit from their work)  QQ/T8: Some hard working students who do most of the work can also feel bad especially if they know that all the members of the group will get the same grade.  INT/T1 group dynamics can be a headache with students not contributing and students having not experienced CL before needing extra attention and this takes its toll.  3.2 SUB-THEME: CL drawbacks for LSP teachers  CL can be time-consuming and require more preparation  QQ/T2: Effective CL takes time in terms of preparation. Also, activities may not work effectively the first time.  QQ/T3: It’s time consuming and could take you back in the syllabus (hence Ts may lose ground on covering their material)  QQ/T8: it’s also time consuming with large groups (25 students)  INT/T1 if CL is not integrated in the curriculum then it can take you backwards in terms of covering the syllabus material.  INT/T2 It can be time-consuming in terms of implementation and it can mean more preparation on the Ts’ part  INT/T3 In terms of preparation it certainly is demanding on the T but I think that once a T designs a number of tasks and perfects them then only minor changes will be needed to use with various groups.  INT/T4 a lot of work awaits Ts in preparing for this shift in pedagogy.  CL can be difficult to manage.  QQ/T1: CL may be more difficult to manage than a straightforward lecture.  INT/T4 Ss coming to the class with minimum or no experience of CL can sometimes be difficult to manage  Shy Ss don’t normally participate in CL.  QQ/T3: Shy students don’t normally participate in this type of activities.  Difficulties in assessing CL.  QQ/T4: not easy to assess  QQ/T8: Sometimes assessing learners is not so easy  INT/T2 Assessment mostly.  INT/T3 How to grade Ss has been by far the most difficult thing for me.  INT/T4 Assessing fairly, I think this is the most obvious one. I’ve had Ss complaining about not getting a high enough grade because of someone else not doing their work, I’ve had students complaining of loafers and I’ve been trying out different ways of assessing CL.  INT/T1 The main issue is that groups are not always functioning well; some students who haven’t experienced CL before find it difficult to get used to this method, other students who are either not strong enough or don’t care that much just sit back and let others do the job. Essentially, assessment is the biggest issue given that it’s really difficult to know who did what in a group.  INT/T3 Assessment as earlier said is also a major headache; you don’t want Ss to come knocking on your door asking for re-evaluations, that’s the last thing a T would need.  INT/T4 For ESPs in particular I think assessment certainly is a concern |

**Appendix 10**

**Identified tentative themes and subthemes for both samples**

|  |  |
| --- | --- |
| **Main themes** | **Subthemes** |
| 1: Definitions and prior experience | 1.1 CL |
|  | 1.2 CTs |
|  | 1.3 Experience with CL |
|  | 1.4 Experience with CTs |
| 2: CL benefits | 2.1: CL benefits resulting from sharing |
|  | 2.2: CL benefits resulting from interpersonal relations |
|  | 2.3: CL raises motivation |
| 3: CL disadvantages | --- |
| 4: CL and autonomy | 4.1: Positive perceptions on autonomy in HE |
|  | 4.2: Neutral or negative perceptions on autonomy in HE |
| 5: CL and peer feedback | 5.1: Perceptions against peer feedback |
|  | 5.2: Perceptions favoring peer feedback |
| 6: CL and assessment | 6.1: Risks in assessing CL |
|  | 6.2: Fair practices in assessing CL |
|  | 6.3: Teachers’ role in CL assessment |
| 7: CL and accountability | 7.1: Positive perceptions towards accountability in CL |
|  | 7.2: Negative perceptions towards accountability in CL |
|  | 7.3: Student accountability and the role of the teachers’ approach |
| 8: CL and group dynamics | 8.1: Collisions |
|  | 8.2: Loafing |
|  | 8.3: Suggested group size |
|  | 8.4: Group formation type |
| 9: CT benefits in ESP |  |
| 10: CT disadvantages in ESP |  |
| 11: General viewpoints following CT integration in the ESP |  |
| 12: Effects of CL/CT integration | 12.1: Perceptions on technology |
|  | 12.2: Approaching the ESP course |
| 13: Suggested course changes | --- |

(Table 1: Identified tentative themes and subthemes for the student sample)

|  |  |
| --- | --- |
| **Main themes** | **Subthemes** |
| 1: Extent and means of CL employment in LSP |  |
| 2: CL benefits | 2.1: CL benefits for LSP learners |
|  | 2.2: CL benefits for LSP teachers |
| 3: CL drawbacks | 3.1: CL drawbacks for LSP learners |
|  | 3.2: CL drawbacks for LSP teachers |
| 4: Group formation | 4.1: Group formation type |
|  | 4.2: Group size |
| 5: Level of CT knowledge; related training | 5.1: Level of knowledge |
|  | 5.2: Training on CTs |
| 6: Use of CTs in LSP | 6.1: Perceptions regarding CT integration |
|  | 6.2: Actual degree of CT classroom integration |
| 7: CT benefits | 7.1: CT benefits for students |
|  | 7.2: CT benefits for teachers |
| 8: CT drawbacks | 8.1: CT drawbacks for students |
|  | 8.2: CT drawbacks for teachers |
| 9: CL in LSP curriculum development | 9.1: CL integration in new LSP courses |
|  | 9.2: Ss’ role in CL integration in new LSP curricula |
| 10: The future of CL and CTs in the language teaching profession |  |

(Table 2: Identified tentative themes and subthemes for the teacher sample)

**Appendix 11**

**Theme labels and definitions for both samples**

|  |  |
| --- | --- |
| **Labeling** | **Definition** |
| CL benefits and drawbacks | This theme discusses student perceptions on CL benefits and drawbacks; benefits mainly focus on idea sharing, interpersonal relations, preparation, productivity, authenticity and their effects on learning, whereas drawbacks mainly focus on a lack of communication, intra-group conflicts and various troubles resulting from individuals not behaving suitably. |
| CL group dynamics | This theme discusses group dynamics that can aid or impede a group from collaborating efficiently. Collisions, loafing and sense of community are addressed. Also, student views on how groups should be formed and what an ideal group size is, are presented. |
| Teacher assessment and peer feedback in CL | This theme discusses positive and negative student perceptions on peer feedback and also discusses assessment in CL as the main problematic area in those perceptions. Fair practices are debated, as a number of ways of assessing CL come to the fore. Attention is also drawn to the teacher’s role in assessing CL. |
| Autonomy and accountability in CL | This theme discusses positive, neutral and negative student perceptions on autonomy and accountability, as these are promoted through the integration of CL in the ESP classroom. |
| Effects of CL/CT integration in ESP | This theme discusses how student perceptions have shifted following their ESP course and whether integration of CL and CTs has affected their methodology of approaching a course in terms of preparation. |
| Benefits and drawbacks of CTs | This theme discusses student perceptions on CT benefits and drawbacks; benefits include faster execution of tasks, keeping pace with today’s age and easier communication, whereas drawbacks mainly focus on a lack of related know-how. |
| General viewpoints on CTs | This theme discusses students’ viewpoints on a number of issues relating to CTs, including concerns regarding overusing CTs and reservations over the web. |

(Table 1: Theme labels and definitions for the student sample)

|  |  |
| --- | --- |
| **Labeling** | **Definition** |
| CL benefits and drawbacks | This theme discusses teacher perceptions on CL benefits and drawbacks of CL for both themselves and their LSP students. Student-related benefits for students include motivation, authenticity and learning from one another; benefits for teachers include more time to help students and being able to provide hands-on practice. Student-related drawbacks include spending excessive amounts of time in CL and intra-group conflicts, whereas teacher-related drawbacks include the need for more preparation, assessment issues, and the challenges CL brings upon their control mechanisms. The theme also inquires whether and in what ways have teacher perceptions shifted in the past five years as a result of increasing CL integration in HE curricula. |
| CL group formation | This theme discusses teacher practices on group formation and group sizes. |
| Extent of CL employment in LSP | This theme discusses how extensively teachers tend to employ CL in their LSPs and via which means. |
| The future of CL and CTs in LSP curriculum development | This theme takes a look at what teachers believe the future holds for the language teaching profession with regard to CL and CT integration. This theme also discusses whether teachers would embed CL in a new LSP course and to what extent. It also debates the role students can play in the integration or not of CL in new LSP curricula. |
| Benefits and drawbacks of CTs | This theme discusses teacher perceptions on CT benefits and drawbacks both themselves and their LSP students. Student-related benefits include enhanced motivation, improved skills and keeping up with the digital age; teacher-related benefits include more sources to use and more variety in pedagogies. Student-related drawbacks include the time needed for students to familiarize themselves with CTs and the danger of them using CTs to socialize instead of focusing on their tasks; teacher-related drawbacks include a bigger workload, time restrictions and also the effort needed to keep up with constant advancement in CTs. |
| Level of CT knowledge and related training | This theme briefly takes a look at the teachers’ perceived level of knowledge concerning CTs and their views on whether they should be getting training on CTs. |
| Use of CTs in LSP | This theme discusses teacher practices on how CTs are employed in the LSP classroom and teacher perceptions on whether CTs should be employed in the LSP classroom in the first place. |

(Table 2: Theme labels and definitions for the teacher sample)

1. Despite the theoretical limitations behind the use of this term (e.g., ‘tutor’ or ‘facilitator’ would have been more constructivist-oriented notions), for purposes of consistency I employ the notion of ‘teacher’ throughout the thesis. Also, for the people involved in this study, the notion of ‘teacher’ better reflects their overall status in their work environment, hence the use of the term. [↑](#footnote-ref-1)
2. Notable exceptions include Kern (1995) and Horwitz (1988, 1985). [↑](#footnote-ref-2)
3. (also see Dudley-Evans & St John, 1998, p. 6; Robinson, 1991, pp. 3-4) [↑](#footnote-ref-3)
4. See Crystal (2003), for a comprehensive reading that traces the origins of English as a global language. [↑](#footnote-ref-4)
5. Pedagogy and methodology are two notions widely employed in this thesis. To avoid confusion, pedagogy is an overarching theory, encompassing methodologies, teaching and learning targets and curricula; accordingly, methodology is more specific, as it entails the particular teaching and learning activities employed in a learning environment in order to realise those targets (Bowman, Donovan, & Burns, 2000, p. 182). [↑](#footnote-ref-5)
6. (See Chapter 3, on how the course was structured). [↑](#footnote-ref-6)
7. This is not to say that all students can appreciate the value of ESP, or that they are all interested in ESP or in their field of studies (Robinson, 1991, p. 82). Moreover, let us not forget that in ESP, students face specialized skills, quite different from those involved in other language classes they have attended (Harding, 2007, p. 8). For example, in ESP, students are taught how to write memos, or how to describe technical step-by-step processes; this difference makes things even more complex. [↑](#footnote-ref-7)
8. (see for example Peterson’s (1999) assessment of web sources for ESP teaching; most of the sources he discussed relatively recently, are already a thing of the past). [↑](#footnote-ref-8)
9. For example, Gage (1989) discusses the “paradigm wars”, while Rabinow and Sullivan (1987) talk about the “interpretive turn” in mid- to late 20th century research, i.e. a shift from positivism toward hermeneutics. Such shifts (and the resulting debates) are expected, mainly because different purposes and questions demand different perspectives (Cohen, Manion, and Morrison, 2005, p. xvii; Davis, 1995, p. 448; Mackay, 1981, p. 108). [↑](#footnote-ref-9)
10. (*contingent constructivisms*; see Vavrus, 2009, p. 310) [↑](#footnote-ref-10)
11. This idea, combined (a) with the focus on language as a means of organizing our social and mental functioning, and (b) with the constructs of the *Zone of Proximal Development* and *scaffolding*, gave rise to the *sociocultural theory* (Thomas, 2000). This theory, however, offers a considerably wider theoretical lens (for more on sociocultural theory and its often contentious relation to social constructivism and to L2 learning, see Lantolf & Poehner, 2008; Lantolf & Thorne, 2006; Kinginger, 2001; Packer & Goicoechea, 2000; Lantolf & Pavlenko, 1995; Aljaafreh & Lantolf, 1994; Wertsch, 1991; Newman, Griffin, & Cole, 1989). [↑](#footnote-ref-11)
12. (cf. Gillen, 2000; van der Veer & Valsiner, 1993; Wertsch, 1985 for accounts distancing ZPD from Vygotsky). [↑](#footnote-ref-12)
13. (following on from Marx, through his writings, Vygotsky targeted social reform in the post-revolutionary Soviet Union; see Wertsch, 1985) [↑](#footnote-ref-13)
14. For extensive discussions on how ZPD was initially applied and on the different, even misplaced, selective, or over-simplified interpretations it has drawn since, see Poehner & Lantolf, 2005; Hasse, 2001; Gillen, 2000; Dunn & Lantolf, 1998; Valsiner & van der Veer, 1993). [↑](#footnote-ref-14)
15. (issues like whether there can be such a thing as full competence in language learning and what this notion entails exactly, are highly complex and debatable; word limit and scope mean that the current thesis does not wish to enter such debates. Competence in language learning is extensively addressed in the CEFR (Council of Europe, 2001); for informative and often contradictory accounts on competence, also see Bachman, 1990; Canale & Swain, 1980; Hymes, 1972; Chomsky, 1965). [↑](#footnote-ref-15)
16. cf. Swain, 2000; Donato, 1994; in language learning settings, the ZPD may also arise in the absence of a teacher. [↑](#footnote-ref-16)
17. For purposes of clarity though, I should define the two notions. I take autonomy to mean a person’s capacity to take control of one’s own learning, and develop social responsibility, self-determination and critical awareness. I take self-regulation to be a learning process that entails purposeful actions aiming at acquiring skills or information. For comprehensive discussions on autonomy in education and in foreign language learning, see Jiménez Raya, Lamb & Vieira, 2007; Lamb & Reinders, 2007; Benson & Voller, 1997; Little, 1991; Wenden, 1991; Holec, 1988; 1981;on self-regulation, seeZimmerman & Schunk, 2001; Bandura, 1997; Butler & Winne, 1995; Schunk & Zimmerman, 1994. [↑](#footnote-ref-17)
18. Also see Dunn & Lantolf, 1998 for a discussion on the links between Krashen’s comprehensible input hypothesis and ZPD in SLA research. [↑](#footnote-ref-18)
19. (see Hawkey, 2003 for a similar use of scaffolding). [↑](#footnote-ref-19)
20. (for a discussion on how the ESP course that formed the basis for the present case study is a practical example of social constructivist pedagogy, see chapter 3). [↑](#footnote-ref-20)
21. (see CEFR for languages; Council of Europe, 2001 and Bloom’s taxonomy; Kennedy, Hyland, & Ryan, 2009 for the two dominant schemes for learning outcome writing in higher education internationally) [↑](#footnote-ref-21)
22. (this echoes both Von Neumann and Morgenstern’s (1944) *Game Theory* and Nash’s (1950) *Equilibrium Theory*; these theories were born in economics but found applications in a wide range of fields) [↑](#footnote-ref-22)
23. (see Michaelsen & Black, 1994, and Mesch, 1991, for examples of how the two principles are realized in a CL setting) [↑](#footnote-ref-23)
24. (see Strijbos & Fischer, 2007 for a description of the various forms this research has taken) [↑](#footnote-ref-24)
25. Peer-reviewing has been found to have the capacity of being more informative than teacher feedback, pushing students more toward autonomy (e.g., Gray, 2002; Lockhart & Ng, 1993) [↑](#footnote-ref-25)
26. Experimental here equals a controlled application of CL. This can take place in a classroom setting but is typified by attempts to minimize negative influences such as social loafing or other disruptions, thus yielding the best possible intended outcomes. [↑](#footnote-ref-26)
27. (a way around this would be, as mentioned above, to have smaller groups or implement more direct or immediate forms of evaluations; see Bacon, 2005, p. 253). [↑](#footnote-ref-27)
28. This proposal however sounds problematic to me; what does “firing” mean in a classroom setting? Do those students fail the task or the course altogether? Are they given another chance to somehow make up for their non-collaboration? These are all considerations that need to be applied consistently, and only after teachers are completely certain that “firing” a member was fair practice from the group. Can they be so though? [↑](#footnote-ref-28)
29. (some have argued that this has already been replaced by Web 3.0, a “semantic web”. However, much of this talk has been in magazines, newspapers, and on the internet (e.g., Markoff, 2007); academic research has yet to endorse such an evolution). [↑](#footnote-ref-29)
30. (see Bento & Schuster, 2003; Lipponen, Rahikainen, Hakkarainen, & Palonen, 2003; Carr-Chellman, Dyer, & Breman, 2000; Wegerif, 1998; Hmelo, Gotterer, & Bransford, 1997; Warschauer, 1996b) [↑](#footnote-ref-30)
31. (for similar studies, also see Adam & Nel, 2009; Hartshorne & Ajjan, 2009; Ayres, 2002; Stepp-Greany, 2002) [↑](#footnote-ref-31)
32. (as stated in Chapter 1, this is one gap that the current study aims to fill) [↑](#footnote-ref-32)
33. (see Section 2.2) [↑](#footnote-ref-33)
34. (also see Section 2.3) [↑](#footnote-ref-34)
35. (for a discussion on definitions of case study, see Yin, 2009, pp. 17-8; Merriam, 1998, pp. 10-1). [↑](#footnote-ref-35)
36. (e.g., Shawer, 2010; Churchill & Churchill, 2008; Remedios, Clarke, & Hawthorne, 2008; Deaney & Hennessy, 2007; Luke, 2006; Webb, 2006; Wood & Head, 2004; Hawkey, 2003; McIntosh, Braul, & Chao, 2001) [↑](#footnote-ref-36)
37. Stress here is on *necessarily*, because, as it shall be seen later, incidence and prevalence are not rendered redundant in this thesis, as these can serve important purposes in data analysis and interpretation of findings. [↑](#footnote-ref-37)
38. (more on triangulation in Section 3.3) [↑](#footnote-ref-38)
39. (for more on insider knowledge, see Section 3.2.1) [↑](#footnote-ref-39)
40. (also see Section 3.7) [↑](#footnote-ref-40)
41. For extensive discussions on the notion of generalizability in qualitative inquiry, see Duff, 2006; Cohen *et al*., 2005; Lazaraton, 1995; Lincoln & Guba, 1985. [↑](#footnote-ref-41)
42. The issue of ‘qualitative criteria’ is a much debated one and I feel the need to clearly state my position here. The current study does employ a set of criteria for research assessment purposes. These criteria are employed as contextualized guidelines for my particular choice of methodology and framework and their use here does not promote or prescribe their use in other, different research contexts operating under different frameworks. For discussions problematizing the use of quality criteria in qualitative inquiry, see Hammersley, 2007; Spencer, Ritchie, Lewis, & Dillon, 2003, pp. 29-43. [↑](#footnote-ref-42)
43. For the need on the availability of field notes/extended transcripts, see Marshall & Rossman, 2011, p. 254; Bryman, 1988, p. 77. [↑](#footnote-ref-43)
44. Member checking was the only technique that was planned for but did not materialize. All study participants were given the opportunity to check the dataset and the resulting interpretations but at the time of writing, no one had opted to do so. [↑](#footnote-ref-44)
45. (for extensive information on the European Credit Transfer and Accumulation System, see European Commission, 2009) [↑](#footnote-ref-45)
46. (for example, in memo writing, instead of a tutorial, students had to study a variety of memos online and figure out themselves how to go about writing a business memo, how its structure should look like, what to include in it, a.s.o. I intervened and started reviewing their work, only after students started writing their memos collaboratively). [↑](#footnote-ref-46)
47. (see Chapters 4 and 5) [↑](#footnote-ref-47)
48. (see Appendices 1a, 1b) [↑](#footnote-ref-48)
49. (see Appendix 1c) [↑](#footnote-ref-49)
50. (see Appendix 2) [↑](#footnote-ref-50)
51. For extensive discussions on the protection of research participants, see Marshall & Rossman, 2011, pp. 121-130; Howe & Moses, 1999, pp. 22-5. [↑](#footnote-ref-51)
52. For a list of traits of insider research, see Foster, 2009, pp. 18-9. [↑](#footnote-ref-52)
53. A related search yielded a small number of studies on faculty appraisal (Mercer, 2007), faculty involvement in shared governance (Labaree, 2002), academic research (Brannick & Coghlan, 2007), doctoral qualitative research (Hellawell, 2006), school management (Preedy & Riches, 1988) and educational administration (Anderson & Jones, 2000) but none on beliefs and perceptions of pedagogies or curriculum matters. [↑](#footnote-ref-53)
54. To overcome such limitations, Trowler (2011) suggested conducting research “polyocularity” (i.e. having research teams from several inside/outside cultures). However, this requires excessive resources. [↑](#footnote-ref-54)
55. For extensive discussions on informed consent, see Shaw, 2008, and Howe & Moses, 1999. [↑](#footnote-ref-55)
56. (see Appendix 6a) [↑](#footnote-ref-56)
57. (see Appendix 6b) [↑](#footnote-ref-57)
58. Such concerns may of course apply to my teacher sample, too. However, being a junior member of staff, I consider the student sample to be more of an issue here. [↑](#footnote-ref-58)
59. I should clarify why I opted for group interviews over focus groups: focus groups normally look for group norms and the interviewer takes the more withdrawn role of a moderator (Patton, 2002, p. 386), therefore the discussion relies almost entirely on group interaction. In addition, focus groups are usually more successful if composed of strangers (Cohen *et al*., 2005, p. 288), which was not the case here. My idea behind having a group of participants interviewed together was to get richer data without however having to relinquish my control in terms of the overall agenda; I hence opted for the more general group interview type. Moreover, I opted for both individual and group interviews for my student sample for two reasons. One reason was to take advantage of some added group interview strengths (see further below). Based on feedback from my piloting, the second reason was to be able to accommodate both students who felt more comfortable being interviewed individually and students who felt more comfortable being interviewed in groups (see 3.7.2). [↑](#footnote-ref-59)
60. (see Chapter 4) [↑](#footnote-ref-60)
61. (see Section 3.7) [↑](#footnote-ref-61)
62. (a) standardized, (b) in-depth, (c) ethnographic, (d) elite, (e) life history, (f) focus groups (LeCompte & Preissle, 1993), (g) semi-structured, (h) group interviews (Bogdan & Biklen, 1992), (i) structured (Lincoln & Guba, 1985), (j) exploratory (Oppenheim, 1992), (k) informal conversational, (l) interview guide approaches, (m) standardized open-ended and, (n) closed quantitative interviews (Patton, 1980). [↑](#footnote-ref-62)
63. (see Appendix 7c) [↑](#footnote-ref-63)
64. (Q12, Q15, Q16, Q17, Q18) [↑](#footnote-ref-64)
65. (Q12 and Q17 forwarded to a rating scale, Q18 forwarded to an open question) [↑](#footnote-ref-65)
66. (Q1, Q10, second part of Q12, second part of Q17) [↑](#footnote-ref-66)
67. (Q2, Q5, Q6, Q7, Q8, Q11) [↑](#footnote-ref-67)
68. (Q3, Q4, Q9, Q13, Q14, second part of Q18, Q19) [↑](#footnote-ref-68)
69. (Q3, Q4, Q13, Q14 and Q19) [↑](#footnote-ref-69)
70. (albeit with no significant difference in the substance of the data produced by the two modes or the length of answers to open-ended questions; Denscombe, 2008, pp. 253, 364) [↑](#footnote-ref-70)
71. (for a comprehensive discussion on the merits and limitations of various forms of web surveys, see Vicente & Reis, 2010; Dommeyer & Moriarty, 2000). [↑](#footnote-ref-71)
72. (cf. loss of context because of non-continuous text in web questionnaires; Toepoel, Das, & Van Soest, 2009, p. 201). [↑](#footnote-ref-72)
73. (see Section 3.7) [↑](#footnote-ref-73)
74. (e.g., Q18: Do you think students’ beliefs with regard to collaboration and technology should be taken into consideration when developing the ESP curriculum?) [↑](#footnote-ref-74)
75. (e.g., Q19: What do you imagine our profession to be like in 10 years” time with regard to the use of CL/of CTs) [↑](#footnote-ref-75)
76. (e.g., Q16: Do you find it necessary for language teachers to be getting training on the actual use of CT in education?) [↑](#footnote-ref-76)
77. (only two participants failed to answer the optional part of Q18, and only two participants failed to answer Q19 which was also optional). [↑](#footnote-ref-77)
78. Hence, personal entries are not intended to quote from in this thesis. [↑](#footnote-ref-78)
79. (for a comprehensive discussion on the challenges and limitations of instructional reflective journals, see O’Connell & Dyment, 2011). [↑](#footnote-ref-79)
80. (see Section 3.3) [↑](#footnote-ref-80)
81. (e.g., snowball sampling, quota sampling, dimensional sampling, convenience sampling; see Fox, 2010; Battaglia, 2008) [↑](#footnote-ref-81)
82. (2 groups X 4 students, 2 groups X 2 students) [↑](#footnote-ref-82)
83. (in a 10-point GPA system, with 5 being the pass mark) [↑](#footnote-ref-83)
84. (3 individual interviews, 2 groups X 3 students) [↑](#footnote-ref-84)
85. (see Appendix 3a) [↑](#footnote-ref-85)
86. (see Appendix 3b) [↑](#footnote-ref-86)
87. (see Appendix 4a) [↑](#footnote-ref-87)
88. (see Appendix 4b for revisions on teacher questionnaires and individual interviews) [↑](#footnote-ref-88)
89. (see Appendix 5a) [↑](#footnote-ref-89)
90. (see Appendix 6a) [↑](#footnote-ref-90)
91. (see previous section) [↑](#footnote-ref-91)
92. (see Appendix 7a for the Conversation Guide, including a list of all the prompts and probes used) [↑](#footnote-ref-92)
93. (see Section 3.9) [↑](#footnote-ref-93)
94. (see Section 3.10) [↑](#footnote-ref-94)
95. (this was the only part of all data collection that took place in Greek). [↑](#footnote-ref-95)
96. (see Appendix 5b) [↑](#footnote-ref-96)
97. (for a completed questionnaire, see Appendix 8c) [↑](#footnote-ref-97)
98. (see Vicente & Reis, 2010, p. 252, on how low response rates can be causes of bias in surveys) [↑](#footnote-ref-98)
99. (see Appendix 6b) [↑](#footnote-ref-99)
100. (see Appendix 7d) [↑](#footnote-ref-100)
101. (see Section 3.9) [↑](#footnote-ref-101)
102. (see Section 3.10) [↑](#footnote-ref-102)
103. (for a sample of the personal reflective journal, see Appendix 8e) [↑](#footnote-ref-103)
104. (for the reflective journal template, see Appendix 7b; for a sample of the completed student reflective journal, see Appendix 8d) [↑](#footnote-ref-104)
105. (for an indicative sample, see Appendices 8a, 8b; transcriptions of all interviews, as well as the tape-recorded interviews, are available electronically upon request, should any ambiguities or inconsistencies arise in the transcribed data; see Fasick, 2001). [↑](#footnote-ref-105)
106. (see Section 3.10) [↑](#footnote-ref-106)
107. (e.g., see Attard & Coulson, 2012, for using thematic analysis within an essentialist/realist theoretical framework; see Kracker & Pollio, 2003, for using thematic analysis within a phenomenological framework; see Jones, MacGillivray, Kroll, Zohoor, & Connaghan, 2011, for using thematic analysis within an analytic comparative framework). [↑](#footnote-ref-107)
108. (adapted from Braun & Clarke, 2006) [↑](#footnote-ref-108)
109. (these are quite similar to Braun and Clarke’s thematic analysis but the relevant literature is quite narrow) [↑](#footnote-ref-109)
110. (this mainly aims at generating a theory, which was not my purpose here) [↑](#footnote-ref-110)
111. (there are no instances of this being used in the Humanities, having emanated from Psychotherapy studies) [↑](#footnote-ref-111)
112. (for a sample of initial codings, see Appendices 9a, 9b) [↑](#footnote-ref-112)
113. (Tables 1 and 2; see Appendix 10) [↑](#footnote-ref-113)
114. (see Appendix 11) [↑](#footnote-ref-114)
115. (how many participants say things relevant to a theme) [↑](#footnote-ref-115)
116. (frequency of theme occurrence throughout the dataset) [↑](#footnote-ref-116)
117. Ideal group size (individual interviews): 2 (9 entries), 2-3 (2 entries), 3 (2 entries), 3-4 (1 entry), 4 (2 entries). [↑](#footnote-ref-117)
118. Ideal group size (reflective journals): 2 (7 entries), 3 (2 entries), 2-3 (3 entries), 4 (1 entry), 5+ (1 entry). [↑](#footnote-ref-118)
119. i.e. all assessable components of a course are pair or group tasks, meaning that students are never individually assessed but their grade is always dependent upon their own *and* others’ effort and performance. [↑](#footnote-ref-119)
120. (see Section 2.3) [↑](#footnote-ref-120)
121. (students saw the benefit of being grouped with more competent peers and attested to improvements in their own performance, while teachers employ CL as a means of exploiting its potential to lead to better learning outcomes, via its capacity as a tool for ZPDs) [↑](#footnote-ref-121)
122. As a side note, peer feedback, a key constructivist component of collaborative curricula, also split opinions: it was seen as being more representative of the real world, compared to teacher feedback which was regarded to be more valid. [↑](#footnote-ref-122)
123. Rather than a term exam, a series of smaller assessable components were used (mid-term and final exam, three writing assignments, an oral presentation), leading to a rethinking of assessment’s overall purpose. [↑](#footnote-ref-123)
124. Qualitative changes refer to deep learning practices, i.e. an active understanding of concepts and their relationships, as opposed to surface learning practices, i.e. memorization, a focus on facts and minimal understanding of concepts and their relations. [↑](#footnote-ref-124)
125. (see Chapter 3) [↑](#footnote-ref-125)
126. (see Chapter 3) [↑](#footnote-ref-126)
127. (see Chapter 4) [↑](#footnote-ref-127)
128. (see Chapter 3) [↑](#footnote-ref-128)
129. (for example, I substituted grounded analysis with thematic analysis when I saw that the purposes of my research were better met by the latter) [↑](#footnote-ref-129)