Research and Practice in Applied Linguistics

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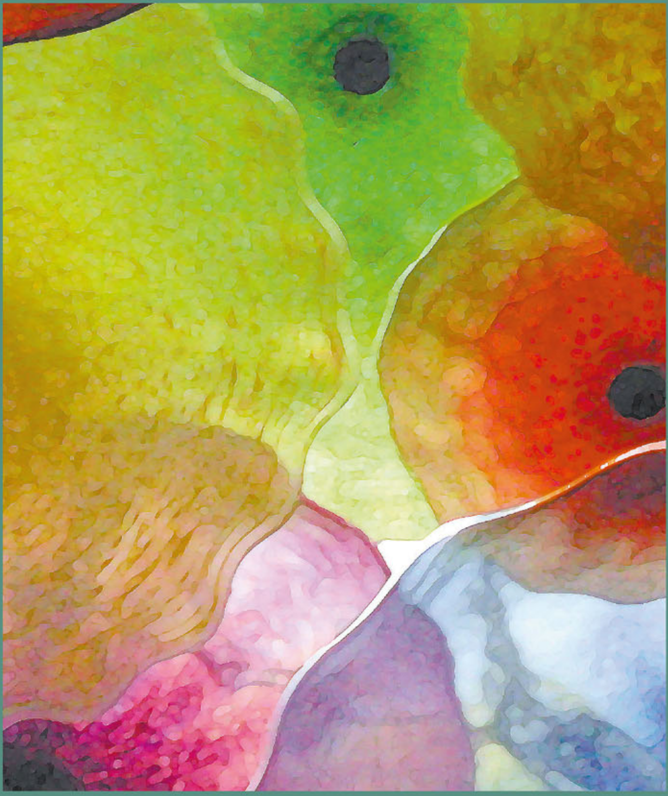
Language for Specific Purposes



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Research and Practice in Applied Linguistics

General Editors: **Christopher N. Candlin** and **David R. Hall**, Linguistics Department, Macquarie University, Australia.

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Language for Specific Purposes

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*To the memory of David Hall, our much loved
and deeply missed colleague and friend*

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General Editors' Preface

Research and Practice in Applied Linguistics provides the essential cross-over between research in applied linguistics and its practical applications in the professions. Written by leading scholars and practitioners, the series provides rapid and authoritative access to current scholarship and research on key topics in language education and professional communication more broadly. Books in the series are designed for students and researchers in Applied Linguistics, TESOL, Language Education, Communication Studies and related fields, and for professionals concerned with language and communication.

Every book in this innovative series is designed to be user-friendly, with clear illustrations and accessible style. The quotations and definitions of key concepts that punctuate the main text are intended to ensure that many, often competing, voices are heard. Each book presents a concise historical and conceptual overview of its chosen field, identifying many lines of enquiry and findings, but also gaps and disagreements. Throughout the books, readers are encouraged to take up issues of enquiry and research that relate to their own contexts of practice, guided by reflective and exploratory questions and examples that invite practical connections to their work.

The focus throughout is on exploring the relationship between research and practice. How far can research provide answers to the questions and issues that arise in practice? How should we warrant the relevance of research to practice? Can research questions that arise and are examined in very specific circumstances be informed by, and inform, the global body of research and practice? What different kinds of information can be obtained from different research methodologies? How should we make a selection between the options available, and how far are different methods compatible with each other? How can the results of research be turned into practical action?

The books in this series identify key researchable areas in the field and provide workable examples of research projects, backed up by details of appropriate research tools and resources. Case studies and exemplars of research and practice are drawn on throughout the books. References to key institutions, individual research lists, journals and professional organisations provide starting points for gathering information and embarking on research. The books also include annotated lists of key works in the field for further study.

The overall objective of the series is to illustrate the message that in Applied Linguistics there can be no good professional practice that isn't based on good research, and there can be no good research that isn't informed by practice.

Christopher N. Candlin and David R. Hall
Macquarie University, Sydney

Acknowledgements

Stephen and I sincerely thank our families and David's for their support throughout this book's journey to completion.

And what a journey it has been! The idea for this book emerged from a partnership between David Hall and I when we were developing a course in LSP for the Master's in Applied Linguistics at Macquarie University. Both of us had worked separately for many years in EAP and ESP in Sydney, and David also had valuable experience developing ESP courses in Europe, the Middle East and Asia (particularly in Thailand). This book had a very long gestation, and unfortunately our careers and the ups and downs of life would not stop for the writing of a manuscript. At first, David and I were both heavily involved in our teaching and other work for the National Centre for English Language Teaching and Research (NCELTR) at Macquarie. David took on heavier responsibilities there, including head of postgraduate research, head and co-editor with Chris Candlin (1940–2015) of the RAPAL series, while I subsequently took up a leading role in EAP at The University of Western Sydney and finally took a tenure-track position in the USA. Consequently, much of the writing of this book took place at a distance, via email, Skype and meetings at international conferences as far-flung as Brisbane, Beijing and Madison, Wisconsin.

As lead author there are many people I want to acknowledge specifically. First, I want to acknowledge David, for his generosity in giving me his time and access to his unique and comprehensive LSP library whenever I returned to Sydney. It was with enormous shock and sadness that we received the news in 2013 that David had only a very few months to live. With tremendous courage, mental toughness and his irrepressible and self-deprecating humour, David continued to work on his parts of the manuscript until shortly before his death. I was overwhelmed that David bequeathed to me his LSP library, which is now mostly with me in the United States. It is poignant to open a reference work in LSP, and see 'David Hall, 1991' or 'David Hall, 2006' handwritten inside the front cover.

Secondly, I sincerely thank Stephen for agreeing to step in to 'lightly edit' David's chapters, write some of the final sections, and help bring the whole manuscript to the point of submission. He has done a wonderful job in preserving David's voice, while adding his own substantial intellectual contribution.

Thirdly I wish to acknowledge a debt to the English Language Institute at the University of Michigan in Ann Arbor. I was very fortunate to receive a Morley Scholarship in 2001 to do preliminary research for this book. John Swales was extremely generous with his time, his personal library and his incisive comments on some very early draft sections of this book. I returned to the ELI in the summer of 2004 to team-teach in the summer institute for international students of business and law. I thank Dianne Larsen-Freeman for this opportunity, and the teachers for allowing me to work with their students. I also thank the many new friends I made at the ELI, especially Elizabeth Axelson and Chris Feak, for their personal and professional hospitality while I was working on my research.

Finally, on a very personal note, I thank my husband, Professor Daniel Kies, for his extreme patience, his unfailing confidence in my academic pursuits, and his very pertinent and helpful comments on the manuscript.

Stephen and I would both like to acknowledge Chris Candlin, the Series Editor, for his continuing faith in our writing project over such a long and, at times, difficult gestation, and for his very supportive and timely editorial guidance and comments. Any remaining errors or omissions are entirely our responsibility.

Sandra Gollin-Kies and Stephen H. Moore
May 2015

About the Authors

Sandra Gollin-Kies is Associate Professor in the Department of Languages and Literature at Benedictine University, where she co-directs the MA in Linguistics (TESOL), and teaches EAP for Master's programmes in Business and Health, as well as academic writing for social sciences and sciences to undergraduates. Her career in LSP began in Australia in the mid-1970s. She set up the first university-wide EAP programme at the University of Technology, Sydney, and directed The Learning Centre at the University of Western Sydney. At Macquarie University she was a teacher professional developer for the national Adult Migrant English Programme, and also taught in the MA in Linguistics, where she developed a course in LSP with David Hall. She now lives and works in the USA. Her research interests are in the analysis of spoken and written discourse in EAP, workplace and professional contexts. Her work has appeared in the *ESP Journal, Quaderns de Filologia,* and several edited books pertaining to EAP/ESP.

David R. Hall (1947–2014) was Associate Professor in the Linguistics Department at Macquarie University, where he worked for more than 20 years. David was an applied linguist with broad interests. His research areas included Language for Specific Purposes, materials development, language teacher education by distance and learner-centredness/learner autonomy. His teaching and research supervision interests and knowledge of the field went far beyond these areas. For David, research was not separate from practice and he made significant contributions to the academy in research, research supervision, teaching and administration (including serving multiple terms as Head of the Linguistics Department and Associate Dean of the Faculty of Human Sciences). David passed away in February 2014.

Stephen H. Moore is Senior Lecturer in the Linguistics Department at Macquarie University. He has worked in the fields of English language teaching, English for Specific Purposes, discourse analysis and language assessment for more than 20 years. His recent research has included investigating the discourse of financial planners and the spoken discourse of accountants. He also has a longstanding interest in English in and about Cambodia. In the 1980s, Stephen trained and worked as an accountant in London.

Introduction

The term Language for Specific Purposes (LSP) has various different interpretations and applications. Before we turn to these, it is worth examining each of the phrase's constituent terms.

What do we mean when we talk about **Language** for specific purposes? In what ways can language be said to fulfil specific purposes? Is there something specific about the language to be used, and if there is, in what way can that difference be defined? Does there exist, for example, a definable language specific to the teaching of physics, to the writing of business letters, to the writing of international contracts, to verbal exchanges between diplomats? Does the difference, if it exists, reside in the specialised vocabulary used, in the different meanings ascribed to words in different contexts, in the different collocations, in the way that sentences and ideas are sequenced and combined to form a coherent communicative event, in the interpersonal relations that are realised in the text, in the constraints on what can and cannot be said and on different roles of the event's participants, in the values that are embedded in the text? If there are differences, are they probabilistic or can rules be specified? Is it possible to prescribe or describe a one-to-one mapping between form and function?

Some of these questions take us back to more fundamental issues about language and how it can be defined. Some linguists see language as a self-contained system, with sentences generated from a finite number of rules that also determine whether a sentence is or is not grammatical. Other linguists see language as a system of choices, with those choices made on the basis of context and function. These two approaches, which are often represented as competing but may actually be seen as the complementary examination of different aspects of language, are referred to in different ways in literature. Chomsky

(1986) used the expressions Externalized language (or E-language) and Internalized language (or I-language) to denote the different approaches.

I-language is associated with formalist, structuralist and cognitive approaches to language study, where the interest lies in detecting patterns and representations in the brains of individuals. E-language is concerned with language as a social tool and is associated with functional and contextualised studies of real observed language in social behaviour between people. Much (but not all) of sociolinguistics and discourse analysis would fall into the latter category.

Quote I.1 Two views of language study

Michael Halliday and Jim Martin

[Systemic-functional linguistics] is oriented to the description of language as a resource for meaning rather than as a system of rules. It is oriented, in other words, to speakers' meaning potential (what they can mean) rather than neurologically based constraints on what they can say.

(Halliday and Martin 1993: 22)

Noam Chomsky

Syntactic investigation of a given language has as its goal the construction of a grammar that can be viewed as a device of some sort for producing the sentences of the language.

(Chomsky 1957: 11)

Linguistic theory is mentalistic, since it is concerned with discovering a mental reality underlying actual behaviour … A grammar of a language purports to be a description of the ideal speaker-hearer's intrinsic competence.

(Chomsky 1965: 4)

Deborah Schiffrin

Two paradigms in linguistics provide different assumptions about the general nature of language and the goals of linguistics … These paradigms are sometimes differently labelled: … formalist, …

structuralist, … *a priori* grammar [as opposed to] functionalist, … emergent, … interactive. These differences of paradigm also influence definitions of discourse: a definition derived from the formalist paradigm views discourse as 'sentences'…, a definition derived from the functionalist paradigm views discourse as 'language use'. … The relationship between structure and function in general is an important issue that is related to other issues central to discourse analysis.

(Schiffrin 1994: 20)

Language for Specific Purposes, almost by definition, refers to language in context and it is not surprising that functionalist and pragmatic approaches to language have dominated in this domain. While this has been especially the case in pedagogy, the formalist approach has until recently dominated in the field of terminology.

As we shall see in Chapter 1, the ways in which theory, research and practice interact are complex. It is worth recalling, for all of us who are involved in teaching, learning and using language, that despite the massive amount of research energy spent over the years on trying to describe what language is and how it works, there is no consensus and there are many competing theories. Recent years have seen much research engagement with language and its social function, and a focus on the dynamic, ever-changing nature of language, with the worrying implication for both the language teacher and the terminologist that a statement you make today about language may no longer be true tomorrow.

Quote I.2 Views on the dynamic nature of language

Bruno Strecker

[Language is] the basically pragmatic means of communication which we possess and of which our language is but a provisional and ever-changing stockpile of examples or precedents.

(Strecker 1985: 246)

Diane Larsen-Freeman

Every time English is used, it changes. As I write this sentence, and as you read it, it changes. […] [This alters] in a fundamental way our model of the brain and our conception of language. A static algorithm cannot account for the continual and never-ending growth and complexification of a system that is initiated from the bottom-up. It cannot account for the performance 'inconsistencies of competing dialects and registers' nor the 'improvisational metaphors of ordinary language usage'.

(Larsen-Freeman 1997: 148–149)

Roy Harris

Appeal to a notion of 'standard usage', whether in philosophy or philology, is usually one or other of two things. First, it may be an attempt to establish a supposedly neutral baseline, by reference to which other notions of 'correctness' may then be defined … In this case, it is usual to claim that a standard is a purely descriptive term, with no prescriptive implications. Thus to say that a usage is linguistically standard is not to sanction it or to recommend it but merely to say that it is an established practice. Then, it seems, 'correctness' may be subsequently and separately defined as 'conformity to the linguistics standard' (i.e. to the established practice). Alternatively, appeal to standard usage may be overtly prescriptive. What is recommended as standard is so recommended *because* it is correct (or regarded as correct) … This prescriptive notion of what is standard may then be used to explain why a usage has become or should become established practice. In this case, it is assumed that standard usage, in the sense of correct usage, has an external rationale of some kind, or perhaps various rationales, although it is rarely stated explicitly what these might be. The important point is that on this view the question of what is or is not established practice is quite separate: it is a question of *which* standard, if any, prevails in the real world, i.e. in the linguistic community. This linguistic universe, then, is one of potentially competing standards and competing practices; and the problem then becomes one of limiting admission to the competition.

(Harris 1988: 22–23)

What do we mean when we talk about language for **Specific** purposes? By using the word 'specific', we are implying that we can delimit what it is that we intend to address. In other words, we are suggesting that we can define both what is included in and what is excluded from our intentions. In what terms can specificity be determined? Can we make our descriptions, for example, on the basis of general functions, such as categorising, comparing, evaluating, describing, summarising? Can we make them on the basis of topic, or discipline – the language of mathematics, of accounting, of animal husbandry, of biology, of geology? Can we make them on the basis of text-types, or genres – the language of the memorandum, the e-mail message, the peace treaty, the research article, the press release, the parliamentary debate? Can we make them on the basis of targeted situations – a restaurant, a business meeting, a lecture-theatre, a job interview, an examination? Can and should these and other category-types be combined?

This leads to a major question for LSP: how specific do we need to be? And, indeed, specific about what? How much of what we describe and teach is generalisable to different situations, disciplines and events, and how much is only applicable or relevant to a single event in a single context? For those involved in determining equivalences between languages (for example, for contracts, treaties and international agreements) and those involved in funding teaching programs, this question is fundamental. It is possible to argue that the only true LSP is one that relates to a single user or group of users for a single event, or, by contrast, that LSP is not fundamentally different from Language for General Purposes and that no specific direction or instruction is needed for users to deploy the general resources of the language for their own purposes.

Quote I.3 Views on specificity

Ann Johns

The principal tenet of specific purposes language teaching (LSP) is that of 'specificity': each pedagogical situation and each group of learners is considered to be new and different. Ideally, a unique curriculum and collection of classroom activities is designed for each group of students and teachers in every new context. No single approach, no new or old orthodoxy, is appropriate for all pedagogical situations. Thus, central to LSP pedagogy must be the determination of the unique characteristics of each teaching/learning situation, and the exploitation of these characteristics for development of syllabuses, of classroom activities, and of evaluation and assessment.

(Johns 2006: 684)

Tony Dudley-Evans and Maggie Jo St John

[Where an academic support course relates to a particular academic course or there is one-to-one work with business people] the course becomes really specific … geared to the specific needs of the target situation and of the individuals concerned [making] extensive use of authentic materials.

(Dudley-Evans and St John 1998: 9)

Tom Hutchinson and Alan Waters

A glance at a mechanical engineering class in a Technical College … will reveal that the topic is concerned with mechanical engineering, that there are texts about mechanical engineering, and so on; but what the students are expected to cope with should not be confused with what the students require in order to cope. A distinction needs to be drawn between the end … and the means. It is necessary to examine the underlying competence which the learner must bring to the mechanical engineering classroom, or to the study of any specialised subject.

(Hutchinson and Waters 1980: 178)

It is clear that for each project, there is a need to determine where on the cline between these two extremes the target should be placed. This calls for a balance between effectiveness and efficiency. A high degree of specificity may be costly and therefore less efficient, while a low degree of specificity may be less costly (because more participants can be processed in the same group) but less effective. In operations such as the teaching of language for academic purposes in universities or the communication-training programs of large companies, such a balance must be determined to underpin decisions on the design and implementation of whole programs.

Finally, in this introduction, what do we mean when we talk about language for specific **Purposes**? Most important here is the question of whose purposes we are talking about. Who gets to decide on the purpose? Is purpose determined by the funding agency (e.g. the employer, the school, the government, the scholarship donor), the implementation agency (e.g. the teacher, the researcher), the 'target' agency (e.g. the subject lecturer, the customer, the workplace) or the participant (e.g. the employee, the student, the learner)? A mismatch between the perceived purposes of different stakeholders in LSP projects is very common, even in some very costly international aid projects. Teachers may decide that critical thinking is an important part of writing academic assignments, while the marker of the assignments may be interested only in testing how accurately the student has retained information. In-house workshop participants may want to improve their language in order to get out of their current job, while employers are looking to improve performance in the current job. Teachers may be devoted to improving communicative performance, while learners may be interested in getting a higher grade on a standardised test.

A second issue with purpose is how immediate the purpose is. There is a significant difference between language for immediate needs and language for some future purpose. This is one reason why it is difficult to convince many school-students to devote time and effort to the learning and practice of languages. In the teaching of language for academic purposes, there may be more immediate purposes related to the learning environment and longer-term goals relating to later professional practice. Employees may have an immediate purpose of dealing with current tasks but a more distant target of tasks to be encountered after successful promotion.

The investigation of needs and purposes in specific contexts has inevitably involved teachers and others in their own research, and LSP teachers frequently see themselves as teacher-researcher-designers rather than as mere consumers of packaged course materials.

Quote I.4 Diane Belcher on research and teachers

… the dividing lines in ESP between researchers and teachers, or curriculum designers, materials developers, and teachers, are frequently blurred. Since even the earliest days of ESP … practitioners have viewed assessment of specific needs as requiring research skills and creative approaches to novel situations, and needs assessment itself has been seen as in need of continual reassessment.

(Belcher 2006: 135)

Although status, for the LSP teacher in many contexts, continues to be a site of struggle, there is no doubt that this integral incorporation of research investigation into teaching preparation has helped to upgrade teachers' own perceptions of their work as well as the perceptions of colleagues in other fields.

We refer to LSP throughout this book even though most of the examples we use relate to English, and many of the authors we cite (as in the Belcher example above) talk about ESP rather than LSP. English for Specific Purposes (ESP), English for Science and Technology (EST) and other related areas involving English are well-established fields of enquiry, but there is also a large body of work that has been and is being done in other languages. The term LSP also covers work in terminology in a way that ESP generally does not, and it encompasses work in translation studies. The focus of this book will be much more on the pedagogical and applied research aspects of LSP, though we do see valuable and interesting overlaps between these various strands of LSP.

Part I
Concepts and Issues

1
Historical and Conceptual Overview of LSP

This chapter will:

- Outline the history of LSP
- Provide a conceptual overview of the field
- Discuss the interplay of theory-driven and data-driven approaches
- Discuss the interplay of theory and pedagogy in LSP

1.1 Introduction

When people speak of *Language* for Specific Purposes, they generally think about *English* for Specific Purposes, a subject that is usually broken down into English for Academic Purposes and English for Occupational, Vocational or Professional Purposes, as well as many other finer categories, such as English for business, English for engineers or even English for museum guides. But Language for Specific Purposes is a field that extends well beyond this to parallel domains in languages other than English, ranging for example, from Arabic for Religious Purposes and Portuguese for Academic Purposes to Chinese for Occupational Purposes. We wish to clearly acknowledge that much important LSP research and practice is taking place in languages other than English, although at this time studies in English dominate the published literature.

The study of the ways in which language can be used in specific contexts and to achieve specific ends is not new. Rhetoric and the power of rhetorical devices have been studied and taught at least since Classical Greek and Roman times in the West and for at least 24 centuries in the East (though the traditions of rhetoric teaching are quite different. See, for example, Gernet 1972/2002: 92–93).

The teaching of language for specific purposes burgeoned in the early decades of the renaissance in Italy: ‘alongside the *ars notarie* developed the *ars dictaminis* and the *ars rhetorica*, the medieval arts of writing and rhetoric, basic educational building-blocks’ (Denley 1988: 288). Leon Battista Alberti, for example, devised specialist terms, not without technical difficulty and some opposition, for architecture and related fields (Laurén 2002: 91).

The seventeenth century saw major developments in science and a concurrent development of a language of science. Gotti (2002: 65 et seq.) has pointed out the numerous complaints of seventeenth-century scientists such as Galileo, Bacon, Boyle and Digby about the inadequacy of everyday language and their recognition of ‘the need for a novel scientific language, quite different from ordinary speech’ (Gotti 2002: 65). Halliday also places the birth of scientific English in the seventeenth century, citing Newton’s *Treatise on Opticks* as a key text (Halliday 1993: 57–62).

The need for agreement on technical and commercial terminology as world trade expanded in the eighteenth and nineteenth centuries resulted in a growth of lexicographical works aimed at fixing standard linguistic usage in much the same way as the Napoleonic metric system and the imperial system of weights and measures aimed to fix a universal standard of measurements. The need to control language diversity through definition of standards was also closely connected with the spread of European imperialism. ‘In 1862 one appeal for volunteer helpers in the national dictionary project refers explicitly to “the race of English words which is to form the dominant speech of the world”’ (Harris 1988: 18).

From the beginning of the twentieth century this need for language which avoids ambiguity became even more evident and for a long time now, trade groups such as the European Union and political groups such as the United Nations have spent significant time and resources on ensuring that negotiators, translators and interpreters agree on what their words mean. The political agenda, while perhaps not expressed in the same unapologetic words as in the nineteenth century, remains significant, and has stimulated considerable research and comment in recent years (Phillipson 1992; 2013, Tollefson 1995; 2011).

Much of the work on language for specific purposes in the twentieth century was, and still remains today, in the field of technical terminology. A number of schools of thought in the study of terminology as an academic field were established, perhaps most notably the Vienna School associated with the names of Wüster, Felber and others. Their work is undoubtedly important in the study of specific-purpose language and has been very influential in language planning and standardisation, particularly in international trade and political bodies. Some of their basic concepts, however, have been challenged. Their strict separation of meaning ('concept') and form ('linguistic sign'), the insistence on the primacy of the concept, and the underlying assumption that concepts can be unambiguously defined have been strongly contested by terminology scholars (for example, in Temmerman 2000), by more socially-situated studies of language and by those who use newer technologies such as corpus analysis to reveal the dynamic nature of language in context (see, for example, Flowerdew 2012). The status of terminology as a separate field of study has also been challenged, for example by Sager (1990: 1): 'Everything of importance that can be said about terminology is more appropriately said in the context of linguistics or information science or computational linguistics'.

Concept 1.1 The five principles of the Vienna school for terminology

1. A definition of the concept precedes the allocation of a term
2. Concepts can be clearly defined in relation to other concepts
3. Concept definition uses specific definition-types: intensional (i.e. a listing of characteristics differentiating the concept from similar concepts), extensional (a listing of all the objects belonging to the concept) and part-whole (a definition relating the part to a superordinate concept)
4. There is a one-to-one correspondence between term and concept (the principle of *univocity*)
5. Terminology studies are synchronic – terms are assigned permanently and there is no room for language development

(Felber 1981)

Recent works on standards have questioned whether the idea of standardisation can be maintained. In their edited volume on *Standard English: The widening debate*, Bex and Watts (1999) note that 'notions of "Standard English" vary from country to country, and not merely in the ways in which such a variety is described but also in the prestige in which it is held and the functions it has developed to perform' (5).

It is a widespread idea that what is specific about specific language is the terminology used: that technical language uses technical words, scientific language uses scientific words, the language of particle physics use particle physics words, and so on. This is the lay, common-sense view, and it is not surprising that novice teachers faced with the task of devising a highly specific course (on, say, Russian for marine engineers), sometimes reach for the lexicon and construct their course as a series of vocabulary-building exercises. In fact, some published special-purpose textbooks do very little more.

It will be evident, however, that successful communication involves far more than establishing the meaning of individual lexical items and phrases. How much more will become apparent in the pages of this book, which is concerned with what is encompassed in the field of language for specific purposes (LSP) and the ways in which its intellectual development and practical applications have interacted with each other and can proceed into the future.

1.2 Theory, practice and research in LSP

Varantola (1986) distinguishes between LSP as a description of a language variety and LSP as a curriculum/pedagogic variety. At first sight, this distinction seems similar to that between theory and practice, but it is not completely congruent with that distinction, as the existence of linguistic theories and pedagogical practices can be paralleled by pedagogical theories and linguistic descriptive practices (Figure 1.1).

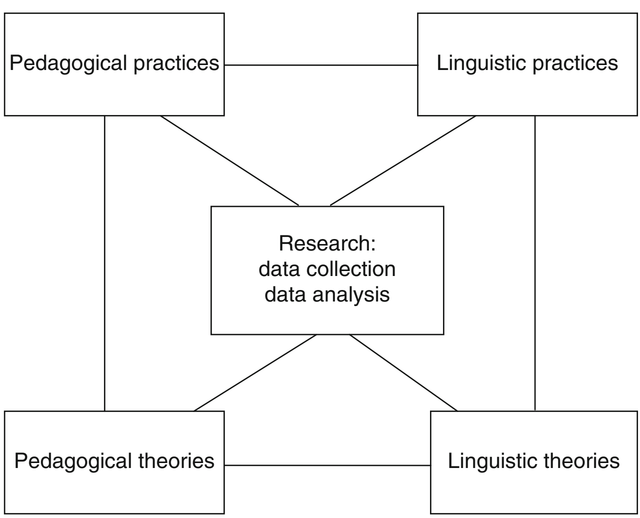

Figure 1.1 Theory, data and practice

Nonetheless, the parallels between the linguistics/pedagogical divide on the one hand and the theory/practice divide on the other are often assumed and underlie much of the debate in LSP as well as in applied linguistics more generally.

Some researchers in the field have little or no interest in teaching applications, seeing these as belonging to a separate field (of 'didactics', 'pedagogy', 'andragogy' or 'education'), while their own work is a sub-field of linguistics. Some practitioners see research as having no immediate relevance to their teaching classrooms, where issues of what motivates learners and what 'works' in class may be based on a pragmatic mix of activities driven by experience rather than theory. The field of LSP has at different times been predominantly theory-driven and at other times predominantly practice-driven.

A further distinction is made by de Beaugrande (1989: 15) between 'theory' and 'data'. De Beaugrande suggests that linguistics in general has been sometimes data-driven, sometimes theory-driven.

Quote 1.1 de Beaugrande on theory and data

Linguistics has long vacillated between models of theory and models of data. In general, 'structural' linguistics gathered unprecedented quantities of data, but was rather sparse in its theories, whereas 'generative' linguistics created many models of theory, but was quite noncommittal about obtaining data.

(de Beaugrande 1989: 15)

An early attack on the function-based ESP textbooks of the 1970s also referred to these distinctions, suggesting that the then newly-emerging ESP textbook series such as *Focus* (Allen and Widdowson 1974 and later) and *Nucleus* (Bates and Dudley-Evans 1976 and later) were driven by linguistic theory without data and by pedagogical theory with little attention to pedagogical and curriculum development practice.

Quote 1.2 Ewer and Boys on state of EST textbooks in 1970s

Although the [10 EST] textbooks examined claimed unreservedly to teach the language of science and technology, there is little evidence that their authors have made the necessary efforts to find out what this language consists of in the first place, and the lack of agreement between textbooks as regards their valid teaching contents only emphasises the haphazard nature of the linguistic criteria applied. As a result, the teaching points selected in each case cover only a small proportion of the significant features of scientific discourse; at the same time there are serious inadequacies in the ways in which these points are explained, exemplified and exercised, as well as a general lack of additional help for both students and teachers.

(Ewer and Boys 1981: 95)

By contrast, Dudley-Evans (1997: 59) denies that LSP has an established theory and suggests that training in LSP should focus on course design procedures rather than theory.

Quote 1.3 Dudley-Evans on LSP theory

… there is not an established theory for ESP in the same way as there is for, say, Communicative Language Teaching and Second Language Acquisition. … The emphasis on ESP/LSP courses has been on the procedures followed in setting up courses, carrying out text analysis and writing and evaluating teaching materials. … LSP training needs to concentrate on this 'set of procedures'.

(Dudley-Evans 1997: 59)

We would like to suggest that the connection between teaching, research and theory is, and should be, much more complex. While there are many different research perspectives on the field of language for specific purposes, and we will outline many of these in this book, our interest is in the multi-directional flow between research, teaching and the theories that inform and are informed by practice and analysis (see Figure 1.2). We suggest also that theory-building, data analysis and workplace/classroom practice, while interdependent, have at different times each taken a dominant role in the development of the field.

In the field of language for specific purposes, where the 'language' component is closely linked to the 'special purpose', there are at least two interlocking systems at play. One Venn diagram like Figure 1.2 might link our own professional practice as linguists with linguistic theory and linguistic data, while a parallel set of components would represent the professional practices, the data and the theories of the

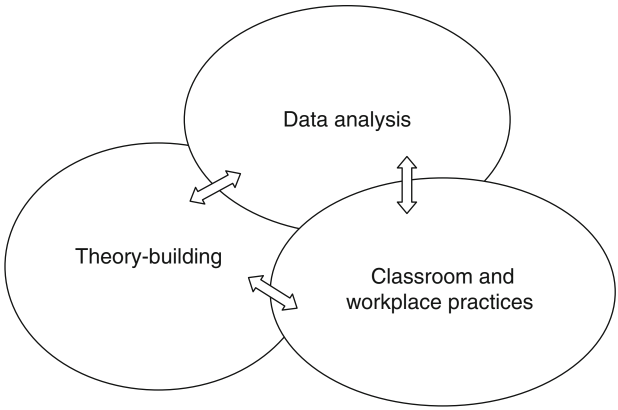

Figure 1.2 The relationship between theory, data and professional practice

targeted special purpose. The complexities of the resulting connections might lead us to question whether there can ever be a single set of generally accepted principles for the field of LSP.

We see LSP as *necessarily* interdisciplinary, drawing on insights and practices from a wide variety of sources. In particular, LSP is not a mere sub-field of foreign language teaching, though it looks to foreign language teaching as one of its sources. We see LSP as interdisciplinary not merely because it deals with the language practices of other fields, but as interdisciplinary even within linguistics and other academic disciplines. LSP gains insights from, and contributes to, fields such as pragmatics, discourse analysis, motivation theory, philosophy of science, genre and register theory, sociolinguistics, cognitive linguistics, technical and professional communication, literacy, terminology studies, intercultural communication, epistemology, management communication, computational linguistics, lexicography, language planning, semantics, text linguistics, stylistics, language acquisition, translation and interpreting and many others.

Despite its overlap with so many other disparate fields, and its inherent overlap with special-purpose fields, it is worthwhile to try to define what it is about LSP that can give it an identity as a professional field. What is the agenda for LSP? What are the areas which practitioners, theorists and researchers can agree are worthy of our attention? For us, the LSP agenda is to characterise the ways in which language is used in specific contexts by specific groups for specific purposes, to explore the extent to which language use in such contexts is stable, to examine the role of language in establishing, maintaining and developing group values and self-identification, and to identify and evaluate the means by which people can become proficient in using language in specific contexts for their own specific purposes, and can graduate to membership of their target group or groups.

1.2.1 A theory-driven stage: communicative language teaching and notional syllabuses

There were many examples of specialised goal-oriented courses before the blossoming of LSP, and in particular ESP, as a self-identified field in the 1970s. Not all of these were as focused on terminology and word-frequency as is sometimes thought. An interesting example is a 1932 book designed to teach 'medical Arabic' for medical workers in Syria and Palestine whose first language was Hebrew, French or English. The book consisted of questions and answers, with translations, of the kind to be expected in doctor-patient interaction, and of 'conversations' in colloquial Arabic based on medical topics as they might be explained to a patient (Haddad and Wahba 1932, described in Rosenhouse 1989). Another example is the introduction of German as a Foreign Language into the curriculum of a Medical School founded by a German doctor in 1907 in Shanghai, China (Fluck and Yong 1989).

Although LSP was clearly not 'invented' in the 1970s, it was in this period that groups of teachers and writers began to perceive themselves as belonging to an ESP 'movement' (although EST – English for Science and Technology – was at first a more common acronym). Before then, most language teachers, if asked what their special area of expertise was, would probably have responded 'grammar' or 'literature', those being the two major components of their own professional training. For many teachers the change from a self-perception as students of the 'humanities' to one that encompassed the reading and understanding of scientific and technological discourse was a slow and difficult adjustment. The encounter with the unfamiliar discourse of technology is still one that worries many novice LSP teachers. (See related discussion in Chapter 8).

It is not surprising that many of the earlier ESP teachers chose as texts extracts from popularisations of science topics, historical approaches, and moral and philosophical issues surrounding scientific advances, texts in other words with which the humanities-trained language teacher felt more comfortable. Examples include articles from magazines such as *Scientific American* and the *English Studies Series*

(Oxford University Press). These texts are authentic in the sense that they were not originally written for the language teaching classroom, but inauthentic as the sort of texts with which the learners themselves would have to engage within their specialist studies. Widdowson (1979) also discusses the issue of authenticity and scientific discourse in ESP teaching. He notes three types of scientific discourse (i.e. science as a discipline, science as a subject and science as a topic of interest), the latter being most often drawn upon by ESP teachers due to its accessibility to them.

It is no accident that the teaching of ESP emerged as an identifiable movement contemporaneously with a renewed focus, in both language teaching and in the study of linguistics, on how language is used to achieve specific goals.

In linguistics, Halliday's systemic-functional theory of grammar, which views language as a system of choices and incorporating context as a component of the system, was becoming more influential. An early work on which Halliday collaborated, *The Linguistics Sciences and Language Teaching* (Halliday, McIntosh and Strevens 1964), contained what Swales (2000: 59) has called a 'clarion-call' for a more specific-purpose approach to language-teaching: 'in effect, the authors promised to usher in a Brave New World of a stronger descriptive base for pedagogical materials'. Halliday and Hasan's *Cohesion in English* (1976) was particularly influential in encouraging teachers and linguists to look at levels of organisation above the sentence level.

Chomsky's transformational grammar had by this time encountered difficulties with the notion of meaning-preserving transformations, in which sentences such as 'John loves Mary', 'Mary is loved by John' and 'It is John who is loved by Mary' were seen as transformations of the same basic string of relationships between components. The view of grammar as susceptible to context-free description was undermined both by obvious counterexamples (e.g. 'Every book has been read by at least one person in the group' is not the same as 'At least one person in the group has read every book') and by psycholinguistics experiments that showed the importance of context on comprehension. A series of experiments in the 1960s on the 'derivational theory of complexity' had originally shown that the greater the number of transformations from basic strings, the longer it would take to process the surface sentence, so that 'I've read that book' is quicker to process than 'I haven't read that book' (with a negative transformation) and 'Have you read that book?' (with an interrogative transformation). However, as soon as negatives were placed in a context where negatives would occur naturally (i.e. in response to an implied or explicit positive), the differences disappeared. For example, a sentence such as 'A whale is not a fish', which contradicts a common-sense misperception, is processed as quickly as a positive statement, while 'A salmon is not a mammal', where a context in which the utterance would make sense is much more difficult to imagine, takes much longer. (See Wason 1980 for a detailed discussion). Partly because of these developments, the study of 'pure' syntax had begun to incorporate aspects of semantics, and a number of major books in this area were published around this time (e.g. Lyons 1968, 1977; Seuren 1972; 1974, Leech 1974).

The linguistic tradition initiated by Ferdinand de Saussure saw language as part of a larger system which he categorised by means of discrete dichotomies. Saussure wanted to define the subject-matter of linguistics as something that could be fixed and known. To this end, wherever his system branched into two, he always excluded one 'branch' as not belonging to the proper study of linguistics. His emphasis, and that of the later linguists who worked in this tradition, was on synchronic study of language as a self-contained system in which individual words and phrases were defined in relation to other words and phrases. Actual language use (*parole* as opposed to *langue*) was not admitted to the study of language.

This remained the dominant paradigm for linguistic study for many decades and can still be seen as the philosophy underlying work on transformational grammar and universal grammar, as well as that of terminology studies, as can clearly be seen in Concept 1.1 concerning the Vienna School. In the 1920s, however, Saussure's approach was challenged by a Soviet linguist, Valentin Voloshinov. Unfortunately, his work and that of other Soviet thinkers, such as Bakhtin and Vygotsky, was suppressed in the Soviet Union and did not become well-known until much later when translations began appearing in the 1960s. (There has been some dispute about the identity of Voloshinov and Bakhtin which need not concern us here).

Voloshinov described Saussure's approach as 'abstract objectivism' and rejected the notion that *parole* was too idiosyncratic to be a component of a serious theory (Voloshinov 1973: 58–61). His concept of linguistic study reaffirmed the importance of context and the social conditions of production and reception of language. This is much closer to the view of language that underlies much of the work in language for specific purposes that we outline in this book, where the specificity of context and purpose are essential elements of analysis.

Quote 1.4 Bennett on Voloshinov

Voloshinov argues that the proper concern of linguistics should be to establish a typology of speech-genres which would explain the peculiar mode of the refraction or signification of reality they effect with reference to the social conditions of socio-verbal interaction, themselves contextualised within the framework of wider economic, social and political relationships, which underlie and produce them. This, for Voloshinov, applied just as much to language in its written form as in its spoken forms, just as much to literary genres – which he defined as 'verbal performances in print' – as to speech genres.

(Bennett 1979/2003: 66)

In the 1960s and 70s linguistic philosophers John Austin and John Searle discussed how language was used not just as a coding system for conveying messages, but as a way for 'doing things' with words (see Austin 1962; Searle 1969). Speech Act Theory, as it subsequently came to be known, focused on three types of acts: locutionary (i.e. what was said); illocutionary (i.e. what was intended to be understood); and perlocutionary (i.e. the action taken by the hearer as a result of the locutionary act). 'Felicity conditions' had to be satisfied if a given speech act was to be effectively performed. The work of Paul Grice, another philosopher of language, further developed our understanding of how we make sense of recognising the intentions of our interlocutors. He introduced the notion of a 'cooperative principle' by which speakers 'Make your contribution such as it is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged' (Grice 1975: 45). Four Gricean maxims attempt to explain how we understand what is said, including how we make implicatures in particular circumstances. These maxims concern the quality, quantity, relation and manner of speech. Both Speech Act theory and Gricean maxims sparked wide interest and research in communicative functions of language, which ultimately spawned the fields of pragmatics and discourse analysis. Sociologists in the 1960s and 70s were also working with language analysis and, led by Harvey Sacks (Sacks 1992), developed what came to be known as Conversation Analysis, or the study of talk in interaction. All of these theoretical developments were to have an influence on the field of LSP.

Developments in language teaching closely paralleled the changing focus of theoretical linguistics, with the importance of context, meaning and communication for a real purpose coming together in two movements intimately connected with LSP: notional or functional syllabuses, and communicative language teaching.

The idea of the notional syllabus found its most notable proponent in Wilkins 1976 and its best-known expression in the work of the Council of Europe (Van Ek 1976). Instead of dividing language into structures and grading them in terms of difficulty and learnability – as both grammar-translation and audio-lingual methods had done, the notional syllabus divided language into semantic areas, expressed either as 'notions' (e.g. cause and effect, time, place, comparison, structure, dimensions) or as 'functions' (e.g. describing, negotiating, giving instructions), and sought to identify the more common patterns of usage in these areas, with regard more to the usefulness of the patterns than their difficulty.

The notional syllabus allowed teachers and textbook authors to move beyond two assumptions that were implicit in 'first-generation' ESP/EST textbooks: (1) that scientific texts need to be simplified to cater to the linguistic level of the students; and (2) that 'technical' English can only be taught at more advanced stages of language learning.

These 'first-generation' textbooks can be characterised either as books of advanced sentence-level grammar (e.g. Thornley 1964, Herbert 1965, Ewer and Latorre 1969, Swales 1971) or as simplified or popularised texts with comprehension questions such as the *English Studies* series or L. A. Hill's *Note-Taking Practice* (1968).

Many of the second-generation textbook series in the 1970s and early 1980s (e.g. the *Focus* series and the *Nucleus* series) were organised as notional syllabuses. There is little doubt that the content of series such as these was based largely on intuition rather than rigorous analysis of real texts, and there was a notable attack on this perceived lack of rigour in the very first volume of the *ESP Journal*. The attack, already mentioned above, was by Jack Ewer, who had co-authored an earlier, more traditionally structure-based ESP book (Ewer and Latorre 1969). Ewer charged authors with failing either to analyse real scientific texts or to understand how to construct coherent and practical syllabuses. In other words, the charge was that textbook authors were ignoring the data and had no practical experience of curriculum and materials development – they were theory-driven.

At that stage of its development, one has to agree that the ESP materials being produced were theory-led rather than data-led, but the major factor in the widespread adoption of ESP materials must surely be that they actually worked in the classroom, by making materials more relevant to the students and thereby increasing motivation. This was a clear gain for those teachers, for example, who were involved at the University of Tabriz with the development of ESP materials that later became the *Nucleus* series.

Despite the criticism, the notional syllabus became the most widespread basis of materials design in the 1970s and 1980s. This is evidenced not only in commercially published materials, but also in the large number of institution-specific projects reported in in-house newsletter-journals such as *ESPMENA* (English for Special Purposes in the Middle East and North Africa) *Bulletin*, and others particularly from the Middle East and South America – see Chapter 5) and through organisations set up to share information and materials (e.g. SELMOUS in the UK. There is history of this in Volume One of the *EAP Journal*). One of these self-produced newsletters – the *EST Clearinghouse* based at Oregon State University – was eventually to be transformed into *The ESP Journal* (now *English for Specific Purposes*).

Communicative language teaching did not suddenly, in the 1970s, appear Venus-like fully formed. Like notional syllabuses and ESP, it had many predecessors, but it took shape at this time as an approach with which practitioners and writers could identify. The approach foregrounded the use of language as a means of communication, with the assumption that much learning of language took place through language in use rather than language as an object of study (Candlin and Breen 1980/2001, Brumfit and Johnson 1979).

The communicative approach was reinforced by advances in error analysis and second language acquisition studies (e.g. Corder 1967; 1981, Selinker 1972, Dulay and Burt 1974, Richards 1974), which strongly suggested that learners proceed developmentally through a predictable series of stages in which the production of errors plays an important part. This view of error was quite opposed to that of the audio-lingual method, where learners were expected to master one structure before going on to the next. It said, on the contrary, that making errors was an essential part of progress, that learners, through experience of using the target language, and forming their own hypotheses and generalisations about how the language worked, would develop increasingly sophisticated and more target-like 'interlanguages'. It provided yet another impetus for the development of materials and syllabuses that privileged use over usage, and encouraged classroom activities such as group-work, in which learners undertook simulated or real tasks in order to reach specified goals. In the 1990s, interest in genre analytical studies began to take hold, initially with the focus on the written product rather than the writing process. (See, for example, the 'Write it Right' project led by Jim Martin in Australia.) In particular, genre was seen as providing a structure that could realise a social purpose (Martin 1992, Bhatia 2004).

The history of language-teaching has to a large extent been the history of the tension between form and function, between instruction in formal aspects of language as a system and experience in actually using the language. Audio-lingual teachers used to compare their methods with traditional methods of language-teaching by using the metaphor of learning to ride a bicycle. To learn a language, they would say, is a skill like riding a bicycle: you do not need to know about how the bicycle works in order to ride it. If we may extend the metaphor a little, communicative teachers might say that the audio-lingual teachers wanted to break down the learning into component parts and master one component before moving on to the next. In the case of the bicycle, this would mean practicing getting on to the bicycle until the movement was perfected, then advancing to getting on and gripping the handlebars, and then adding the placement of the feet on the pedals, and so on. The communicative teacher would take a more holistic approach and have the learner on the bicycle riding around a safe, traffic-free course before proceeding on to the real roads, while the LSP teacher would be working with the learner to plan real trips to real places for specific purposes at a specific time.

Without wishing to push the metaphor too far, one can easily see that there are variations on how the communicative and LSP teachers might go about doing their jobs, and some of these remain live and researchable issues today. Is there, for example, a place for the practicing of particular isolated skills? Is it useful to devise simulated situations rather than make use of real ones? Does it help learners' motivation to study how the machine works?

1.2.2 A practice-driven stage: study skills and teachers as materials writers

Many of the teachers who taught ESP in universities and language schools in the 1970s were having to deal with problems faced by large numbers of students who up to that point had not been numerous in western university systems: students who were arriving for short postgraduate programmes with no previous history of studying in English. In the UK, students had typically, in the past, come from Commonwealth countries, with English-medium schooling and a curriculum and methodology based on (and frequently exactly the same as) those from the UK system, with 'O' levels and 'A' levels. In the 1970s there was an influx of students from different language backgrounds and different educational experiences and expectations. When ESP teachers in tertiary institutions or in schools preparing students for tertiary study implemented their new notional syllabuses and communicative methodology, they quickly discovered that students were not making the expected progress and that they were not able to cope with the expectations of their lecturers.

The interest in study skills developed around this time. This was for the most part not based on systematic research but on teacher observations. Study skills books such as Yorkey in the USA and Heaton in the UK were widely used, and many university preparation courses were known as English and Study Skills courses.

Study skills dealt with areas such as note-taking, note-making, listening to lectures, locating books in libraries, using the index and contents pages of books, non-linear approaches to reading, essay-writing, participating in tutorials and so on.

That most of these courses were not firmly data-based has since become obvious. Many of the skills covered were founded on the arts-educated teacher's understanding of what goes on in universities, for example that tutorials are places where students talk and opinions are exchanged, that all disciplines value a balanced pro-and-con approach to essay-writing and so on. This was a stage in which pedagogical practice (i.e. what worked well in the language-teaching class) was at the forefront of developments in the field.

Similarly, with the theories of notional syllabuses, communicative language teaching and teaching for specific purposes becoming well established as dominant paradigms, many teachers found themselves in the position of materials-developers. The organisation of LSP courses around notions made materials-writing relatively easy, compared to structural syllabuses with their reliance on the experts to define comparative grammatical complexity of different language features. In a notional course, you first list your notions, then you find examples in your targeted field, then you write a series of classroom exercises around the examples you have found (which may involve modifying or rewriting the examples you have found). In the 1970s and 80s there were large numbers of such materials-writing projects at local levels. Many writers published articles about the process and the results, from places such as Kuwait, the Philippines, Malaysia and Venezuela. In the UK an organisation called SELMOUS (Special English Language Materials for Overseas University Students) was set up with the aim of allowing members to swap such locally-produced materials.

Most of these materials were only marginally data-based. The driving force behind them was what worked in class and what produced the appreciation in students of the effort that had been made to cater to their specific academic interests, resulting in much stronger motivation.

This was certainly a very real gain, but looking at some of those materials now, it is clear that the notions on which courses were based were not necessarily the most appropriate for the targeted discipline, that the exercises incorporated in the materials were essentially random selections of items of interest that happened to occur to the materials writer, and that even when authentic texts were included, there was not often an authentic framework or the expectation of an authentic response to those materials.

1.2.3 LSP in the 1990s and the new millennium: a data-driven and collaborative approach

In recent years, teachers and others have begun to look more critically at what actually occurs in the target situation. Initially, the focus was on the language professional going into a situation, observing how things were done, and analysing what they saw from their point of view and using their own system of analysis. The Sinclair-Coulthard version of discourse analysis started with this sort of approach, focusing on what actually happens in the classroom rather than what happens in theory or, more specifically, what the teacher thinks is happening. (In this sense, Sinclair and Coulthard (1975) follow in the footsteps of the pioneering work of John Holt (1967)). There have been many other published examples of analysis of classroom and workplace interaction, including the work of Celia Roberts and her colleagues in British workplaces (Roberts, Davies and Jupp 1992).

What is beginning to characterise current work in the field, however, is a significant development. This is a new concern for working collaboratively with professionals in the targeted fields. This has changed the focus and the nature of the research endeavour. The language expert does not approach the other field as an outside observer but as an insider member of a team with specific areas of expertise to contribute. The collaborators are professionals in their own field – health workers, academics, railway-workers, lawyers and so on – but they are also team members, not observed and analysed by an outsider, but part of an observing and analysing team, with their own professional interpretations of what is going on incorporated into the project rather than being hypothesised by someone else.

We are beginning to see this approach in both academic and professional contexts. In Australia, the general approach to EAP in the universities now tends towards incorporating aspects of language and communication directly into disciplinary courses, with language and subject experts working together to give lectures and to produce materials such as lecture hand-outs, assignment guidance and online teaching materials. The pioneering and much-cited work of Dudley-Evans and Johns at Birmingham University was an early example of this; one of the reasons for its frequent citation is that nothing much else of the same kind was done for the next two decades. Now, with large numbers of overseas students in university classes – whether it is in English-speaking environments such as the US, the UK, Australia, Singapore, India or Canada or whether it involves overseas students studying in Japan, in France, in Germany and in Russia – lecturers are increasingly inclined to take the matter of language and communication seriously. Where once there may have been mistrust of the LSP expert (what are they doing on my patch?), now there is a willingness to collaborate. (See Chapter 8 for more on collaboration).

In the workplace too, the same awareness has become more widespread. The work of Srikant Sarangi with health professionals in Wales and England (e.g. Sarangi 2006; 2007), and the work of Vijay Bhatia and Chris Candlin with lawyers and legal professionals in Hong Kong and other international centres, are examples of this new approach.

Quote 1.5 Candlin, Bhatia and Jensen (2002a) on collaborative research

… there will be a requirement to institute an integrated program of research which harmonises distinct research paradigms, but one which also enjoins researchers to cooperate closely with a range of research participants so that issues of why can be informative of descriptions of how. In short, not only to describe discourse data as text, but to interpret it as a process of ongoing accomplishment and to set both in the context of broader explanatory analysis of the structural, historical, social and professional/institutional/organisational place of such discourses.

(Candlin et al. 2002a: 104–105)

The focus has moved towards a socially-grounded view of communication, in which context and motivation play crucial parts. As Bargiella-Chiapini and Nickerson write in their volume on business writing: 'The concern is not only with what actors write and how they write it, but also, and perhaps more importantly, with why they write the way they do, and what the effects of their writing on inter-firm and inter-group relations are' (1999: 3).

1.3 Concluding comments

We would suggest, then, that LSP in its modern form has experienced a development that was initially theory-driven, then became practice-driven, and has now once again turned to a more thorough examination of data, and that professional practice and theoretical underpinnings should be the framework through which we observe and interpret target situations, so that both we, as LSP teachers, and professionals in the field can better understand and improve the processes by which experts, apprentices and lay people interact with and understand each other.

Discussion points

1. Reflect on your own experience of LSP. To what extent has it been theory-driven or data-driven?
2. In what ways and to what extent has your LSP experience been pedagogically-driven?
3. In your experience of LSP, which was more central: the role of discipline-specific jargon or notions of genre and discourse communities? Why?
4. How do you see the future of LSP developing, given its roots and course of development to date?

2
Key Trends Affecting Learning, Teaching and Researching LSP

This chapter will:

- Describe three major trends that impact LSP: increasing globalisation, the development of new communication technologies and new approaches to language and learning.
- Outline some factors arising from each of those trends that are particularly relevant to the field of LSP.

The previous sections provided an introduction to some views on the nature of LSP, its roots and branches, and some of its key concerns. Now we turn to three interrelated trends that we believe are major drivers behind change in the way LSP is perceived in the world, and that are likely to shape its future. Figure 2.1 attempts to show not only how these three trends overlap and interrelate with one another, but also some ways in which the learning, teaching and researching of LSP are affected by them.

Each of these topics is enormous in scope, and there is a vast amount of literature available to scholars who wish to investigate any of the issues in depth. There are many other issues that we can only lightly touch on here because of space restrictions, therefore our plan is to provide a broad sketch of how we see the terrain, the issues and the implications, with reference to some key books and articles for those readers who wish to read more. By highlighting these points, this chapter also provides a rationale for the choices we have made concerning material in the remainder of the book.

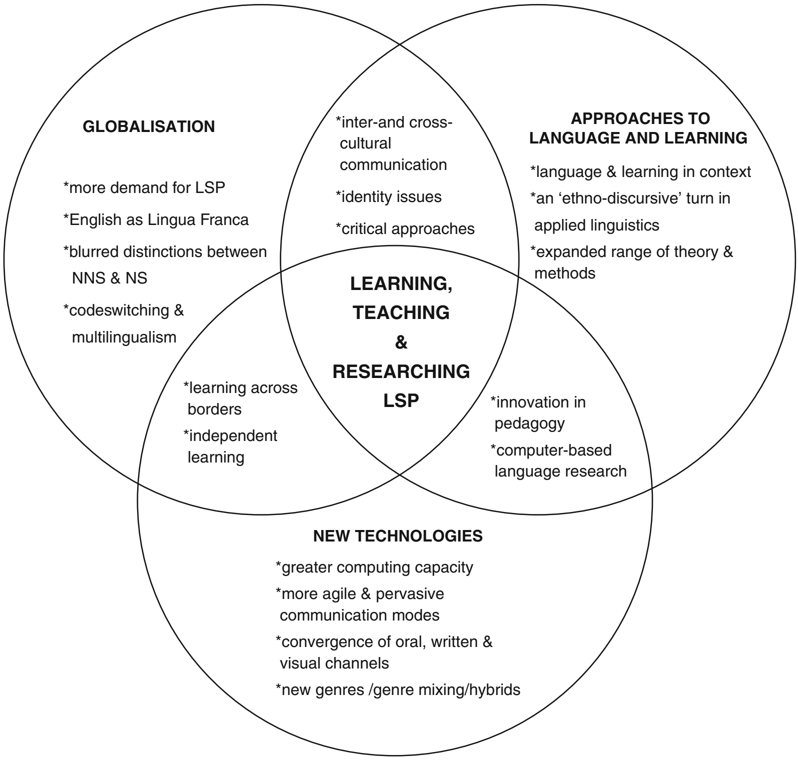

Figure 2.1 Key trends affecting learning, teaching and researching LSP

2.1 Globalisation

> In India we speak English in a different way, and in the States it is in a different way. [Interviewer: So they want you to learn …] A neutral accent. [Interviewer: What does that mean?] Neutral. Means they can understand what we tell. Like [for example] 'schedule' – they say *sked*ule … And the American accent you have more r's rolling, there's a stress on the r's. So it's sem-eye-conductor, it's not se-me-conductor. … You're not supposed to speak anything except English, except American English (Female worker, respondent 11). Mirchandani (2004: 360)

This extract is drawn from research into the social and linguistic impact of the introduction of transnational call centres in India. Although there are myriad examples of the impact of globalisation on learning, teaching, and researching LSP, this case is particularly relevant, as it foregrounds so many of the issues and debates that will affect where, why and how the enterprise of LSP, and ESP in particular, will flourish or decline in the twenty-first century.

The term 'globalisation' itself has become so commonplace that its possible meanings and ramifications are rarely unpacked. A sociologist, van der Bly (2005), problematises the idea of globalisation via sets of alternative meanings as: condition or process, reality or 'futurology', one-dimensional or multidimensional. This is more than an exercise in semantics; the way we understand globalisation has implications for our attitudes and reactions to such diverse movements as the flood of international students to foreign tertiary institutions, the uptake of 'International English' across the globe, the use of foreign 'loan words' in business communication, and the outsourcing of labour to foreign countries. For instance, globalisation could be seen as a process of reduction of human cultures and languages to a single society, or as an open attitude to cross fertilisation of ideas, language and other human activities. These alternatives could be put in negative or positive terms depending on the costs or benefits people perceive for themselves or the social/economic/ecological/political worlds they inhabit or want to inhabit.

Case Study 2.1 Mirchandani on life in the call centre

Mirchandani (2004) reported that major cities in India already possessed reliable high capacity telephone lines. Many large multinational companies (e.g. AOL, British Airways, Dell Computers) had outsourced their call centres to India in an attempt to cut costs. Indian operators were carrying out telemarketing or providing customer service, for example, dealing with insurance claims, credit card inquiries, computer hardware issues, communication network connections, banking and financial plans.

Operators were typically graduates, working night shifts that corresponded to daylight hours in the country where the clients were located. They were paid relatively more than others in their communities, but less than what call centre operators received in western countries and unfortunately much less than what they would have received if they had been able to get jobs in their professional fields in India. Apparently because of a perception that clients in the USA or other western countries might (a) resent knowing that these jobs are being outsourced overseas, or (b) feel less confident speaking with an operator who is obviously not from an Anglo background, the companies trained the operators to work to 'scripts' and 'neutralise' their accents.

The ESP training method Mirchandani described was highly behaviourist, with much repetition from cassettes, CDs and videos. The training included modification of accent and grammar, and focused on customer service, including how to be task focused and to avoid engaging in interpersonal activity that might alert customers to the location of the call centre. Operators were even called upon to use Americanised pseudonyms to disguise their origin. Call centre workers reported finding the work 'deskilling, repetitive and tedious', and developed hostile attitudes to their American customers who they perceived as rich but ignorant compared with themselves. The workers saw the work as transient, and constantly searched for more fulfilling opportunities.

(based on Mirchandani 2004)

This example highlights one impact that new technological developments in satellite, digital and wireless communication are having on the ability of capital to shift labour across national boundaries. While moves such as this may be promoted as economically advantageous to workers in the host countries, the impact on social and cultural practices, including choice of language (in this case, right down to the variety and preferred pronunciation) can be controlled by the employing company. Thus there are built-in inequalities privileging English, and foreign cultural practices. Although workers are competent in a recognised variety of English (in fact for some it is their first language), to receive the perceived economic benefit, they apparently need to learn a different variety for this specific purpose. The level of deception implied in taking on a pseudonym and an American accent impacts badly on the workers' sense of identity and self esteem, and results in resentment and a sense of hopelessness. The 'training' methods outlined in this report reflect an outmoded style of ESP, largely unaffected by the findings of educational, social, cognitive and linguistic research over the past 30 years. Of course our example is egregious; ESP teaching over this period has rarely included such demands as the ones put to the call centre workers in Mirchandani's critical study. Our book contains many examples of excellent LSP courses, with materials and methods soundly based in best practice and research. However, we find this case useful as a springboard to examine some important LSP issues arising from:

- The emergence of English as the 'lingua franca' (ELF) of international commerce, education, entertainment, law, science and technology, politics and many other key activities;
- Increasing demand for LSP;

- Blurred distinctions between native and non-native speakers of English, and the related questions of standards and intelligibility;
- Multilingualism, and the effect of strategies such as codeswitching on discourses.

2.1.1 English as a Lingua Franca (ELF)

A lingua franca is defined by UNESCO as a language 'used habitually by people whose mother tongues are different in order to facilitate communication between them' (UNESCO 1968 [1953]). The rapid increase in the number of people worldwide using English in this way is simultaneously one of the greatest effects and one of the greatest drivers of globalisation. In 1995 David Crystal described English rather triumphantly as:

> [T]he main language of books, newspapers, airports and air traffic control, international business and academic conferences, science, technology, medicine, diplomacy, sports, international competitions, pop music and advertising. Over two-thirds of the world's scientists write in English. Three quarters of the world's mail is written in English. Of all the information in the world's electronic retrieval systems, 80% is stored in English. (Crystal 1995: 358)

The hegemony of English, and in particular of American and British varieties, has inspired a wide range of responses, some of them highly critical.

Concept 2.1 Attitudes towards English as a *Lingua Franca*

Phillipson

Phillipson (1992) argues that English, and its handmaid ELT, is hegemonic and imperialistic, insidiously undermining other languages and cultures via the social and ideological constructs of the language itself. Although ELT practitioners may be well meaning, the (unintentional?) effect on learners and second language speakers is alienation towards their primary culture, society and language.

Swales

Referring to trends in academic publishing, Swales (1997) suggests English could be characterized as *Tyrannosaurus Rex*, 'a powerful carnivore gobbling up the other denizens of the academic linguistic grazing grounds' (374). He regrets 'not the loss of languages per se, but the loss of specialized registers in otherwise healthy languages as a clear consequence of the global advance of English' (376). He points to the increasing trend for scientists to publish in English language journals, mostly based in the USA, thus reinforcing the global academic gatekeeping role of America.

Pennycook

Pennycook (1998) deplores the tone of triumphalism about English in popular western media. Glorification of English denigrates other languages and reinforces NS/NNS dichotomy. It implies NS teachers and pedagogical practices are superior. Beliefs about English and educational practices are embedded in neo-colonial constructions of the 'self' and 'other' and must be resisted.

Widdowson

> How English develops in the world is no business whatever of native speakers in England, the United States, or anywhere else. They have no say in the matter, no right to intervene or pass judgment. They are irrelevant. The very fact that English is an international language means that no nation can have custody over it.
> (Widdowson 1994: 385)

Seidlhofer

> ELF speakers are… not primarily concerned with emulating the way native speakers use their mother tongue within their own communities, nor with socio-psychological and ideological issues. Instead, the central concerns for this domain are efficiency, relevance and economy in language learning and language use. The reasons why the linguistic imperialism school has had little impact on mainstream ELT are rather obvious: people need and want to learn English whatever the ideological baggage that comes with it.
> (Seidlhofer 2000: 57)

Jenkins

> [T]here is as yet little evidence that the global examination boards, such as Cambridge ESOL, IELTS, and TOEFL, are taking account of ELF or are even willing to engage in debate with ELF researchers. … On the other hand, the negative orientations of testers and ELT/SLA traditionalists are increasingly being countered by a growing receptivity towards ELF, especially among younger ELF users and researchers. This is witnessed, for example, by a notable growth in the number of younger NNESs studying for PhDs in ELF and going on to publish

> in the field. To this can be added other positive signs such as the establishment of ELF corpora in addition to VOICE, for example ELFA (the corpus of ELF in Academic Settings) and ACE (the Asian Corpus of English) among many others, and the launch of both the Journal of ELF and a new book series, Developments in ELF (De Gruyter Mouton).
>
> (Jenkins 2012: 493–494)

Since Crystal's early pronouncements, the picture has changed rapidly, with Chinese, Hindi/Urdu, Spanish as well as Arabic and even minority languages gaining ground at the expense of English, particularly on the internet (Graddol 2006). Meanwhile, in the EU, proficiency in a number of languages, including English, is encouraged, with 'FL programs in primary and secondary schools (especially in vocational secondary schools and technical high schools) so that students enter the university with a high level of L2 proficiency, which allows them to be successful in LSP, ESP, and EAP courses', and in Eastern Europe, German, French, Spanish and Russian are widely used professionally and vocationally as well as for international communication (Lafford 2012: 10). While for now English is undoubtedly the *lingua franca* of international communication, business and academia, and in high demand, other languages such as Mandarin, Spanish and Hindi will become increasingly important in these fields (Graddol 2006: 62).

2.1.2 Increasing demand for LSP

With rapid globalisation there has been a correspondingly increased demand for bilingual/multilingual education and training, business and travel, which has in turn necessitated language instruction directly relevant to those activities. Overwhelmingly, demand has been for this instruction to be in English, however there have been considerable advances in the teaching of other languages for specific purposes, particularly in the EU. Lafford (2012: 9) notes that the European Commission, the Council of Europe's Language Policy Division and the European Centre for Modern Language encourage and support the growth of LSP in Europe under 'societal and governmental pressures to create multilingual, mobile EU citizens in Europe with an understanding that knowledge of how the target language is used in culturally appropriate ways in professional settings would improve their opportunities for international employment'. A quick search of publishers' websites reveals the availability of textbooks and dictionaries devoted to LSP in Spanish, French, Russian and German, Chinese, and Japanese. However, these are still relatively few in number compared to those in

English, almost exclusively non-academic, and mostly related to the practical concerns of the business or professional world.

By contrast, the ELT (and by association, LSP) industry, which is highly lucrative and expanding, has also been criticised for fuelling more demand through its own self-promotion (Phillipson 1992). Much of the publicity suggests that people everywhere need to learn English in order to achieve success in life, and if possible, most want to learn it from 'native' English speakers. This bias is reinforced by the industry, which frequently uses the fact that they have native speaker teachers to promote courses. The British Council in particular has come in for criticism (e.g. by Phillipson) on the grounds that it perpetuates this kind of neo-colonialist attitude.

2.1.3 Blurred distinctions between native and non-native speakers of English

The hegemony of English was established through the forces of colonialism, immigration and commerce. The concentric circles model (Kachru 1985; 1997) attempted to capture the distinctions between native and non-native speakers, based on how and why English established itself around the world, and how it has evolved differently for different purposes.

Concept 2.2 Kachru's concentric circles model

1. *Inner circle*: the traditional bases of English, countries where the majority of the population are native speakers of English, usually as a result of 'gradual and planned movement of English – speaking populations' (Kachru 1997: 67) e.g. Britain, Australia and New Zealand, North America, also referred to as BANA (Holliday 1994).
2. *Outer circle*: former colonies or spheres of influence of the UK or USA. e.g. India, Kenya, Nigeria, the Philippines, Singapore. English (ESL) is just one of the codes used by bi- or multi-lingual speakers; English is either an official language or is widely used in essential areas such as education, the law and administration. English is used with varying degrees of competence in many domains, both as an intranational and international language.
3. *Expanding circle*: countries which may not necessarily have a colonial history with users from the inner circle, and where English (EFL) is rapidly assuming the dominant position as the international language (e.g. China, Japan, Taiwan, Thailand and Greece).

(Kachru 1985)

Undoubtedly Kachru's model has been useful; it has provided a rationale for discussing the question of standard English, that is whether it really exists, and if it does, whether it is desirable, where it should be taught, and also for discussing whether other varieties should be taught in different contexts. However, as time goes on, and globalisation increases, it is becoming more difficult to draw a distinction among Kachru's three circles, and the motivation for attempting to do so has also become harder to justify Kachru's model has been criticised for being confusing in its labelling, with the so-called 'outer circle' placed between the 'inner' and 'expanding circles' (Tripathi 1998). Many writers now prefer to refer to 'inner' and 'outer' circles only, conflating circles two and three as 'outer', while some prefer to use the alternative terms 'Centre' and 'Periphery' (following Phillipson 1992: 52).

Kachru's circles are also criticised for not having a neat correspondence with the native speaker and non-native speaker distinctions traditionally used in ELT (Tripathi 1998). It is clear that these lines are dissolving in many contexts. As early as 1977, Graddol had predicted that by the beginning of the twenty-first century, 'those who speak English alongside other languages will outnumber first-language speakers and, increasingly, will decide the global future of the language', and he proposed an alternative model consisting of three overlapping circles of English illustrating a move in the 'centre of gravity' from L1 to L2 English (10).

We see this occurring for example, in Kachru's 'inner circle', where immigration and natural increase has resulted in large numbers of British, Americans, Canadians, Australians and New Zealanders who were mostly educated in English in local schools, but who speak a language other than English at home. Such people are often referred to as generation 1.5 (Rumbaut and Irma 1988, Harklau, Losey and Siegal 1999). They tend to possess a high oral fluency in English, and may be considered by some to be native speakers; nevertheless they often find themselves disadvantaged in higher education or in seeking employment because they use non-standard vocabulary or make ESL 'errors' in written English.

It would be over-simplifying the issues to think that using English or another language is just an either/or choice, and it remains true that even within the Centre, social class, age, gender and profession are major determinants of whether people can take advantage of the assumed social and economic benefits of English. On the one hand, Pakir (1999) was optimistic that in 'outer circle' countries such as Singapore, Malaysia and Brunei the huge numbers of English-knowing bilinguals would have many opportunities in the twenty-first century.

She described typical English-knowing bilinguals in these countries as urban dwellers participating in 'technologically driven hubs' with levels of education that enabled them to take advantage of capitalism, democratisation, modernisation and globalisation, in particular in the areas of global and electronic media. She suggested that members of other social strata in these countries also aspired to English-knowing bilingualism, offering the prospect of 'a colossal number of new speakers of English' (109). On the other hand, not only in the poorest of countries but also in the more technologically advanced, it is clear that there is a growing divide between the elites who can get access to the 'benefits' of globalisation, and the poor, who are denied access. Both these scenarios offer challenges for EAP/ESP in areas such as teacher training, curriculum and materials development and research.

The growing demand for English, and the increasing proportion of speakers of the language on the Periphery rather than in the Centre means that teachers and researchers are going to be people from the local region rather than expatriates from the Centre. Although native speaker teachers tend to have special privileges by virtue of where they come from, and regardless of their competence (Brutt-Griffler and Saminy 2001), the non-native speaker teacher brings other strengths to the classroom. Seidlhofer (1999) suggests that teachers of a foreign language may have greater insights into culturally and socially appropriate pedagogies, they can 'authenticate' language so students 'can make it their own in various contexts of use' (236), and they also have insights from a shared L1 into the kinds of errors learners are likely to make, and how to avoid them. The same may hold true for teachers of other languages for specific purposes, although the purpose, audience and context for which the target language will be used will have a strong influence on how 'standardised' the variety needs to be.

2.1.4 The question of standards

There has been a long running debate in ELT over the importance of 'Standard English' in a globalised world. Henry Widdowson (1994) remarked:

> Standard English is no longer the preserve of a group of people living in an offshore European island, or even of larger groups living in continents elsewhere. It is an international language. As such it serves a whole range of different communities and their institutional purposes and these transcend traditional communal and cultural boundaries (382).

Alan Davies (1999) defines as standard English 'the language [variety] used by the educated' (184). But in an age of universal education, what might this mean? Davies (and others who use this formulation) seem to imply that there is a sub-set of the 'educated' to which they are referring, but without defining what this subset might be, the argument becomes circular: standard English is the language of people who are educated enough to speak standard English. Davies does allow that there are several standard Englishes (although all from the Centre), but says that the differences among say, British English and American English are not substantial. This is true largely because standard English is more concerned with grammatical than lexical features. Widdowson (1994) points out that vocabulary is diversified to suit a range of social and institutional uses; while people may be able to communicate easily within their professional subgroup, because of the specialised terminology, 'varieties of English used for international communication in science, finance, commerce, and so on are mutually unintelligible' (383). Widdowson may be overstating this point; it is not that they are unintelligible, more that the implications and values attached to words may lead to only partial understanding or to misunderstandings. This point is particularly pertinent to the field of LSP which, as we have argued in Chapter 1, is concerned with communication both within and between specialist fields.

While support for standard English remains strong among traditionalists in the Centre, the term 'native speaker' now seems less and less sustainable in its original sense. The old attitudinal distinctions of English as a Native Language (ENL), English as a Second Language (ESL) and English as a Foreign Language (EFL) are becoming less meaningful and quite unhelpful as a means of addressing 'other vital issues directly concerned with functions, identities and creativity in Englishes in dynamic sociocultural and linguistic contexts in practically every English-using part of the world' (Kachru 1997: 66–67). Rather than seeing users of local and regional varieties of English as deficient, Kachru suggests that variations should be embraced, and recognised as 'a formally and functionally determined range of languages … as part of their competence for linguistic interaction' (Kachru 1986: 164). Canagarajah (2006) goes further; he supports 'code meshing', integrating local varieties of English with Standard Written English with the goal of pluralising academic writing and developing multilingual competence.

Such opinions are relevant to authors and students, particularly writers of theses, conference papers and journal articles who face difficulties having their manuscripts accepted in international journals. It can be extremely difficult to get a paper published if one is clearly not a speaker of a standard variety of English, and this can be a serious barrier to scholars and graduate students who are situated on the Periphery (Tardy 2004). English is well established as the common International Language of Science (EILS). In1995, over 95% of the research papers in the world's largest citation index, the *Science Citation Index* were in English, with French, German and Russian accounting for almost all the rest (van Leeuwen, Moed, Tijssen, Visser and van Raan 2001, reported in Tardy 2004). Although by 2011, the percentage in English was reported to have dropped to 81% (Purnell 2012), there is no doubt about the hegemony of English in the world of publishing, even if absolute figures are hard to come by. It has been claimed that within the scientific community, strenuous, and perhaps highly prejudicial attempts are made to maintain standards, chiefly through the gatekeeping activities of prestigious scientific journals, the majority of which are published in the United States (Flowerdew 1999, Canagarajah 2002). One suggested response, while not a panacea, is that that localised scientific communities encourage their members to publish in local language journals so that regionally relevant scientific findings can at least be aired and acted upon (Swales 1997). In response to the issues, another branch of LSP related to getting published has sprung up, with multiple books and special issues of leading journals devoted to this topic.

2.1.5 Intelligibility, comprehensibility and interpretability

Concerns have been raised that the rise and acceptance of so many local varieties of English will make 'English speakers' mutually unintelligible. According to Widdowson (1994) these fears are baseless; Standard English, like other varieties of language develops by 'a continuing process of self regulation', so English 'will naturally stabilize into standard form to the extent required to meet the needs of the communities concerned' (385). Regardless of whether people are interacting interculturally or cross-culturally, communication needs to be intelligible, comprehensible and interpretable by the parties involved. *Intelligibility* refers to the ability of the listener to recognise individual words or utterances, while *comprehensibility* is the ability to understand the meaning of the word or utterance in a particular context; a third factor, *interpretability*, relates to the ability to understand a speaker's intention (Smith and Nelson 1985). How these three factors are construed is very much bound up in the contexts where they are applied.

Intelligibility rests mainly on decoding phonological features, and pronunciation, including segmentals, appears to be the most troublesome aspect of spoken communication not only between NS and

NNS, but also between NNS and NNS (Pickering 2006). Deterding and Kirkpatrick (2006) analysed conversation among 20 participants, all of Asian background but from different mother tongues, at a regional conference in Singapore. They found evidence of common pronunciation features that differed from 'Standard English' that supported their hypothesis that there is an emerging lingua franca in the ASEAN countries of Cambodia, Brunei, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam. Only those features of pronunciation not shared by speakers from other ASEAN countries resulted in communication break-down. These researchers conclude that 'the ability to accommodate one's pronunciation to the needs of one's listeners; and the knowledge of when that is required and how to achieve it is essential for international communication' (406).

Lack of comprehensibility and interpretability among varieties of English in international contexts such as international shipping and air traffic control can have severe, even fatal, consequences. As a result, bounded, pragmatically motivated varieties with a carefully delimited vocabulary and prescriptive grammar that can be comprehended across national boundaries have been developed in some key fields. Examples are 'Seaspeak' (Strevens 1984), 'Airspeak' (Robertson and Johnson 1988), 'Policespeak' for English and French police and emergency services at the Channel Tunnel (Johnson, Garner, Hick and Matthews 1993), and 'Emergencyspeak' for 'cross-border' emergencies in the UK and Europe (Davies 2005). Another variety, EDIFACT, has been designed to facilitate electronic exchange of goods and trading information (Meierkord 2006a).

Case Study 2.2 Airspeak

English was established in 1950 as the predominant language used in aviation by the International Civil Aviation Organization, but it is still not the mandatory official language in Air Traffic Control (ATC). Some countries (e.g. France, Italy and many of the former Soviet Union) still allow their own languages as well as English to be used for domestic ATC (Itokawa 2000: 52) 'However, realistically speaking, if one cannot use English, one cannot participate in the field' (Tajima 2004: 453).

Another way of increasing comprehensibility could be to use a more limited variety of English with fewer local cultural allusions. In business there is a move towards training members of international teams in what some call English as an International Language (EIL). However, there is as yet no clear agreement on what EIL consists of and competing acronyms further confuse the issue.

Quote 2.1 Rogerson-Revell on English as an international language

Indeed, in its strictest sense, the term 'lingua franca' seems to be equated with a pidgin being a language with no native speakers. The term English as a Lingua Franca (ELF) is generally used in this way to refer exclusively to the use of English between speakers whose mother tongue is not English (Firth 1996; Seidlhofer 2001). The term BELF (Business ELF) is also used by some (Louhiala-Salminen et al. 2005) to refer to the use of English for business purposes between speakers whose mother tongue is not English. However, both of these terms exclude a substantial body of communicative events where English is used as a common language both between ELF speakers and between ELF and English as a mother tongue (EMT) speakers. Broader terms such as 'English as an International Language' (EIL), along with 'Global English' and 'International English', seem open to this more flexible and liberal interpretation. Consequently, in this study, the term English for International Business (EIB) is used to refer to the use of English as a common language in business contexts where both EMT and ELF speakers could be present (Rogerson-Revell 2007: 104–105).

Note: See also Bargiela-Chiappini, Nickerson and Planken 2013 for more on English for Business terminology and research.

2.2 The development of new technologies

With globalisation, access to digital information technology is increasing exponentially. In 1999, less than 5% of the world's population had access to the internet; by 2010 that number had grown to nearly two billion, or almost 30% – an increase of around 400% (http://www.internetworldstats.com/stats.htm). New modes of online communication are proliferating in both personal and professional lives. Increasingly, students of the twenty-first century are 'digital natives' (Prensky 2001), freely participating on mobile devices both inside and outside of class in a wide range of social media such as Twitter and Facebook, online forums, chat, blogs and personal websites. To many of these students, email seems as hopelessly outdated as 'snail mail', and it is often the teachers who feel the need to keep up. Yet the interactivity afforded through web 2.0, the huge amounts of highly specific data now available online, and the enormous processing capacity of modern computers and mobile devices offer opportunities for innovation in teaching and learning that teachers should not ignore. Courses can be delivered totally online, enabling participation by students who are widely separated geographically, or in blended formats, allowing students the opportunity to do some work at their own pace, in their own time, and some face-to-face in the classroom (Arnó 2012). Pedagogy can be highly customised for specific needs, either through Learning Management Systems (LMS), or in dedicated environments (Garrett 2009).

2.2.1 Greater computing capacity

In the mid-1960s, Gordon Moore predicted that the number of transistors in an integrated circuit would double every two years (see Moore 1965). This prediction has largely turned out to be correct, with ever more powerful computing devices, including phones and tablets that can connect wirelessly to the internet appearing on the market. Teachers and students who have access to the web now have the opportunity to download and interrogate enormous amounts of spoken, written, or multimodal data either in stand-alone electronic texts or in specialised corpora. For the LSP teacher, to whom access to authentic texts and contexts is essential, this development provides unparalleled opportunities for textual analysis and comparison.

2.2.2 More agile and pervasive communication modes

Equally important is the opportunity that web 2.0 provides for interactivity and collaboration, not only in the classroom, but across vast distances. While distance learning has a long history, until the arrival of the internet, access to teaching and learning materials was restricted, turnaround and feedback was slow, and opportunities for communication with fellow students or the teacher were quite limited. The introduction of mobile devices such as phones and tablets has provided students with the capability of connecting, downloading, uploading, chatting or composing anytime, anywhere wireless networks are available. While this agility is often welcomed, it can impose unreasonable demands on teachers and students to be in constant communication, and guidelines for reasonable access need to be set. In the workplace, multi-tasking communication using diverse modes such as email and chat simultaneously has become the norm, to the extent that second language learners may need training and practice in dealing with it (Giminez 2014).

2.2.3 Convergence of oral, written and visual channels

The rise in multimodality is one of the more striking trends in technologically-mediated communication. In 2000, the New London Group noted: 'written-linguistic modes of meaning are part and parcel of visual, audio, and spatial patterns of meaning. Take for instance the multimodal ways in which meanings are made on the World Wide Web, or in videocaptioning, or in interactive multimedia, or in desktop publishing, or in the use of written texts in a shopping mall' (Cope and Kalantzis 2000a: 5–6). The New London Group forcefully argued at that time for changes to the way literacy is conceived and taught that would reflect these new realities, and also for literacy educators and students to engage in multiliteracies actively and critically to make positive social change in the world. Since that time, the continued convergence of all kinds of media coupled with the proliferation of new media has only increased the need for research into new or hybrid forms of communication, and development of pedagogies that empower learners of all kinds to engage critically and effectively with them.

2.2.4 New genres/genre mixing/hybrids

Genre theorists have long noted the capacity for genres to split into new sub-genres, and the tendency towards genre-mixing or hybridity (Bakhtin 1986, Bhatia 1993). The convergence of computers and internet-based technology introduces new genres, such as the cybergenre. Shepherd and Watters note for instance, that

> [t]he interface for [a] digital newspaper looks and acts like a newspaper but includes the video clips and blow ups of stories and photographs. There is substantially more functionality than incorporated by the initial replicated news genre. The functionality includes the VCR-type controls on the video, blow ups of stories and photographs, and interaction based on string searching and hypertext links. (Shepherd and Watters 1998: 100)

Similarly, a mathematics dictionary or a textbook evolves into an online multimodal experience that may even be personalised based on the individual's needs or preferences. Students may be familiar with such genres, but may have difficulty reading them critically.

2.3 Approaches to language and learning

The globalised twenty-first-century world of multimodalities and multiliteracies, not to mention multilinguality demands a rethinking of approaches to language and learning. This rethinking needs to go well beyond repackaging old material and uploading it to the web. In the general university context, there has been much interest in 'flipped' classrooms where teachers provide content via the internet or Learning Management Systems (LMS), for students to access out of class-time, and reserve face-time for in-depth discussion and problem-solving (Bowen 2012). While such innovations have their place, other less dramatic, but equally fundamental changes are taking place in the way LSP is conceived and delivered.

2.3.1 Language and learning in context

A central tenet of LSP has always been that to be effective, the learning students do must be contextualised. LSP teachers have long used task-based approaches, simulations and role-plays to contextualise learning and provide some measure of authenticity, but it has not always been easy to provide a meaningful and pedagogically defensible integration with real-world professional or academic contexts. Two newer pedagogies in particular that seem very well-suited to LSP are Content and Language Integrated Learning (CLIL) and Community Service Learning (CSL).

Quote 2.2 Arnó and Mancho on CLIL

Content and Language Integrated Learning has been defined as 'an educational approach where [content] subjects [...] are taught through the medium of a foreign language' to students at all educational levels (Dalton-Puffer, Nikula, & Smit, 2010: 1). Some approaches stress the dual integrative focus on content and language, taught by subject specialists or team teaching (Greere & Räsänen, 2008). From the US tradition of Content-Based Instruction (CBI), (Brinton, Snow, & Wesche, 1989), different levels of integration can be distinguished according to (i) whether content is the primary goal of the course under the sole responsibility of the specialist instructor; (ii) whether or not language learning support is included (sheltered model); (iii) if there is specific language instruction to support content courses through the collaboration of subject-matter and language specialists (adjunct model); and (iv) if the language instructor uses discipline content to teach language (theme-based), similar to Dudley-Evans and St. John's (1998) 'carrier content'. In turn, these authors identify different types of collaboration that range from cooperation to team-teaching. These are not unproblematic, because content lecturers fear that adapting content to English lower proficiency learners may result in a "watering down of the content"; or language lecturers may regard supporting other disciplines as "eroding their professional career"(Crandall & Kaufman, 2002: 3).

In Europe, Greere and Räsänen (2008) propose a classification of CLIL courses ranging from the absence of the integration of language and content to full collaboration between language and discipline specialists: (i) the non-integration model (which they term 'non-CLIL'), involving independent content and language courses (less than 25% of exposure to English in content courses); (ii) the Language for Specific Purposes (LSP)/Discipline Based Language Teaching mode, similar to the theme-based model above (i.e., subject-matter exposure through LSP subjects); (iii) the pre-CLIL model (language/content), which involves LSP courses preparing for content courses (similar to the CBI adjunct model) or content courses taught through the foreign language; (iv) the adjunct-CLIL model, which tailors language instruction to disciplinary needs, based on the collaboration of language and subject specialists, and (v) the CLIL model which involves the team-teaching of dual programs catering for language and content. This distinction helps in the analysis of CLIL programs in terms of language and content and the roles played by each.

(Arnó and Mancho 2015: 63–64)

In a longitudinal study, Song (2006) compared the academic success of students taking a content-linked ESL programme with a group who did not receive CBI. The CBI group achieved higher academic pass rates and better grades and better subsequent performance in ESL and developmental English courses. The CBI students also achieved better long-term academic success in English proficiency tests, graduation and retention rates, and overall GPA.

Concept 2.3 Lear on Community Service Learning (CSL)

Lear (2012) describes Community Service Learning (CSL) as 'a type of experiential learning that blends specific course content with real-world applications and ties them together through structured reflection' (158). In the US, smaller colleges have a long-standing tradition of requiring students to engage with the local community

> through service learning projects. Lear argues that the CSL model is a perfect fit with LSP as it combines real-world experience in the target professional context with meaningful language practice; operating outside the constraints of the classroom, CSL may provide a learning environment that enables students to engage in authentic communities of practice (Lave and Wenger 1991) and to develop their 'symbolic competence' (Savignon 2007) in the relationships that exist in specific professional or workplace contexts. Lear cites several examples of interdisciplinary programmes at Californian Universities (e.g. in Nursing, Business, Economics and Journalism) that use a CSL approach with Spanish (164–165).
>
> Lear (2012)

Lafford (2012) discusses several examples of foreign language programmes in the US that take innovative LSP approaches. The Chinese Flagship Program at Arizona State University (Spring 2014) integrates LSP with the FL curriculum to more closely address the needs of international business, workplace and academic contexts. In addition to intensive studies in language and culture, students have immersion experience in foreign universities and 'language-intensive internships via public and private partnerships with international agencies and corporations, and the opportunity to develop professional-level language proficiency while obtaining an undergraduate major' (Lafford 2012: 7). The Monterey Institute of International Studies provides several master's programmes involving 'interdisciplinary coursework in business, economics, political science, and so on, that is imparted in several target languages (e.g. Arabic, Chinese, English, French, Japanese, Russian, Spanish) and guided by an awareness and analysis of genres' (Lafford 2012: 19), while at Georgetown University, the 'Developing Multiple Literacies' project has restructured the entire German-language programme on a genre-based, systemic-functional linguistics model to address the need for 'language-based cultural literacy at advanced levels of ability that is now much in demand in civil society, government, the professions, and commerce and trade in the United States and elsewhere' (Byrnes, Maxim and Norris 2010:12).

2.3.2 An 'ethno-discursive' turn in applied linguistics

Applied linguistics is a very broad interdisciplinary field with strong links to education, anthropology, sociology and many other disciplines within the social sciences. From its very beginnings, the field of LSP, a sub-field in educational applied linguistics, has been heavily invested in examining language in context. Dudley-Evans and St John (1998) note the pioneering work of Lackstrom, Selinker and Trimble (1973) in 'relating language form to language use, making use of the main criterion for the selection of ESP teaching materials' (22). LSP has also been closely associated with advances in the concepts of register (Halliday et al. 1964, Halliday and Hasan 1985) and then genre, particularly in the ESP and systemic functional traditions (Hyon 1996). The early work of Swales (e.g. Swales 1981a) on the analysis of research article introductions set the tone for a generation of discourse analytical work in ESP and EAP, and has been extended widely in languages other than English. In a very real sense, then, the field of LSP has led the way in embracing contextualised studies of language use.

Meanwhile, changes have been taking place in related fields. In their preface to *The SAGE handbook of qualitative research*, Denzin and Lincoln speak of a 'quiet methodological revolution', a 'qualitative revolution [that] is taking over the social sciences and related professional fields' (2005b: ix). With it has come greater hybridity, a blurring of disciplinary and methodological boundaries, and a turn towards more interpretive and qualitative approaches, in particular the use of ethnography. Ethnography, although it is variously interpreted, and not unproblematic, is seen by Denzin and Lincoln as 'one of the major discourses of the neomodern world', and one that can (and should) be used to further the cause of social justice (xvi). Among the responses to this revolution are ways of approaching research problems that draw on previously separate traditions. For applied linguistics, the combination of ethnographic techniques of data collection with techniques of discourse analysis could perhaps be described as an 'ethno-discursive turn', one that combines the primary desire to explore written, spoken or multimodal texts linguistically with the additional goal of achieving a 'thick' description of a particular social context.

2.3.3 Access to an expanded range of theory and research methods

Increased collaboration of linguists and non-linguists in LSP projects has involved borrowing and sharing among such diverse fields as anthropology, sociology, sociolinguistics, rhetoric, philosophy and social psychology. Opening up space to different theoretical frameworks can encourage productive hybrid approaches to research (Bargiela-Chiappini and Nickerson 2002, Sarangi and Candlin 2003). Linguistic ethnography, for example, combines linguistic analysis with ethnography in the study of social, institutional and political processes, making the argument that ethnography can benefit from the analytical frameworks provided by linguistics, while linguistics can benefit from the processes of reflexive sensitivity required in ethnography (Creese 2008: 232). We also see LSP researchers combining discourse analysis of a specialised corpus of written, spoken or multimodal texts from a particular context with ethnographic data collected by participant or non-participant observation, interviewing, shadowing or a collection of artefacts such as company reports. In this ethno-discoursal mode, discourse analysis is supplemented with analysis of data triangulated from a variety of contextual sources. An 'ethno-discursive' approach lends itself to the investigation of language used in such diverse contexts as the factory floor, the company boardroom or the university. It enables investigation of research concerns such as personal identity, power relations in the workplace or academia, and intercultural communication, while maintaining a primary focus on language.

If there is a disadvantage of the application of more diverse sets of theory it is that although it enriches the field, it can increase the risk of confusion through misappropriation of terminology, or inadequate explanation by researchers where terms have changed their meanings as they are used in different contexts. An example of this is the confusion in the literature over the terms *constructivism* and *constructionism*. These terms (as well as the terms *social constructionism*, *cognitive constructivism* and *social constructivism*) are widely drawn on in discussions of LSP research and pedagogy. Although some writers appear to use them interchangeably, constructivism and constructionism are quite different paradigms, with different goals and emphases, and each has a number of different variations and interpretations (Hruby 2001).

A constructivist approach focuses on cognitive processes; it assumes that students will learn best by engaging in scaffolded practical problem-solving tasks. Scaffolding refers to the way the teacher 'contributes what learners are not yet able to do alone or do not yet know. Teachers adjust, and strategically diminish, their contribution, supporting learners as they progress towards their potential level of independent performance' (Feez 2002: 56–57). In LSP, constructivism is commonly applied in task-based learning and problem-based learning including computer-based learning, in fact, in any environments where there is an emphasis on learning by doing. These could include fieldwork, group projects, problem-based learning, self-directed research in libraries and online and hypothesis testing, using, for example, computer-based simulations (Thornton and Houser 2002).

Social constructionism places more emphasis on the role of discourse in community, and constructionist assumptions underlie much of the current research and teaching in LSP. One social constructionist framework that has been used in analysing business settings is Giddens' structuration theory (1984), which suggests that human activity and social structures are in a dynamic and reciprocal relationship, each contributing to and drawing on the other. As Yates and Orlikowski (1992) explain:

> Structuration theory involves the production, reproduction, and transformation of social institutions, which are enacted through individuals' use of social rules. These rules shape the action taken by individuals in organizations; at the same time, by regularly drawing on the rules, individuals reaffirm or modify the social institutions in an ongoing, recursive interaction. (299–300)

Social constructionist ideas are often used in conjunction with a critical approach, which aims to alter the power *status quo* in particular settings by proposing alternative, transformative discourses (Fairclough et al. 2004).

Finally, though these two approaches have different roots and different foci, both can be used to good effect. Warschauer (2002) compares two teachers' use of either constructivist or constructionist principles in integrating technology in academic writing classes at the college level, and concludes that both successfully achieved their goals.

2.4 Concluding comments

In this chapter we have attempted to provide a very broad picture of the context of LSP from the perspectives of globalisation, new technologies and approaches to language and learning. In the next chapter we discuss implications of the intersections of these three perspectives for learning, teaching and researching LSP.

Discussion points

1. How important do you think it is to teach 'standard English' in your LSP classroom? What is your justification for your stance on this issue?
2. How realistic is it to incorporate a critical stance (as advocated for example, by Benesch or Canagarajah) in your LSP classroom? What do you see as the costs and benefits of doing so?
3. To what extent is it important to incorporate the latest versions of 'new media', for example, blogs or tweets in an LSP classroom? What would be the advantages or disadvantages of doing so?

3

LSP in the Twenty-First Century: At the Intersection of Globalisation, Technology and Applied Linguistics

This chapter will:

- Outline some important developments arising from global trends that are particularly relevant to the field of LSP
- Briefly discuss the impact of those developments on particular aspects of learning, teaching and researching LSP

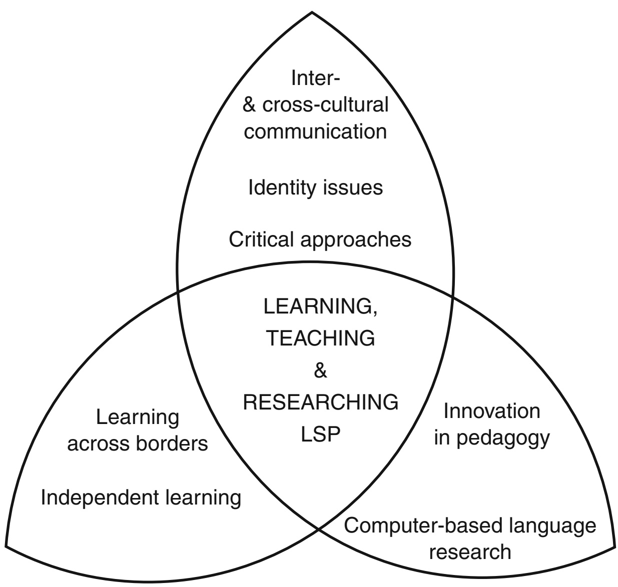

Figure 3.1 Themes in learning, teaching and researching LSP

In the last chapter we described how the confluence of new approaches to language and learning, the development of new digital technologies, and the forces of globalisation have produced many new opportunities and challenges for LSP. We now turn to a discussion of how the intersection of globalisation, new understandings of language and learning, and the application of new technologies impacts teaching and learning, and also researching of LSP. Figure 3.1 highlights the themes that we will explore in this chapter.

3.1 Globalisation and new approaches to language and learning

As we have discussed, new approaches to language and learning have arisen as a result of the wider dissemination and acceptance of theory from fields such as sociology, psychology and linguistics. In particular we saw that the understanding of context, which has always been important to the idea of LSP, has become even more central as it has been more explicitly underpinned by socio-linguistic theory. At the same time, applied linguistic research has become more focused on discourse and genres. In LSP teaching, we see social constructionist ideas underpinning ethnographic and genre-based approaches such as Johns' socioliterate approach (Johns 1995). Social constructivist thinking has also been influential, with, for example, problem-based learning becoming popular in disciplines such as engineering and business, although not always well-received by students in some cultural contexts (Jackson 2003). The intersection of globalisation and new approaches to language and learning raises a number of issues that we will discuss here:

- Inter-cultural and cross-cultural communication
- Issues of identity and authenticity
- Critical approaches

3.1.1 Inter-cultural and cross-cultural communication

The terms 'intercultural' and 'cross-cultural' are frequently used interchangeably or even indiscriminately, so we think it important to make a distinction between these two different kinds of communication. According to Gudykunst (2002) 'Cross-cultural involves comparisons of communication *across cultures* … Intercultural communication involves communication *between people of different cultures*' (19 our italics). More recently Spencer-Oatey and Franklin (2009) have developed the term 'Intercultural Interaction Competence' (ICIC) 'to refer to the competence not only to communicate (verbally and non-verbally) and behave effectively and appropriately with people from other cultural groups, but also to handle the psychological demands and dynamic outcomes that result from such interchanges' (51). Earlier studies in cross-cultural communication that were influential in LSP include those of Kaplan (2001) and Hinds (1987); both attempted to draw connections between thought patterns and writing styles in different cultures, but they were also criticised (perhaps unjustly) for ethnocentricity, excessively broad generalisations and untested assumptions (Silva and Matsuda 2001). However, with the more precise socio-cultural and linguistic analytical tools available today, researchers have taken a renewed interest not only in how different cultures and languages themselves solve rhetorical problems in discourse, but also in how members of a particular culture interact with those of a different culture.

For example, in a study that addresses both cross-cultural and intercultural issues, Bilbow (1997) compared the discourse of English speaking western expatriates and Cantonese-speaking Chinese in intercultural meetings in a Hong Kong-based company. Drawing on a 140,000 word corpus of business meetings, and insights drawn from pragmatics, critical discourse analysis and speech act theory, he concluded that an individual's verbal performances are closely connected to his/her level of power in an organisation. Factors included not only ethnicity, but also gender and the prevailing corporate culture (individualistic or collective). Individuals were also perceived differently by members of the different cultural groups, and personal characteristics were attributed to speakers on that basis. For example, the same speaker could be seen as deferential by members of one culture and manipulative by the other. Such findings have implications for intercultural training in a business setting where managing the impression one makes on others is of high importance. Spencer-Oatey and Franklin (2009) have taken up this challenge, developing tools for assessing, developing and researching ICIC in professional and school education contexts.

Intercultural interaction can also involve neo-colonialist agendas, and test the extent to which 'cultural outsiders' of different racial and economic backgrounds can discuss or act on issues such as gender in a context which is totally outside their experience. In a case study that explored gender issues embedded within cross-cultural activities in a non-western context, Appleby (2009) interviewed four Australian female EAP teachers involved in an international aid programme in East Timor. She found considerable tension and inconsistency in the ways the teachers tried to balance a need for cultural sensitivity with what they saw as gender inequalities inside and outside the classroom.

The issues that arise in the cases described above are also closely tied to notions of personal and cultural identity and authenticity.

3.1.2 Issues of identity and authenticity

> Language studies researchers have moved increasingly away from a view of language learning as an autonomous cognitive activity and toward explorations of the political, community, and institutional contexts in which this activity is embedded, and which this activity both reflects and constructs. (Leki 2005: 136)

The notion of identity is intimately bound up in this view, and has been addressed in many different studies. Ivanič (1997), for example, identifies different dimensions of writer identity that come into play in the academic writing process, including the authorial self, the autobiographical self and the discoursal self. Gender, age, socio-economic background and ethnicity, as well as language, can all be implicated. Norton (2000) sees second language learners' identity as multi-faceted, contested and fluid. She uses the idea of 'investment' to describe how the goals and desires of language learners and the target language are interrelated.

Writers and speakers from other language or cultural backgrounds struggle to maintain what they see as their 'own' identity while attempting to accommodate the rules and demands of a new environment. The development of a professional identity through induction into the discourse of a particular field over time has been the subject of many studies. Some examples include: Dressen-Hammouda's (2008) longitudinal study of the apprenticeship of a graduate student in France into the professional discourse of geology; Le Ha Phan's (2009) study of one of her master's student's attempts at appropriating English as an international language, maintaining his voice and identity while accommodating the requirements of the university; Woodward-Kron's (2008) analysis of the way undergraduates in education incorporate specialist language into their writing as they are inducted into their discipline; and Ingleton and Cadman's (2002) report on the struggle of international graduate students to maintain their former confident self-image when under pressure to perform and conform to the norms of an unfamiliar social and academic environment.

Issues of identity also arise in writing for academic publication. For example, Hirano (2009) compared generic moves in journal article introductions in Brazilian Portuguese and English, and found that writers in Brazilian Portuguese were less likely than writers in English to include an explicit 'indicating a gap' move. Hirano suggested one of the reasons could be that Brazilian writers, being in a small discourse community, were reluctant to criticise the work of close colleagues; they preferred to maintain solidarity.

Globalisation has placed peculiar demands on identity and has generated a variety of responses. In a case study of an international business meeting in Italy where English was the lingua franca, Poncini (2002) found that many other languages were used instrumentally or procedurally. In small group discussions where people had differing levels of skill and confidence in using English, the use of other languages levelled the playing field, positioning all participants as multilinguals. Heller (2003) investigated the contradictions between language as a mark of authenticity, belonging or identity, and language as an acquirable technical skill and marketable commodity in francophone Canada. These contradictions have direct consequences for language teaching and learning, insofar as they affect what counts as competence, who gets to define what counts as competence, who is interested in acquiring that competence, and what is considered the best way to acquire it.

We have seen that local individuals or social groups are taking on elements of the global which they perceive to be of use, meanwhile utilising strategies to retain their local flavour or identity. Robertson (1995) refers to this process as 'glocalisation', where the particular is universalized and the universal is particularised. This is the second stage of globalisation, where, for example, businesses and media re-package their products so they can function most effectively to meet local economic and social demands (Graddol 1997). In LSP, these so-called 'glocal' solutions abound. In many different contexts, speakers seamlessly use code-mixing and code-switching between English and another language depending on who they are talking to and their communicative purpose. People will use English for international communication and the local language for projecting their own identity and values, and they may even speak a local variety of English. In Europe, Euro English (EU English) is an emerging variety used in documents within the European Union. With distinctive lexical choices, discourse strategies and accents, it is used as a lingua franca among linguistically and culturally diverse populations whose first language is not English (Jenkins 2001, Seidlhofer 2001). Increasingly, teachers will have to take into account local values, cultural norms and the needs and wants of such learners. As noted in Chapter 2, in South-East Asia an English lingua franca seems to be emerging where speakers adapt their pronunciation to suit the needs of their Asian listeners with very little loss of intelligibility;

this could lead to a situation where local teachers of English will draw on local norms for teaching materials, and it has been suggested that it will be the British and Americans who will need language training in order to do business in the region (Deterding and Kirkpatrick 2006).

We are already seeing the notion of authenticity expanding to recognise this reality. The high value placed upon authenticity in modern language teaching is, in part, a strong reaction against the artificiality of teaching methods that formerly prevailed (and in fact still prevail in many locations around the world) based on grammar translation, transformational grammar and the audiolingual approach. The rise of Communicative Language Teaching (CLT) in the 1970s coincided with the general availability of new technologies which provided ready access to real world texts intended for audiences other than students of language. Via video and audio recording it is now possible to gain intimate access to real world contexts and examine and analyse them in detail. Discourse analysis, corpus linguistics and genre studies have continued to grow in popularity and extent as a result and the findings of these research efforts have increasingly been applied in the language teaching classroom.

Although 'authenticity' is generally accepted as a guiding principle in LSP, its meaning has been much debated (for details see for example, Robinson (1991), Jordan (1997), Macdonald, Badger and White (2000), and van Lier (1996)). Concept 3.1 provides a sample of a range of positions on authenticity, and the way the idea has evolved.

Concept 3.1 Authenticity

Wilkins

Wilkins (1976) defines an authentic text as 'a stretch of real language, produced by a real speaker or writer for a real audience and designed to convey a real message of some sort' (79).

Breen

Breen (1985: 61) identifies four ways in which authenticity may be recognised in language teaching: in the texts used as input data for learners; in the learners' own interpretations of such texts; in the tasks developed for language learning, and in the actual social situation of the language classroom.

Hutchinson and Waters

Hutchinson and Waters (1987) claim authenticity is not a characteristic of a text in itself: it is a feature of a text in a particular context: 'A text can only be truly authentic … in the context for which it was originally written. Since in ESP any text is automatically removed from its original context, there is no such thing as an authentic text in ESP' (159).

Widdowson

Widdowson (1990) claims that artificiality is not only an essential characteristic of pedagogy, but also a strength. 'Pedagogy is bound to be a contrivance: that is precisely its purpose. If what went on in classrooms exactly replicated the conditions of the world outside, there would be no point in pedagogy at all' (163). He goes on to say (1996) that authenticity is dependent on the authority of the native speaker.

van Lier

van Lier (1996) says authenticity is the result of acts of *authentication*, by students and their teacher, of the learning process and the language used in it. The teacher may be instrumental in promoting authenticity, although this may be a lot easier to achieve in some settings, and students, than in others (128).

The notion of authenticity becomes especially problematic where the target language is an international or foreign language, not a second language. Kramsch and Sullivan (1996) suggest that communicative teaching methodologies suited to westerners may be seen as inappropriate, and even culturally imperialistic in global contexts. They argue that authentic pedagogy depends more on appropriate interactions among teacher and students in the classroom than on 'genuine' texts and tasks imported from Anglo-Saxon environments.

Contexts for learning, to be effective, therefore need to take into account local conditions of use. The process of learning involves getting learners engaged on their own terms, and in order to do this, learners need to make the language their own – in other words, to 'appropriate' it (Kramsch and Sullivan 1996). For instance, a Thai graduate student working on an international aid project in Thailand will need to move easily between two cultures: that of the foreign aid workers and that of the local workers. In order to be true to herself and others, she will need to retain certain key aspects of her primary culture. To be seen to have 'sold out' entirely to a foreign culture and its discourses may not enhance communication and cooperation with her local community. An issue for such individuals is just how far they wish to 'authenticate' their discourse, and an awareness of what are they might be giving up in the process. The cultural, social and personal dislocation that is involved has been discussed at length, for example by Gee (1990; 1994), Kramsch (1993) and Canagarajah (2001), and these authors have made it clear that notions of authenticity, identity and voice are closely identified with 'critical' approaches in LSP.

3.1.3 Critical approaches in LSP

We have seen that globalisation is forcing members of the LSP profession to confront the fact that in their classrooms, very different and often conflicting traditions, ideologies and agendas can be in play at both the individual and the societal level. Block (2007: 5) makes the point that adult immigrants, asylum seekers or long-term sojourners find themselves forced to 'reconstruct and redefine themselves' in totally unfamiliar circumstances, but at the same time do not always have the optimal access to the people, culture and language of their host country that is idealised in the concept of target language immersion. Thus, a key question for teachers who are from different cultures, backgrounds, religions and political persuasions to their students is the extent to which they can, or more importantly, should become involved in negotiating these differences. Another question is whether it is possible to avoid being involved.

A major debate throughout the 1990s revolved around the extent to which EAP should be accommodating students to the expectations of the academy (e.g. Allison 1996) or exploiting opportunities to encourage students to critique and resist the status quo (e.g. Santos 1992, Pennycook 1997). The idea that learners have rights as well as needs is implicated in such a critical approach. Sarah Benesch (1999), for example, has extended the traditional LSP concept of needs analysis to 'rights analysis', arguing that students should be encouraged to become more engaged by activating strategies of negotiation and resistance rather than simply acquiescing to the rules and demands of academic and bureaucratic power structures.

On the other hand, the extent to which students, let alone LSP teachers working on their behalf, can or should actively challenge the curriculum has been questioned. In a paper on the development of an EAP course for Master's of Architecture students, Swales, Barks, Ostermann and Simpson (2001) take a pragmatic approach to this issue. They recognise that collaborative arrangements that are set up between EAP teachers and other academic departments to assist international students can be very fragile and must constantly be renegotiated. They also question whether the international students, who are typically from affluent backgrounds, see themselves as oppressed by the system. What they suggest is a 'middle of the road approach' that provides 'cultural, educational, linguistic, and personal support [for students] in a stressful environment plus a demonstrated stance by the instructor that … [the university] is not a perfect world' (455).

While the critical approaches suggested by Benesch, Pennycook and others might be possible some of the time and with some populations of students in countries like the USA, the extent to which they can or should be applied in different LSP settings around the world is still being questioned. Does the hegemony of English as a lingua franca also extend to the hegemony of western values or ideologies? With the number of second language speakers of English worldwide surpassing the number of native speakers, more teachers of ESP/EAP will be drawn from local communities instead of the expatriate community. Curricula, materials and methodologies, and the ideologies that underpin them, that may be thought appropriate in one context may be considered unsuitable in another. Along with appropriate language for local needs will come language teaching methodologies based on ideologies that are more in tune with local sensibilities. While the cultural climate of higher education in the USA, New Zealand or Western Europe may be open to students' questioning of their professors' ideas and methodologies, in other parts of the world such tactics may be perceived elsewhere as disrespectful, and could even backfire on the students or their teachers. In East Asia, for example, students are more used to a didactic approach to teaching, and Confucian values instil respect for teachers. Jackson (2004), for example, reports that in a Hong Kong university, in 20 video-recorded business case discussions, 'the only one who routinely challenged his professor was an American exchange student, and many of his Hong Kong classmates found this uncomfortable' (226). Notions about when and how students should express their opinions are culturally bound; if self-expression is seen as desirable in the curriculum, then more culturally sensitive ways of encouraging it will need to be found. Jackson (2002), for example, suggests that teachers in an east Asian context might try using cooperative groups where students have a safe place to exchange views, and where representing the group gives a student a legitimate reason to voice an opinion without drawing attention to him/herself.

3.2 The intersection of globalisation and digital technologies

In the continuing process of globalisation, the diffusion of digital technologies provides new technical solutions to solve local problems as well as the opportunity for LSP learners to have immediate and meaningful contact with native speakers and their discourse communities. The former barriers of time and space that existed have largely fallen away. While learning and teaching LSP will certainly continue to involve international travel for some teachers and students, learning can also take place remotely via the internet and wireless technology. Such easy access should enable students to have a greater say and greater flexibility in what, how, when, and where they learn. In this section we focus on:

- Learning across borders
- Independent learning

3.2.1 Learning across borders

The intersection of globalisation and new technologies has seen a huge rise in learning and using languages 'across borders'. Both learners and teachers travel or communicate remotely more readily for specific language learning purposes. Two important fields are language for academic purposes and language for business purposes.

Language for academic purposes has mostly been via the medium of English, with large numbers of international students studying at universities in predominantly English-speaking countries. In Europe, however, it is increasingly the norm for students to study multilingually, and while study abroad is still a requirement of many universities, some students are able to study bilingually without leaving home. Computer Mediated Communication (CMC) projects involving a form of task-based asynchronous interaction called 'e-mail tandem language learning' have been carried out with different language-pairings. Leahy (2001) for example, describes a collaborative task-based project where students in Britain studying law with German, and German students in Germany studying law with English engaged in peer tutoring via email correspondence in the language that was foreign to them; gains were noted in both language fluency and legal content knowledge. In a similar project involving students in English and Spanish (Appel and Gilabert Guerrero 2006), one group had specific tasks to perform and the other group did not; the findings suggested that having a set task resulted in more sustained and more productive interactions. See Bargiela-Chiappini et al. (2013) for examples of business discourse.

LSP teachers also find many more opportunities to work in foreign universities across the world, either by travelling, or remotely via satellite, wireless technology and the internet (see Case Study 3.1).

Case Study 3.1 Ennew and Fujia on international education and China

Since it joined the World Trade Organization in 2001, China has seen an explosion in international education, both in Chinese students studying abroad, and foreign institutions delivering education in China. The authors describe four models: (1) both the provider and educational recipient remain in their own country and education is via distance/online mode; (2) the recipient moves to the provider country; (3) commercial providers set up international campuses in China; (4) a combination of temporary fly-in faculty and local faculty provide education in China (master's degrees in business and management are the most common in this mode). By 2004 there were already over 700 programmes in China collaborating with foreign partners (Ennew and Fujia 2009: 28). Major educational providers are Australia, the USA and Hong Kong, but diverse European and other countries are also involved. Similar partnerships are also being set up in other parts of the world such as the Middle East and South East Asia (Ennew and Fujia 2009).

Starting in the mid-1990s, the teaching of the language of business began to challenge EAP as a global concern (St. John 1996). The realities of a globalised economy have produced complex multilingual business situations (see, for instance, Louhiala-Salminen, Charles and Kankaanranta 2005). Globalisation has also involved greater mobility, not just for managers, but also for workers at every level, including hotel and factory employees (Warschauer 2000, Blue and Harun 2002). The built-in inequalities in these kinds of jobs have long been recognised (Roberts et al. 1992), so critical language awareness to understand and negotiate relations among aspects of language, discourse and power continues to be an important component of LSP.

3.2.2 Independent learning

It is clear that advances in Information and Communication Technology (ICT) provide many exciting possibilities. As Arnó-Macià (2012) puts it:

> [T]echnology has transformed LSP teaching and learning. Through technology, LSP teachers and researchers can access discipline-specific materials and situations and compile corpora of specialized texts. Computer-mediated communication provides learning tools and a gateway to the discourse community. Technology also provides

> opportunities for collaborating, creating virtual environments and online courses, and fostering learner autonomy (89).

Learner autonomy broadly refers to the idea that a person is able to be in control of his/her own learning (Holec 1981). It is true that computer mediated and online language learning satisfies several of the conditions for promoting learner autonomy: it offers students opportunities to study entirely on their own, to take responsibility for their own learning, and be self-directed (Benson and Voller 1997, Benson 2011).

However, the use of technology alone does not guarantee autonomy or a feeling of empowerment; indeed, for some cultures (e.g. those with Confucian traditions) independent learning may not even be seen as something greatly to be desired (Than and Bidmeshki 2010). Also, a 'digital divide 2.0' seems to have opened up for younger students, who may be skilled at accessing digital material, but may lack the critical literacy to use online resources effectively (Vie 2008); even though today's students regularly use digital technologies (e.g. gaming, texting, chatting and surfing the web) outside class, that does not necessarily build the skills or understandings that academics and professionals use (e.g. searching databases, and reading lengthy academic or technical articles online). There is evidence that the growing incidence of plagiarism in student's writing is not just because it is easy to cheat by cutting and pasting from online texts, but also because students are confused about what the academy considers to be appropriate use of sources (See, for example, Pecorari 2003, Abasi and Graves 2008). Some LSP students may need explicit and scaffolded instruction in these more cognitively demanding, and possibly unfamiliar activities before they can use the internet independently for academic or professional purposes (Luzón and González 2006).

3.3 New technologies and new approaches to language and learning

The huge amounts of highly specific data now available via the internet, the enormous processing capacity of modern computers and mobile devices and the interactivity afforded through Web 2.0, offer many opportunities for research and innovation in LSP teaching and learning. In this section we will explore:

- Innovation in pedagogy
- Computer-based data analysis

3.3.1 Innovation in pedagogy

Computer-based technology can be a tool that extends and enhances traditional pedagogies and it also offers the opportunity for greater interactivity via networked computing using the internet and the Web. Pedagogies that were developed in the late twentieth century such as communicative language teaching and task-based approaches take interactivity as a given, and the internet now gives virtually unlimited opportunities for authentic communication in the target language, unrestricted by time or place. Internet connection affords both real-time (synchronous) and delayed (asynchronous) communication with other learners and/or professionals in an ever-changing array of modalities and applications, which can be radically updated, outdated or even disappear before researchers can publish their evaluations of them. General pedagogical principles still stand, however; see Levy (2009) for an evaluation of new technologies for different aspects of second language learning, and Bloch for a snapshot from 2013.

In a special Focus Issue of the *Modern Language Journal* (2012), Arnó reviews recent developments and research in the integration of technology within LSP, and provides a comprehensive overview of the ways in which computer-based technology can enhance LSP teaching and learning (Quote 3.1).

Quote 3.1 Arnó on affordances of technology in teaching languages for specific purposes

> Through technology, LSP teachers can access discipline specific materials and situations and compile corpora of specialized texts. Computer-mediated communication provides learning tools and a gateway to the discourse community. Technology also provides opportunities for collaborating, creating virtual environments and online courses, and fostering learner autonomy.
>
> (Arnó 2012: 89)

In addition, networked computing allows students to learn in a variety of ways: visual and auditory as well as written. Practice can be extended beyond the immediate classroom to other classrooms, perhaps internationally, as well as to workplace, academic or professional contexts outside the classroom. The interaction can be among students, students and teachers, students and professionals, or even with the technology itself via smart, well-designed virtual environments. Artificial intelligence affords access to adaptive environments such as 'Second Life', where LSP students can safely try on different roles, including professional ones, via avatars (Thorne, Black and Sykes 2009).

Computer-based technologies for educational use cover a wide range of applications. There is considerable overlap in terminology in the literature and acronyms proliferate. The most significant for LSP are introduced in Concept 3.2.

Concept 3.2 Some key terms in computer-based education technology

Computer Assisted Instruction (CAI) is a general term for any kind of instruction, including content-area instruction that is carried on via a computer. In CAI a teacher uses software including multimedia to supplement language teaching in a classroom situation.

Computer Assisted Language Learning (CALL) has been used in the past as an acronym for any kind of CAI, but there are differences based on (1) how much automaticity is involved, (2) how much control users have over data, and (3) how much interactivity is available to the users. Simple CALL systems have the lowest level of interactivity and the highest level of teacher control, and can be delivered as software on a computer that may or may not have internet access.

Computer-Based Instruction or Computer-Based Training (CBI/CBT) refers to instruction that is not dependent on classroom teacher input. Students can work independently from self-contained software, including multimedia.

Multimedia applications are interactive systems that can create, store, transmit and retrieve textual, graphic and auditory information either on stand-alone computers or via networks. CD-ROMs and DVDs store very large files and display them on a single machine or over a Local Area Network (LAN) or Wide Area Network (WAN). These days multimedia software is available for downloading via the internet.

Computer Mediated Communication (CMC) refers to the use of computer systems and networks for transferring, storing and retrieving information.

Computer Mediated Language Learning (CMLL), or *Network-Based Language Teaching* (NBLT) provides for peer to peer interaction, either synchronously (responses in real time) or asynchronously (delayed responses) delivered via the internet or on a local area network. Students can use a variety of communication tools such as bulletin boards, blogs, chat, wikis and email.

Learning Management Systems (LMS) such as *Blackboard* and *Desire to Learn* enable teachers to author their own teaching programmes and enable teachers to develop flexible, interactive teaching programmes without having to learn technical skills such as writing in HTML (hypertext mark-up language). Students can engage in interaction with the teacher or peer-to-peer, synchronously or asynchronously.

As well as using computers in the classroom, teachers use computers for *administrative* purposes, such as record keeping, producing materials and contacting students and each other via email. Students are likely to engage in *hybrid* or *blended learning*, an environment that combines face-to-face learning with some computerised tasks in a laboratory, with computers in the classroom, or from home, or public access computers like internet cafes or library facilities outside class hours. In *distance learning* teachers and learners typically meet only online, using a learning management system with multimedia functions (Hanson-Smith and Rilling 2007). However, thus far, it seems, computer-based language education can supplement but not replace face-to-face instruction, and even in cyberspace, teacher-student interaction is crucial. For LSP, connecting to the internet enables access to vast amounts of primary material in special interest areas (as well as additional challenges of critical evaluation and the temptation to plagiarise), and when used effectively, NBLT can provide opportunities for students to fulfill many of the conditions for optimal language learning (Chapelle 2001). Students can interact and negotiate meaning, interact with an authentic audience in the target language, engage in authentic communicative tasks, produce varied and creative language, attend mindfully to form and the language learning process, and receive feedback, within an environment where stress-inducing time pressure can be reduced (Hanson-Smith and Rilling 2007). Some examples of NBLT are provided in Case Study 3.2.

Case Study 3.2 Network-Based Language Teaching for LSP

Shamsudin and Nesi

An empirical study by Shamsudin and Nesi (2006) suggests that computer science students at a Malaysian university using NBLT via Windows NetMeeting™, in conjunction with a programme of sustained-content language instruction (SCLI), made greater improvements in oral communication skills such as interviewing, than a control group. The researchers claimed NBLT provided 'a scaffolded environment in which to practise specific communicative skills … and it also had the advantage of permitting delayed response, … and a slower, more reflective approach' (320–321).

Leahy

Leahy (2004) reports on a four-week electronic role-play exercise in German for Business by fourth-year students at Nottingham Trent University. The students had previously studied at a German university and had had company placements. The largely learner controlled, and process-oriented, collaborative, problem-solving task was conducted via NBLT, using the internet as a primary source of material. The project simulated the research needed to launch a new product in eastern Germany. Students felt that they had greater speaking and writing opportunities and more opportunities to speak with and be corrected by native speakers of German. They also wrote summaries in German, which were graded by the teacher. Although NBLT did not have the desired effect of making the students focus on grammatical form, Leahy concluded that an equally desirable outcome was that it gave 'advanced language learners who already can communicate successfully in higher-order situations, for example, in subject-specific contexts, L2 practice in relevant authentic contexts' (291).

The opportunity to become authors, individually or collaboratively, on the Web also has the potential for students to authenticate the language learning experience, as well as opening up opportunities to present, occlude or explore facets of identity (e.g. gender, ethnicity, age) that may not be easy to do face to face.

Computer-Based Testing (CBT) has also undergone rapid growth since the 1990s, and is now available for many kinds of assessment, ranging from high-stakes, large scale tests such as the internet-based TOEFL (iBT) to small-scale commercial online tests that are frequently bundled with textbooks for classroom use (Ockey 2009). CBT is claimed to have many advantages over traditional tests, for instance, greater authenticity, reliability and practicality, as well as the possibility of instantaneous scoring of test responses (ibid.). A further development in CBT is Computer-Adaptive Testing (CAT), which, based on test-takers' responses, presents them with subsequent test items most suited to their abilities, and 'more innovative test types that require a test taker to identify several important points from a reading or listening passage, or to select sentences from a pool to form a paragraph' (Jamieson 2005: 235). While these and other computer-based modes of assessments show great promise for LSP, much research and development remains to be done. Challenges include finding better ways to assure test security, developing procedures for employing CAT techniques to assess multi-dimensional language constructs, and creating scoring systems capable of measuring the meaning and feeling of written and spoken discourse (Ockey 2009: 845).

The evolution of the TOEFL test, which is widely used to determine international students' readiness to undertake university studies in the USA and other English-speaking countries, illustrates how high-stakes test developers have drawn on technology using corpus-based analyses of spoken and written academic genres and registers to develop more authentic test items (Biber et al. 2004).

3.3.1.1 Some barriers to using internet-based technology

While the advantages of internet-based technology for teaching and learning in LSP are undeniable, much of the potential is yet to be realised, and several barriers to this new phase in pedagogy still exist.

One barrier is to do with access; it should not be forgotten that computer-based technologies are still largely the privilege of teachers and students in the more wealthy industrialised countries, and are not universally available for teaching LSP. From a privileged position, it can be easy to ignore the fact that traditional technologies continue to be of primary importance to teachers of LSP around the world. Indeed, for some LSP teachers, even photocopiers and audio or video recorders may still be difficult to access, with the chalkboard and textbook remaining the main tools of the classroom (see, for example, an account of LSP in Tunisia in Daoud 2000). Once the technology does become available, there may still be issues such as getting reliable and consistent access to the equipment or the network, unwillingness of some participants to collaborate with one another, and even censorship of internet content at the state level (Healey 2006). International initiatives such as the Tunisia Oregon Project that Healey describes can assist in establishing the use of internet-based technology in LSP.

The second barrier is related to patterns of resistance to new technologies by LSP teachers and/or their students. This is not to suggest that technologies should be adopted uncritically; the warning that educational technologies are not methods in themselves, and not every teaching situation is necessarily improved by the addition of new hardware and software, has been consistently repeated for decades (Bowers 1985, Salaberry 1996, Chapelle 2001). Rogers' diffusion of innovation theory (1983) proposes that any new technology will have its small band of *innovators* and *early adopters* followed at some considerable distance by the *late majority*; a considerable remainder of the population, *the laggards* may never take up the innovation. Language teaching in general has tended to pick up on technologies developed for other purposes rather than developing technologies specifically for its purposes. Sometimes a technology has been adopted because it suited the particular pedagogical approach that was fashionable at the time. For example, audiolingualism and the behaviourism inherent in it were perfect partners for early tape-recorder-based language laboratories, which had very little scope for flexibility or interactivity (Salaberry 1996). Fortunately, the modern combination of networked computers and the internet has the flexibility to incorporate interactivity and is therefore consistent with the communicative pedagogies now used in teaching LSP.

Additionally, despite the fact that the beginnings of modern LSP were in English for Science and Technology (e.g. Halliday et al. 1964, Swales 1971, Trimble, Trimble, and Drobnic 1978), and apart from the enthusiasts and early adopters, interest in the use of computer-based teaching still seems to lag behind other topics in LSP. A report on the most common and least common research topics in 1,500 articles from 16 key journals (e.g. *Business Communication Quarterly*, *English for Specific Purposes*, *System* and *Written Communication*) showed that there was remarkably little research into the uses of technology in writing (Juzwik et al. 2006). One contributing factor to this perceived lack of interest could be that language teachers and researchers with a special focus on computing tend to publish in journals devoted to technology, for example *TESL EJ*, *CALICO Journal*, *CALL* (*Computers in Language Learning*) or *Language Learning & Technology.* Although at one end of the spectrum *TESL EJ* and *CALICO Journal* appear to be aimed at practical classroom applications, articles in *CALL* and *Language Learning & Technology* frequently contain highly technical details which teachers and researchers unfamiliar with computer-based learning may find alienating.

Even within these computer-specialist journals, the proportion of articles in all that is devoted to LSP is still relatively small, compared with the space devoted to generalist foreign language learning in languages such as French, German, Arabic and Japanese. Furthermore, the contributions to all of the educational computing journals listed above also show a distinct preference for cognitivist Second Language Acquisition (SLA) theory rather than socially-based theories. While every journal quite rightly has its specialisations and favoured theoretical discourses, there is a risk that LSP teachers who are not technically inclined or are not attracted to SLA theory may feel alienated and may choose not to engage. If computer and internet-based approaches are to be seamlessly integrated in LSP, more contributors from educational computing should contribute to journals focused on LSP, and write in a way that not only demystifies the technological discourse, but also provides practical examples of classroom applications.

There is also little research on teacher training in online language teaching (Compton 2009). Compton identifies ways in which online teaching differs from face-to-face teaching, and proposes three important skills that language teachers need: familiarity and understanding of the technology used for online teaching, appropriate pedagogies, and means of evaluation of learning in online environments. She argues that trainee language teachers also need instruction in how to facilitate online socialisation and build online communities.

While teachers have been quick to take up computer-based technologies for their personal use, for example in lesson preparation or for administrative tasks, when it comes to classroom applications, many have been sceptical about the gap between the hype and actual delivery. Conclusive empirical evidence of improvement in educational outcomes through the use of these technologies is still hard to come by (Chapelle 2001, Blake 2011). Early research was criticised on a number of grounds such as lack of scientific rigour, small sample sizes, subjectivity and the difficulty of comparing what happens in computer-based classrooms with traditional ones (e.g. Salaberry 1996). Perhaps, though, the wrong questions were being posed. Chapelle (2001: 44) suggests that at an even more basic level, evaluating aspects of CALL 'from the perspective of gross comparisons between computer-using learners with those learning through other media … [is] an approach unlikely to shed light on the problem or the solution'.

3.3.2 Computer-based language research

Discourse analysis has always been central to LSP, and one of the biggest areas of growth in LSP research has been in computer-based analysis of spoken, written and multimodal texts. The internet provides opportunities for teachers and their students to access examples of all kinds of texts from quite specific and narrow fields, and also provides access to specialised corpora (see Concept 3.3).

Concept 3.3 What is a corpus?

A corpus is 'a collection of naturally occurring examples of language, consisting of anything from a few sentences to a set of written texts or tape recordings which have been collected for linguistic study. More recently the word has been reserved for collections or (parts of text) that are stored and accessed electronically' (Hunston 2002: 2).

Corpora are available in a very wide range of languages. They can be extremely large and general: the British National Corpus (BNC) is a 100+ million word corpus of modern British English (http://corpus.byu.edu/bnc/) and COCA is a 450 million word corpus of Contemporary American English (http://corpus.byu.edu/coca). Other corpora are highly specialised: the PERC Corpus (formerly the Corpus of Professional English) is a '17-million-word corpus of copyright-cleared English academic journal texts in science, engineering, technology and other fields' (https://scn.jkn21.com/~percinfo/index.html).

Two highly significant smaller corpora that are freely available to scholars are MICASE (the Michigan Corpus of Academic Spoken English), which includes data from academic lectures, classroom discussions, labs, seminars and student advising; and MICUSP, the Michigan Corpus of Undergraduate Student Papers, which contains papers from 16 different disciplines (Simpson, Briggs, Ovens and Swales 2002).

Teachers and students can also develop their own searchable small corpora based on electronic copies of student writing or other texts.

The number of both general and specific corpora is increasing, allowing researchers to carry out computer-based analyses with ease. (See Chapter 13 for a list of websites with specialised corpora, including corpora in languages other than English.) Researchers often use concordancers in conjunction with corpora to carry out text analysis (see Concept 3.4).

Concept 3.4 What is concordancing?

A concordancer is a software program, either installed on a computer or accessed online, that can search a corpus for specific words or phrases that are determined by the researcher in advance. A commonly used concordance of English is Wordsmith Tools 6 (Scott 2012). The results of a concordance search are displayed with the target word or phrase repeated in one-line chunks of text arranged vertically down the middle of the screen. A teacher could use a concordancer for data-driven language learning, for example, to discover which kinds of reporting verbs are most common in a particular genre such as scientific research articles in astrophysics journals. In this way she could discover which aspects of the target language might be most productive to teach. A student could run a concordance on the phrases 'different to' and 'different than' in a corpus of academic texts to find out which phrase is more commonly used, and also to see the syntactic environments in which each phrase occurs. Students too can use concordancers more extensively in their role as 'ethnographers' of their own disciplines (Johns 1997, Lee and Swales 2006).

Corpora and computer-based technology provide many excellent opportunities for teaching and research in LSP. The majority of articles on discourse-analysis in *ESPj* are now based on data drawn from electronic corpora. Examples are very diverse, ranging from the uses of a single word, 'just', in academic lectures from the MICASE corpus (Lindemann and Mauranen 2001) to a study of academic vocabulary in agriculture research articles (Martínez, Beck and Panza 2009) or an analysis of author self-mention in scientific research articles (Hyland 2001). One argument against corpus linguistic analyses has been that they are decontextualised, and therefore do not address the socio-cultural context in which a text is embedded. Lynne Flowerdew (2005) suggests that the integration of corpus-based with genre-based approaches to text analysis can, to some extent, overcome this problem.

Szirmai (2002) suggests there are four stages whereby teachers become acquainted with corpora and concordancers: by consulting products such as electronic dictionaries and word lists in books and CD-ROMs that have drawn on corpora; by using concordancing software themselves to research usage of words or structures in a corpus; by using their analyses to create teaching materials on paper; and by enabling students to access corpora directly as part of CALL activities. An early example of a teacher-developed book of grammar and vocabulary exercises based on concordancing is by Thurstun and Candlin (1997). Bowker and Pearson (2002) provide a very accessible book-length guide for advanced users of LSP (e.g. students, teachers, technical writers and translators) in developing their own corpora for building glossaries of key terms, for investigating writing in a specific field, and as a resource for translation.

Electronic dictionaries based on corpora are particularly useful for LSP students in rapidly changing fields like medicine and computer science, as they are based on current usage and regularly updated.

In LSP research, Computer-Assisted Qualitative Data Analysis Software (CAQDAS) can be used for data analysis. These tools search, organise, categorise and annotate textual and visual data. Programs of this type also frequently support theory-building through the visualisation of relationships between variables that have been coded in the data. An example is NVivo 10 (formerly NUD*IST – Non-numerical Unstructured Data Indexing, Searching and Theorizing), a program that can work with various kinds of complex data, including multimedia (QSR International). CAQDAS can be used in qualitative research such as discourse analysis, grounded theory, action research, conversation analysis, ethnography, literature reviews and phenomenology, as well as mixed method research. For example, qualitative researchers are able to categorise and quantify particular instances in the data on a large scale, and to combine quantitative and qualitative methods.

From the foregoing brief discussion it should be clear that the intersection of digital technology with research and pedagogy in LSP is here to stay. Arnó, Soler and Rueda (2006) conclude:

> [I]t is no longer a matter of how to incorporate technology, but rather how to adapt LSP practice to a context of constant technological changes … when LSP teachers have to design a course and create materials, they no longer design a course and then incorporate technology as a complement to that course; instead, it may be delivered (whether in part or completely) online, using interactive multimedia materials. (257)

3.4 Concluding comments

This chapter has drawn together issues and developments in LSP at the beginning of the twenty-first century. It can be seen that the issues of inter- and cross-cultural communication, identity and critical approaches to learning and research that we discussed are closely connected with pedagogical innovations and computer-based research, as are learning across borders and independent learning. Although all these issues are significant and interconnected, we have placed more emphasis on technology in this chapter because that is the area where new developments have been most striking. In Part II we elaborate on ways in which all these interconnected factors affect the teaching and research of LSP.

Discussion points

1. Identify an intercultural or cross-cultural issue that is important in your own LSP context. What pedagogical strategies could help to resolve it?
2. To what extent do you think is it possible to introduce a 'critical approach' to LSP in your own teaching/learning context? What issues would be important to resolve in trying to do this?
3. What are the principal barriers to using internet-based technologies in your teaching/learning environment? What strategies can you suggest to overcome them?
4. How would you make use of corpora in your own LSP teaching/learning or research environment?

Part II
LSP in the Classroom

In Parts II and III we will look at how people have gone about combining research and practice in implementing LSP projects of various kinds and in different parts of the world. As we have seen in Part I, and as will also be evident in Part III, the relationship between research, theory and practice is interdependent, with each informing and being informed by the others. Here in Part II, most but not all of our LSP project illustrations will be concerned with pedagogical aspects of LSP. In particular, we will explore LSP in relation to course planning, course design and implementation, learner assessment and course evaluation, variable contexts, teaching practices, and management and professional development issues. We have assumed that the reader has at least a basic language teaching background and, therefore, we focus on LSP considerations rather than covering more general teaching considerations.

4
Course Planning

This chapter will:

- Discuss the wide range of contexts in which LSP teaching takes place
- Examine the interests of stakeholders in LSP projects
- Define 'needs analysis' and explore its practices

4.1 Contexts

In this chapter we will examine key issues that feature in the planning and development of LSP courses. We will also provide an historical perspective that shows how the field has developed and also why certain challenges persist.

We have already suggested that LSP is necessarily interdisciplinary. It also necessarily involves different stakeholders. The LSP practitioner has to be able to identify the 'owner' of the specific purposes and has to address related issues such as who has a say in how the purposes are defined, prioritised, neglected and so on. Analysis of the context in which a project is to take place may be far more complex than earlier target needs analysis models might suggest and is likely to involve far more than a list of target language items or target situations.

The contexts in which people try to acquire the skill of using a language for a specific purpose are, of course, extremely varied. Some examples are given in Example 4.1.

The specificity of purpose can vary enormously. One of the major motivating factors in language learning (though not the only one) is having the opportunity to deploy the newly acquired skills in a natural context. It is largely because of students' need to engage with particular meanings in specific contexts that the practice of teaching language

Example 4.1 Some examples of contexts for a language course

- Lao workers learning English who work on a Swedish hydropower project in Laos where installation and maintenance manuals are all in English, and managers are mostly English-speaking Swedes
- Secondary school children learning Spanish in the United States
- Primary school children learning English in Thailand
- Native speakers of German attending a seminar on web-page design in German
- Kenyan tertiary students about to spend a year at a Japanese university
- Vietnamese migrants learning communication skills in France, working on the production line of a car factory
- Xhosa-speaking South Africans studying at an English-medium South African university
- A doctoral student studying Ancient Egyptian in order to study inscriptions found at an archaeological site

for specific purposes became widespread at about the same time as the development of communicative language teaching.

We might think of two axes that help define the immediacy of the need and opportunity for communication in the target language, as displayed in Figure 4.1. Both axes represent a continuum, and most teaching contexts will not fall into the four corners indicated by the letters A, B, C and D. However, for the sake of illustration, we might consider the four 'extreme' situations shown.

Situation **A** describes a context where the target language is being taught in an environment where it is the most common or primary means of communication but the students have no immediate need to use the language. This is quite a common situation in international and expatriate schools, where students may be given instruction in the language of the country in which the school is situated, but may have little need to use that language in everyday life, as social life tends to take place in expatriate circles. A French-medium school in Kuala Lumpur, a Japanese-medium school in Teheran, or an English-medium school in Moscow, might all make use of the target-language environment when trying to teach the local language, but might face a lack of motivation because the students do not need to interact much with the local community and are not likely to stay very long in any case.

Situation **B** is highly favourable for language learning: immediate need and immediate easily-accessible opportunity in the local community. There is a high degree of motivation in this context, where the opportunity for the teacher to draw on the immediate environment as

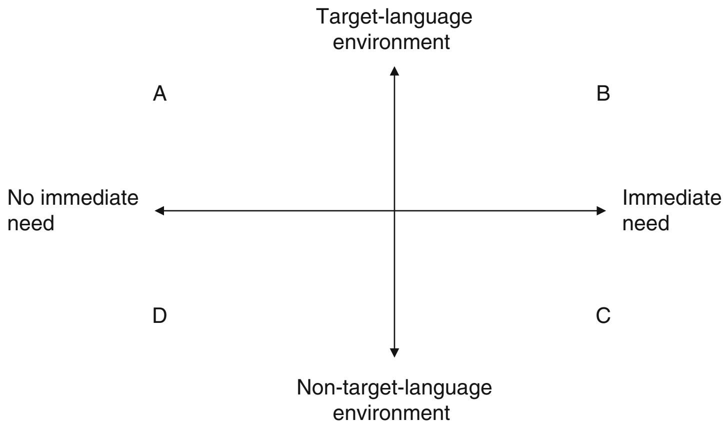

Figure 4.1 The teaching context

a resource is coupled with the opportunity for learners to make use of their learning in an immediately productive way. This is a situation in which the distance between the classroom and 'real life' can be minimised. An example would be newly-arrived migrants needing to learn the language of their adopted country for social and work purposes.

Situation **C** might include contexts such as a businessperson preparing for an imminent extended stay in an overseas country. A Korean, for example, getting ready to go to Latvia for six months to help set up a local branch of a Korean company, might need to learn Latvian very quickly, but will find little of use in the immediate environment before departure.

Situation **D** describes a very common language learning situation – one where there is little or no use of the target language in the local environment, and the learners do not have an immediate use for the language at all. Many foreign language teachers at secondary school level will recognise this situation, and many teachers at tertiary level will be familiar with students emerging from such a situation: students arriving to study in an English-medium institution who have studied English for six or more years at school, but who have never spoken English outside the classroom and have never used English for their own purposes at all.

The two-axis coordinate system of need and opportunity can help the course designer to assess the opportunities and constraints pertaining to a specific programme. This in turn can help to establish realistic expectations of what the programme can and cannot achieve, both for the learners and (often more importantly) for the employers or other programme sponsors.

4.2 Stakeholders

It is very often the case that there are more interested parties in a proposed programme than just the learners and the teacher. We can examine the illustrative list given in Example 4.1 not in terms of trying to define what the needs actually are, but in terms of who has an input into defining those needs and the different weights that might be apportioned to those inputs.

A syllabus specification for primary school children, for example, will almost certainly be designed by a very distant national or state institution which defines needs in terms of a national or state agenda. In most, but not all, cases there will be no input from the children, and little if any input from parents or classroom teachers. If the French car company is sponsoring the programme for its Vietnamese workers, it will want to specify what it is that the workers should be able to do in French.

Language-teaching, whether it involves teaching a first language or a foreign language is highly political, and different political groups may have quite different competing interests. It is worth bearing this in mind in planning, as it means that the stakeholders are not only the obvious ones of teachers, learners and employers. They also include teachers of other subjects, school principals, university presidents and deans, parents of learners, politicians and journalists. Everyone has an opinion, whether well informed or not, on language. The language teacher and curriculum developer do not operate in a neutral, sheltered area where they are free to experiment and innovate.

A very common issue for the LSP teacher is that of the perceptions and related expectations of other people. Those who work in specialist language centres in schools and universities will recognise the situation where a student is sent to the centre to 'get their language sorted out', and company managers often expect a two-day workshop on 'telephone skills' or 'e-mail communication' or 'efficient reading' to make a quasi-miraculous difference to workplace communication. Since such stakeholders are, as often as not, also the paymasters, the LSP specialist needs to work closely with them, take their views into account, and spell out very clearly what is and what is not possible. In a competitive marketplace, where providers may be bidding for work against other providers, honesty about what is not achievable and the temptation to exaggerate claims present moral dilemmas that may sometimes cause conflict between teachers and owners and marketers within the teaching institution. The course designer has somehow to reconcile these competing demands, although if the demands are simply irreconcilable (and this may well be the case), managing rather than reconciling them will be paramount.

Conflicts between stakeholders can happen at a small-scale local level, or can derail major expensive projects. At a local level, there is the story of the workplace-oriented classes for immigrants in the north of England, where the teacher realised from what the participants were saying that one problem they were having was the use of swear-words or taboo-words in the speech of their co-workers. The teacher accordingly devised a lesson showing how such words and expressions were used and when they were appropriate. A tabloid newspaper that somehow came across the story ran a headline story: 'Public money used to teach immigrants to swear!'

Similarly, in a course where one of the authors of this book was teaching in Sydney, Australia, students were introduced to some typically Australian words and phrases, and asked to find out from their homestay families how such expressions might be used. The following day, one student came back with the following note from his host family: 'We are an Australian family and we do not use slang and do not think foreign students should waste their time and money learning it'.

Two more substantial examples are given in the case studies below. The first concerns a first-language teacher-training project, designed to help in-service teacher-trainees cope with the language demands of the national curriculum in the UK. The second is from a three-year spoken English project in Malaysia.

Case Study 4.1 The LINC project

The LINC (Language in the National Curriculum) Project produced a package of training materials for UK school teachers aiming to increase awareness of language and knowledge of linguistic systems so that teachers could better understand the sorts of questions that might arise when incorporating language study into the school curriculum. The linguists who advised on the project, while rejecting the kinds of decontextualised drills and exercises that had once been common in the school classroom, advocated a formal study of language in different contexts, a view strongly influenced by genre theorists and functional grammar. The government of the day reacted badly to this, refused to publish the materials and banned their commercial publication. In writing about the project and its political consequences, the team leader, Ron Carter, says this:

> What was effectively a ban on the publication of LINC materials probably should have been expected. The emphasis on language variation and on language in context led to a too frequent reference to social theory and an emphasis on sociolinguistic perspectives. ... The government eventually made it clear that it had preferred all along training materials which emphasised right and wrong uses of English, reinforcing such an emphasis with drills and exercises for teachers and pupils to follow, and with a printed appendix containing the correct answers to the exercises. ... It was said that certain keywords do not appear in a sufficiently unambiguous way. In the training package words such as **correct**, **standard** and **proper** are always relativised to specific contexts and practices of teaching.
>
> (Carter 2001: 92)

Case Study 4.2 UMSEP

The Universiti Malaya Spoken English Project (UMSEP) was commissioned in 1980 by Universiti Malaya to help prepare students in Arts, Commerce and Law, whose education had been entirely Malay-medium, for the demands of a workplace where English was still a common medium of communication and where it was essential for international, especially ASEAN, commerce. The project involved about a dozen course developers and researchers over a three-year period, and much care was taken to record authentic spoken interaction at the relevant work sites. Video-recordings formed the basis of the teaching materials, with other course elements heavily dependent on the video input. About one week before the formal end of the project, when the fully-trialled and completed materials were shown to senior members of the Language Centre (the formal home of the project), the Head of the Centre was horrified to see that Malaysians were presented in the video recordings, speaking an unambiguously Malaysian variety of English. Within two hours, a hand-written memorandum from the University Vice-Chancellor (President) arrived saying that 'no Malaysian accent' should be used at any point in the materials. It later transpired that the underlying motivation behind the project was the concern among the English-medium educated elite that young people emerging from the universities were no longer speaking proper (in this case, British) English. Attitudes have almost certainly moved on since that time, but in the acrimonious discussions that took place in the final week of the project the four expatriate members of the UMSEP team were explicitly accused of trying to keep the prestige variety for themselves.

(Hall 1985)

These two case studies illustrate the dangers of failing to investigate – or of ignoring – the motivations of different stakeholders. Conflicts such as these can easily be seen, perhaps justifiably, as battles 'between those who have the power but not the knowledge, and those who have the knowledge but not the power' (Carter 2001: 97), but a decision to remain faithful to what one knows about language and language learning rather than operating within the conceptual system of the powerful can have expensive consequences. In a commercial world, conflicts of this kind can lead to a catastrophic loss of business. It is easy to see how the temptation of a large contract might push a provider to embrace the prejudices of the funding agency, and there have been several examples of this in recent years, with the development of controversial combined citizenship-and-language tests for immigrants in some countries, and the provision of language services of dubious theoretical foundations for counter-terrorism, interrogation and identification purposes.

We are not, of course, advocating an unscrupulous abandonment of principle for the sake of a lucrative contract, but it is clear that much LSP work is an ethical minefield, and management of the different priorities needs to be a feature of contract negotiation and planning.

We will discuss later in Chapter 6 the issues associated with assessment in LSP, but we note here that the interests of different stakeholders can play a particularly significant role in how the success of a programme is evaluated. For example, the widespread acceptance in Japan of TOEIC (Test of English for International Communication) means that most employers there want to see an improvement of their employees' TOEIC score as an indicator of achievement no matter what the content of the programme or the aspirations of the participants or the teachers. In other cases, all stakeholders in a project might be so professionally or financially committed to it that meaningful assessment can be difficult.

4.3 Needs analysis

Needs analysis is often referred to as the most important part of LSP. Early versions of LSP needs analysis focused primarily on analysis of the target language in a particular situation. Munby's well-known 'Communication needs processor' (CNP), described in his *Communicative Syllabus Design* (1978), is an example of target language situation analysis pushed to the extreme. Although it remains a frequently-cited work on needs analysis, the Munby model was not used to any great extent in actual course design (the Universiti Malaya Spoken English Project in the early 80s started but failed to carry through a Munby-based syllabus design). The model is well summarised and then roundly condemned in Mead's critical review in *Applied Linguistics*. (Note that Mead was one of the course developers on UMSEP.) Munby's scheme turned out to be unwieldy and unrealistic in its expectation that all a course designer would need to do after applying the CNP would be to seek out examples of the target language and slot them into the syllabus.

Quote 4.1 Mead on Munby

Most seriously the [Munby] model is internally inconsistent. There are no formal restrictions on the membership of categories [and] apparently obvious categories have been omitted. Secondly, there is no way of distinguishing systematically between more and less significant variables. Thirdly, the relationship between the model and its practical application is not made explicit. Munby nowhere spells out what he means by the term 'syllabus' and its precise reference is in doubt. Fourthly, Munby's system is unsupported by either a formal linguistic theory of interaction, or empirical evidence. Munby specifically disallows the use of linguistic data.

(Edited from Mead 1982: 74–76)

Geoff Brindley has published widely on the different components to be taken into consideration in needs analysis. Like others, he has drawn attention to the distinction between needs (what the learner needs to be able to do with the language – or what others may need the learner to be able to do) and wants (what the learner actually wants to do with the language). He characterises the two as, respectively, objective and subjective needs. Brindley warns that when looking at learners' needs and wants, it is important to remember that learners often have strong fixed views about the nature of language, and the nature of the learning and teaching process, and these may conflict with the views of the teacher. Since the views of other stakeholders, as we have seen, may well be a cause of conflict, there is often a need for negotiation.

Brindley also suggests, based on research done with teachers in Australia's Adult Migrant English Program, that teachers' views of needs fall into three categories, reflecting an overall approach to and philosophy of teaching. These are summarised in Concept box 4.1.

Concept 4.1 Brindley on teachers' views of learners' needs

The 'language proficiency' view

Needs are interpreted as the gap between current and desired general proficiency levels. Placement of students in groups depends on measures of proficiency.

The 'psychological-humanistic' view

Needs are interpreted as the gap between current and desired psychological or affective states, emphasising such things as levels of motivation, confidence, awareness and positive attitudes.

The 'specific purpose' view

Needs are seen as 'instrumental' – what does the learner need to be able to do with the language. Course content in this view should reflect the specific purpose of the learner.

(Brindley 1989: 66)

Another powerful reason for negotiation with all stakeholders in needs analysis is given by Field (1990: 31, quoted in Mawer 1991), who points out that a lot of the skills needed in performing a particular job are not the obvious surface skills but less easily-defined skills. In the workplace, this might include such skills as task management, working with the constraints of the workplace environment, promoting and maintaining good work relations, and being able to both initiate and adapt to change, rather than more easily-conceptualised tasks such as filling in a time-sheet, negotiating leave, explaining procedures and so on.

This is a parallel argument to that given by many critics of objectives approaches to management (particularly in education) and of competency-based course design, where the more intangible objectives and competencies tend to lose out to ones that are easy to name and to measure. Field calls this the iceberg model, because much is hidden below the surface. In a diagram accompanying this point, Field places his iceberg within a frame of sea and sky labelled 'social and political context', and by so doing, he further emphasises the complexity of needs analysis, and the impossibility of capturing all that is relevant. The process of course design and content/activity specification must therefore be more than simply the initial analysis – it must allow for as much flexibility and many-sided negotiation as possible.

Case Study 4.3 Classic needs analysis

Abdulla S. Tawfiq designed a course in the early 1980s for first-year undergraduates of the Kufa Faculty of Medicine at Al-Mustansiriyia University in Iraq. His needs analysis used a number of different data-collecting instruments and methodologies:

- Introspection, based on previous teaching experience
- Examination of students' medical textbooks
- Talking to colleagues in other universities in Iraq
- A pre-test of students to assess their level in terms both of language and of medical concepts
- A questionnaire given to subject teachers
- A questionnaire asking students what they thought their needs were
- A student course evaluation questionnaire
- The language teacher's own observation of classroom interaction and performance

(Tawfiq 1984: 86)

Tawfiq's account of the preparation for a course for Iraqi undergraduate medical students features many of the standard ways of ascertaining students' needs and wants. The teacher is at the centre of all the analytical activities, and the emphasis is very much on the teacher as researcher and course designer, with immediate feedback in the classroom and the willingness to change direction when things do not work well. This example shows what a committed teacher who has the time and energy to devote to a fairly thorough needs analysis can do.

There are, however, several problems. First, not all teachers will have time to engage in all these different activities. Second, the different datasets may give contradictory or inconsistent answers. Third, it may not be easy to change directions once the course has been designed based on those inputs which are collected before the course begins. Fourth, and perhaps most important, the whole process frames the learner as a consumer, the focus remaining on training the learner to understand the standard forms in which knowledge is presented in the first year of a medical course and to reproduce that knowledge in the form of reports, essays and examination answers. Tawfiq recognises that this 'objective' needs analysis is not fully adequate when he says that 'needs analysis would not be pinned down by the present needs of the students, but it would take into consideration the aspirations of the educational fraternity for the development of the learning situation which should go in line with the political aspirations of the country concerned' (Tawfiq 1984: 90), but even here the emphasis is on a rather top-down approach.

Case Study 4.4 The needs of a Spanish company

Quintin Sanchez SA is a Spanish company based in Salamanca. They make ham and sausages and they look for export markets worldwide, but particularly in Europe and Japan. In developing new markets, the company has identified a number of communication problems. For example, their assumption that English would enable them to communicate well in Japan proved to be optimistic, and company representatives found themselves negotiating using pocket machine translators. This was doubly difficult as the company was also trying to introduce a relatively unknown type of food into Japanese households. They also found difficulties communicating in parts of Europe, often at a regional rather than a national level, for example in the Flemish-speaking parts of Belgium. Even within Spain, there was resistance to Spanish-language brochures in some parts, and they needed to use translators to produce Catalan and Basque versions. The company was looking for strategies to take them beyond the need for operating through translators.

(Hagen 1999: 93–94)

The Quintin Sanchez example is taken from a large-scale analysis of the communication needs and practices of companies in Europe. The researchers used questionnaires and telephone interviews, with 5,000 questionnaires being distributed to companies in Spain, France, Germany and the UK. The whole project, which was called *Elucidate*, amounts to a kind of language audit, where an analysis of the needs and current capabilities of a whole sector is carried out not only for the purposes of the planning of training provision, but also to establish language policies for the target group. This can be done for a particular industry sector (e.g. see Mawer 1990 for a language audit of metal and engineering in Australia), for individual corporations (e.g. Charles and Marschan-Piekkari 2002 at a Finnish elevator firm), for specific groups (e.g. Jurczak 2004 on Polish petrol stations located along the national borders), for a particular work site (e.g. RLN 2005 on Heathrow Airport) and even for whole countries (e.g. Teemant et al. 1993 on Hungary).

Language audits are an increasingly popular commercial service, with public and private sector providers selling the idea to companies and government departments. Very often, the language audit is a prelude to offering the language training services that are identified in the audit.

There are three main problems with large-scale investigations such as language audits. The first is that there is an over-reliance on self-report through questionnaires where, for example, current competencies may be misrepresented. The second is that they tend to focus on the needs of the organisation rather than the needs of individuals, and the complex motivations and aspirations of individuals remain outside the scope of the study. The third is that, while some observations (such as those recounted in the Quintin Sanchez case) are certainly based on real experience, others may be based on assumptions that have not been tested. For example, in research on the teaching of European languages such as French, German and Spanish to engineering students in Irish universities, Frédéric Royall reports that despite strong in-principle support for the idea of competence in other languages and the development of integrated courses in several universities, 'few of the surveyed managing directors were aware of foreign language courses in any tertiary level Irish institution' and 'language learning was not strongly promoted within the majority of these companies' (Royall 1994: 138). There is, in other words, a gap between what people say they do and what they actually do, and this should make the researcher wary of placing too much weight on questionnaires and interviews.

There is an overview of the main trends and history of needs analysis in an article by Richard West (1994).

Concept 4.2 West's stages in the development of needs analysis

The earliest form of needs analysis was **Target situation analysis** (*necessities* or *objective needs*). This was typically the case in the

1970s. A second stage added a number of additional considerations: deficiency analysis (*lacks, deficiencies, subjective needs*) to estimate the gap between present and target proficiencies; strategy analysis to estimate how to bridge the gap, using a selection of learning styles, strategies and teaching methods; and means analysis to assess the constraints and possibilities in the specific teaching situation. These are said to emerge in the 1980s. A third stage, emerging in the 1990s, is identified as integrated and computer-based analyses.

(Adapted from West 1994: 77–83)

West's example of computer-based analysis is rather idiosyncratic, but the identification of integrated approaches is sound, and this is a trend that has continued since West's original article.

'Integration' can cover several different approaches, but one of the key issues with needs analysis is timing. In the early years of ESP/LSP there was a tendency to assume that all of the needs analysis should be done before designing and delivering a course. Now, needs analysis is seen as potentially a continuous process, taking place before, during and even after course delivery. Needs, wants and methodology are continuously negotiated throughout the course. In this sense, needs analysis, programme delivery and programme evaluation can be seen as an integrated and continuous process. For example, a feedback session in mid-course would both look back at what has gone before and make recommendations for what is to follow, and an end-of-course evaluation can be seen as contributing to the needs analysis for the following programme.

In recent years, needs analysis has focused on process as well as product, and this has had a profound effect both on teaching methodology and on how we see language teaching. The process is as much a part of learning as the final course outcomes, so that many of the activities that take place in and around the LSP classroom either simulate or reproduce target language situation activities or actually incorporate the target language activities into the teaching situation (as, for example, when workplace language teachers actually teach language while working alongside the learners).

A notable example of this is Savage and Storer's needs analysis and course design for a group of aquaculture workers in North-East Thailand.

Case Study 4.5 Learner involvement in content and process

When Bill Savage and Graeme Storer of the Asian Institute of Technology were asked to design and conduct a course for workers on an aquaculture project in north-east Thailand, their initial brief was that workers needed English for meetings with visitors, both short-term and long-term, for access to research findings available only in English, for reporting of project findings, and, potentially, for working on extensions to the project in other countries.

Their investigation of needs led them to devise a three-part course of action, in which the needs analysis and the conduct of the course itself were part of a single continuous process. The first part was a visit by one of the language teachers to the worksite, during which project staff discussed what kinds of work-related activity necessitated the use of English. The second part was a two-day planning workshop, in which seven of the 24 participants travelled to Bangkok and took part in a series of work-related tasks paired with aquaculture workers on the Institute campus, during which needs were explored and clarified. These seven participants then played a leading role in the full two-week workshop, particularly in the initial orientation phase. Apart from the initial activity, all tasks were then decided by the participants working in small groups.

(Based on Savage and Storer 1992)

Savage and Storer emphasise that they base what they do during the course on what the learners can already do, rather than on what they cannot do. It is a building process, rather than an attempt to bridge a gap or make up a deficit. This positive outlook, in which learners' abilities and opinions are respected and where the course develops from the learners' inputs rather than that of the teachers, marks a radical change from earlier ideas of needs analysis. In particular, 'the teacher and participant roles … were no longer distinct' (Savage and Storer 1992: 191).

Much of this approach stems from a desire to promote learner autonomy and a recognition that if learners are to make real progress, they must be able to take opportunities for development beyond the formal classroom. 'The main aim has to be to give students confidence in their ability to communicate despite difficulties, to the point where they can: (a) initiate communicative events, and (b) persist with the attempted communication even when it becomes difficult' (Hall 1995: 11). Empowerment becomes a key goal, where learners are empowered to take control of the whole learning process, from needs identification to content selection.

As we saw in Chapter 3, the empowerment of the learner to influence rather than just accept (and consume) the dominant discourse is one of the main areas of discussion among the various schools of genre analysis. Benesch (1999) takes this one step further when she talks about rights analysis. Her approach balances 'the descriptive approach of needs analysis with a critical approach to the target situation, where the teacher/researcher aims to transform existing conditions to encourage student engagement' (Benesch 1999: 315).

Case Study 4.6 Rights analysis

Sarah Benesch's EAP class for immigrants at a college in the USA was run in parallel with a psychology course and with cooperation from the psychology lecturer. Her class was therefore able to provide feedback on the psychology course as it unfolded and to describe how the students were coping with the demands of the course. Benesch provided feedback from her students to the subject lecturer, and also encouraged her EAP students to develop strategies for active participation (mostly through asking questions) in the lectures. It became clear, however, that not all kinds of questioning were encouraged in the psychology class, and that too many even of the acceptable questions generated problems for a lecturer struggling to cover the set syllabus in the available time. Benesch feels that it is important for learners to be able to resist or challenge such a transmission model of education (or indeed any model), and that the language teacher has to develop in her learners the capacity and confidence to do this. They may choose not to challenge authority in any way, but if this option is not included in the language course, then the option is not presented to them.

'The term "rights" highlights power relations and theorizes EAP students as potentially active students rather than compliant subjects. … It acknowledges that each academic situation offers its own opportunities for negotiation and resistance, depending on local conditions and on the current political climate both inside and outside the educational institution.'

(Benesch 1999: 315)

It is easy to see how Benesch's approach might bring her and her students into conflict with other stakeholders, even if, in her case, the subject lecturer was remarkably tolerant and patient. The ability to ask questions is one that, in theory, most university lecturers would see as desirable, but it can constitute a much more profound challenge to authority when it becomes an ability to contest both the processes and products of education. As Benesch says: 'It may be that lecturing persists because that mode of discourse is an expression of institutional control *over faculty and students alike*' (Benesch 1999: 321, [italics added]). In this case, it is not only the individual lecturer who is questioned, but the whole educational edifice.

In a parallel situation, would the language teacher conducting a course for migrants to help with job-seeking skills also want to encourage a capacity for challenging the conditions in which such work might be available? Would the French car-company mentioned in Example 4.1 want to include the capacity to participate effectively in industrial disputes as part of the course they are funding? It is clear once again that the LSP teacher has to tread very carefully among competing agendas.

4.4 Concluding comments

Having set the 'planning scene' we turn our attention in the following chapter to consider how planning in LSP is operationalised through course design and implementation.

Scenarios for discussion

1. Your company trades in export markets, or would like to. Discuss the impact this has (or would have) on LSP training and who should receive it.
2. You have a French office and they are getting frustrated about having to conduct meetings in English despite the fact that the majority of the managers present are French nationals. Discuss possible ways of dealing with this situation, and what the likely consequences of each might be.
3. Your business has just been bought out by a Spanish company. Discuss how this is likely to impact on the languages used in your particular trading context.
4. Your engineering division has just signed up to a technical joint venture with a Chinese organisation which could result in important medium-term benefits for your firm if the research proves positive. Discuss how you might conduct a language needs analysis as a result of this development.

5
Course Design and Implementation

This chapter will:

- Outline the early history of published accounts of LSP course design
- Describe the interplay of course design and organisational structure
- Introduce the issue of specificity in LSP course design
- Describe the interplay of LSP resources and learner participation in course design
- Discuss the role of language analysis in LSP course design

5.1 Course design narratives

In this chapter we progress from issues of planning to explore issues of LSP course design and implementation. We do this by reference to the history of LSP's contribution to the research literature. (For a more traditional approach to LSP course design, Basturkmen 2010 is an excellent resource for language teachers.)

As we have already pointed out in Chapter 1, the LSP teacher may very often combine the roles of researcher and designer. Although recent emphasis on discourse analysis, genre analysis and corpus analysis may have created research specialisations that have re-established a wedge between professional researcher and classroom practitioner, the very specificity of LSP means that in design and implementation our generalisation about combined roles still stands. Much of the published LSP literature consists of critical (and uncritical) narrations of the genesis and delivery of specific-purpose courses, often with accounts of the many practical and logistical problems to be overcome rather than dealing only with the educational challenges.

Descriptions of materials and how they were designed began, from the 1970s, to appear in journals and books. A number of locally-published journals were founded around the world, devoted to English (mostly) for specific purposes, initially from the local context although they soon began accepting articles from other regions. These included journals such as

- *ESPMENA Bulletin* (ESP in the Middle East and North Africa) (published by Khartoum University, Sudan from 1975 onwards)
- *EST/ESP Chile Newsletter* (published by the University of Santiago, Chile, from 1976 onwards)
- *Al-Manakh* (published by the Language Centre of the University of Kuwait from 1980 onwards)
- *ESPecialist* (published by the Center of Resources, Research and Information in Applied Linguistics and Instrumental Language Teaching (CEPRIL), the Catholic University of São Paulo, from 1980 onwards)

Other local or regional associations devoted special issues to ESP/EST, such as the Regional Language Centre (RELC) in Singapore, which recorded papers from its 1975 seminar on ‘The teaching of English for scientific and technological purposes in Southeast Asia’ in its Anthology Series (Richards 1976) and the Midlands Association for Linguistic Studies in the UK, which produced a dedicated ESP issue of the *MALS Journal* in 1978.

The majority of articles published in these journals and collections are devoted to descriptions of the genesis, development and rationale of materials development projects. In what was virtually a new genre for the academic paper, a ‘warts-and-all’ narrative became common, detailing arguments between team members, struggles with the administration, technical difficulties such as producing physical copies of the materials (this was well before photocopying became widely available and affordable), status of language teachers in relation to the institution and clashes with local examination systems – in short, they covered many of the stakeholder issues that we have already mentioned in Chapter 4. Mackay and Mountford’s influential edited book (1978) contains several such process-focused accounts alongside more traditional analyses of and rationales for courses as finished products. Taken together, these various sources provide a rich resource for anyone who might want to survey the early days of the attempts to institutionalise ‘service’ language courses. Chapter 13 provides lists of currently active international associations and specialist LSP journals.

5.2 Course design and organisational structure

A very common theme in these articles relates to organisational structure and how the language teaching operation was managed. One example from these early days, typical of many others, will suffice here.

Case Study 5.1 Sitachitta and Sagarik on problems and attempts at solutions in the teaching of ESP at the tertiary level in Thailand

In the mid-1970s, these two Thai academics surveyed four major Bangkok universities (Chulalongkorn, Kasetsart, Mahidol and Thammasat) to find out how each of them was responding to the growing need for specific-purpose English language teaching at tertiary level. The survey revealed that each university had a different organisational structure for language-teaching and that arrangements were not always consistent even within the same university. In one university, for example, each faculty had responsibility for its own language teaching arrangements, including the hiring of language teachers, but not all faculties had an English teaching section as such, instead relying on casual (and often unqualified) teachers. This is characterised as an 'extreme degree of fragmentation' (200) and is deemed to undermine the best efforts of those planning teaching programmes, the results of which 'are somewhat disappointing … [with] students … not reaching the level of English proficiency which they need in their specific disciplines' (201). There follows a detailed description of the kind of committee work needed to begin to establish a more centralised system, meeting, as is so often the case, with administrators who 'might be reluctant to make such a complete and radical change from the present system' (203). In another university, all English courses were offered through the traditional Humanities-based English Department, whose members were quite sure the courses they offered to their own students of English were good enough to meet the needs of other faculties. In one of the other universities, the English Department was under the authority of the Faculty of Science, which highlighted what has been a perennial problem for the LSP teacher everywhere, that of institutional status and academic prestige.

> While it is true that it has departmental status equal to that of all the other departments, the various science departments are

> perhaps ‘more equal’ than the English Department. … English is taught as a service and not as a major (or minor) degree [so] predictably … promotions are slow in coming and annual budget allowances generally inadequate. (209)
>
> A problem common to the universities was the lack of teachers trained in devising or even teaching ESP courses and the difficulties in trying to arrange in-service training.
>
> (Sitachitta and Sagarik 1976)

The kinds of problem raised in Sitachitta and Sagarik’s paper are just as relevant today as they were then, with problems of organisational structure, academic respectability, disciplinary suspicion and institutional inertia still to the fore in many places. The article, and the many articles outlining the real logistical, personal and organisational problems facing LSP teachers, served the valuable purposes of showing other practitioners that they were not alone and creating a sense of solidarity. This may be one reason why so many local journals were established and flourished at this time.

5.3 Specificity and duplication in LSP courses

Whatever the difficulties, the 1970s saw a great deal of enthusiasm among practitioners for writing materials specifically tailored for particular groups of students. The design and implementation of courses, moreover, remain a core activity for pedagogical LSP. It was recognised early that there was a substantial amount of duplication of work. Despite the fact that materials from several major projects were adopted by commercial publishers for the global market (for example, the University of Malaya English for Specific Purposes Project (UMESPP) was repackaged as *Skills for Learning* by Nelson; materials originally written for first-year students at the University of Tabriz in Iran were commercially developed as the *Nucleus* series by Longman; and materials from a reading project at the University of Bogotá, Colombia were adapted by Oxford University Press for a commercial audience as *Reading and Thinking in English*), there was still a widespread distrust of commercial materials and a feeling that serious LSP teachers should be writing their own materials. In an article in the first issue of the *ESP*

Journal (now *English for Specific Purposes*), John Swales addressed what he called 'the textbook problem':

> The pressures on service English, already pressurized by not offering degrees, to claim academic respectability by demonstrating profiles of materials supposedly tailor-made for the particular groups of students in its charge have become exceedingly powerful – so powerful that the purchase of textbooks for class use is seen to signal an academic retreat and one tinged with institutional dishonour. (Swales 1980: 15)

The detailed course descriptions contained in journals were one way of countering the duplication of time and effort, but there were also informal and formal arrangements for exchange of materials. One formal arrangement was set up by a group of universities in the UK. Its name was SELMOUS (Special English Language Materials for Overseas University Students). It was founded in 1972 with the purpose of sharing self-produced materials, but how much actual exchange of materials went on as the group established itself is largely unrecorded. The organisation itself later morphed into BALEAP (The British Association of Lecturers in English for Academic Purposes), a professional organisation devoted to EAP research, professional development and course accreditation, but with no mention of 'materials' either in its name or in its aims (although 'advice about materials' is still available through its discussion list).

Despite Swales' lament about the duplication of effort going on in institutions of learning around the world, whereby materials were written for a single group of learners and often not used again, and despite the material-sharing initiatives mentioned above, individual preparation of materials for specific groups of learners has continued to be widely practised. Needs analysis and materials development continue to figure prominently in the many language for specific purpose journals, seminars and conferences catering to national and international practitioners (see Chapter 13 for lists of these resources).

A common early decision relating to course design concerns how specific you need to be and are prepared to be. It is clearly economically more sensible if courses and materials can be shared between different disciplines or professions or workplaces, but you need to weigh up economic efficiency against academic effectiveness. Disciplinary differences can be quite surprising, as we see in the following case that concerns the design of Latin for specific purposes courses for Bulgarian students of Law and Medicine.

Case Study 5.2 Alexandrova on Latin for specific purposes

Todorka Alexandrova, working on courses in Bulgarian universities, began her course design by analysing how much was common and how much was distinct between the two purposes, Lingua Latina Medicinalis (LLM) – Latin for Medicine – and Lingua Latina Iurisprudentiae (LLI) – Latin for the Law.

Among the differences identified were (1) that LLM is still (despite the general perception of Latin as a 'dead' language) an open and developing language in this field, where new terminology is often needed to express new concepts, whereas LLI is a historically closed system; (2) that students of LLM need to work predominantly on single items, including understanding and coining new terms, whereas LLI students need to work much more on phrases and sentences and to apply them appropriately; and (3) LLI students will typically deal with authentic or simplified historic texts, while LLM students will deal with non-authentic texts written to illustrate the use of terminology for medical purposes.

(Alexandrova 1994)

Specialised legal language has a very long tradition, as Santos (2001: 729) reminds us:

> The tradition of the language of law as a specialised language is the oldest and most archaic of specific-purpose languages. In fact in the context of western culture, evidence of legal language emerged very early, between the 9th and 12th centuries. (Our translation from the original French)

Yet even in a case that is as closely-circumscribed as that described by Alexandrova, which concerns the teaching of only very restricted lexis and forms, only in the written form and in very specific textual contexts, it can be seen that the differences as analysed are enough to affect the design and implementation of the two courses. As a course developer, you will frequently be faced with a decision about where on the cline from generic to specific you need to be designing your course. In Chapter 7 we discuss this issue in more detail.

5.4 LSP course design, resources and participation

The major difference for the materials developer today is that the resources for facilitating learning are now much more varied, with electronic modes of communication offering far more choices, and often better-informed choices, than were available in the 1970s and 1980s. Where once materials writers had to make do with scouring through whatever sources were available (e.g. Bates 1978: 79 points out the reliance in Tabriz on cheap textbooks published in the Soviet Union and translated from Russian into English), now it is very easy to find, through the use of search engines and corpora, examples of particular language points in specific contexts. It is also probably the case that much materials development today consists of the collating of already-existing materials rather than writing from scratch – this was already a trend even before the availability of electronic resources, as Swales pointed out: 'it is by no means impossible to find examples of the "borrowing" of published material and of locally produced courses that are more edited anthologies of what is already available than assemblages of the new' (Swales 1980: 11–12).

On the other hand, it is now much easier to involve learners in locating their own resources for learning, so that genuinely collaborative materials and course development becomes a real possibility, as has already been noted in the more general education literature:

> The fifty years since the 100th anniversary of John Dewey's birth have marked the emergence of new technologies that afford a wealth of previously unknown approaches to learning, making it not only possible but practicable for Dewey's educational vision of participatory learning to be realized on a mass scale (Cunningham 2009: 46).

Technology has also made sharing of materials more realistic, even if ownership of intellectual property is increasingly important in the academic world.

An example of a participatory multilingual specific-purpose course developed with the use of the web is that described by Hervé Thily at Le Havre University in France.

Case Study 5.3 Thily on the design of multilingual, multipurpose webpages

The Faculty of International Affairs at Le Havre University offers a masters degree in Trade with Latin America. Its graduates are expected to have advanced communication skills in four languages, French, American English, Brazilian Portuguese and Spanish, in order to deal with 'multilingual information flows criss-crossing the planet and dealing with real-time consequences of financial, commercial and political events' (154). Recognising the need for fast-developing materials to help students become accustomed to the demands of the real world, Hervé Thily and his colleagues decided to develop teaching materials using the resources of the Web. They found that they had considerable support in this from local business groups, colleagues in relevant departments of the university and students themselves. They also found interest nationally and internationally that constituted 'an unexpected supportive following' (155). Their teaching approach involved learners themselves developing websites and participating in real (not simulated) global communication. In this way, students are not only using language, they are also gaining other associated skills:

> By being proficient in all interactive technologies necessary to the making of a web page and site, students can boast an extra qualification in their work experience when joining the work force. This expertise gained from repeated hands-on experiments is valued by companies involved in international trade, e-commerce and high-speed workflows. (162)

(Thily 2001)

Echoing Cunningham's point about participation, Thily's work emphasises the advantages of fully participatory collaboration: 'It makes students aware of the truly demanding and challenging nature of international trade through personal involvement with partners' (Thily 2001: 162). Interestingly, the paper also echoes the 1970s 'warts-and-all' papers when it describes the unforeseen and clearly frustrating difficulty of being unable to find IT technicians at the university who were willing and able to help with the project, as they 'found out disgruntedly within days' (Thily 2001: 156) of starting the project and which caused problems in the initial period of time that Thily characterises as a 'rather longish and unpleasant unproductive stage' (Thily 2001: 157).

5.5 Course design and language analysis

There are many questions that must be asked as you begin designing a course and writing materials. As Thily discovered, not all of these questions can be answered before work begins, and the process is rarely as straightforward as the traditional recursive project management cycle – plan, implement, evaluate – would lead us to believe.

Course design will depend also on your analysis of what students can currently do compared to what you want them to be able to do. With advanced learners, it is not always easy to discover the subtle differences that can make the difference between an expert language user and a novice. The work of Hilkka Stotesbury in Finland provides one example of just such subtle differences.

Case Study 5.4 Stotesbury on differences between expert writing of critical summaries and her students' writing

The trigger for Stotesbury's research was that her students were having difficulties in critical reading, thinking and writing, despite what she was teaching them. Her specific focus was the writing of (critical) summaries, and she hypothesised that all summary-writing is subjective and includes interpretation (as opposed to the view that sees critical thinking as a 'pursuit of "objectivity" and "impersonal stance taking"' (327)) and that this is where the perceived differences had their origin.

She took as her data 77 critical summaries written by Finnish university students in an EAP class and 25 academic book reviews (from *History Today*, *ELT Journal* and *TESOL Quarterly*) and analysed the texts using speech acts, linguistic features and stylistic features.

Her findings fell into four broad areas:

(1) The speech act subtypes in the critical summaries and book reviews showed a 'close affinity', but differed in two respects. There was more evaluation in the book reviews and more straight discussion in the critical summaries.
(2) There were major differences in the linguistic realisation of the speech acts. The students used less dense information packing, less grammatical metaphor (e.g. nominalisation), less multi-layering and less cohesion.
(3) The professional writers tended to have low visibility, embedding their personal viewpoints in the argumentation, while student writers had high visibility, using expressions such as 'I think' and 'In my opinion'.

(4) The students tend to report the original by using a reporting verb (e.g. 'Singh says …') in theme position, while the professional writers use a variety of techniques to move this to later, often parenthetical, parts of the sentence, thus foregrounding the reported elements over the reporting structure.

Stotesbury identifies some implications for her own teaching and suggests several practical tips for EAP teachers, including teaching a greater variety of reporting verbs and ways of nominalising them, outlining a generic structure for a successful critical summary, examining the placement of evaluative speech acts, and looking at alternative ways of projecting one's own voice into the academic discourse.

(Stotesbury 2002)

Stotesbury has some interesting findings, particularly about linguistic realisations and the presentation of a personal voice. This is a question that troubles many novice academic writers when they are given two, often contradictory, instructions: (a) make your writing sound objective; and (b) make sure you give your own critical evaluation. She compares two kinds of text that have enough in common to make the comparison valid, but it must be remembered that there are clear differences, the most important of which is the status that can be claimed by the writer. The professional writer of an academic review is in the position of accredited expert, writing from an insider viewpoint for a professional audience, while the novice writer is demonstrating his/her understanding and giving a personal evaluation for a teacher. This difference means that it is often difficult, or inappropriate, for a novice summariser to adopt the style of a professional reviewer. George Bernard Shaw might be able to get away with saying 'there is no eminent writer … whom I can despise so entirely as I despise Shakespeare when I measure my mind against his' (Shaw 1907: 52), but a literature student would need to be rather more circumspect.

Similar work has been done in many different contexts and with many different genres, but variables such as disciplinary values, cultural preferences, change over time and individual styles make generalisations difficult, so there is always room for further work based in your specific local context. Rather than comparing novice to expert discourse, it might be instructive to compare the discourse of a high-achieving student with that of a low-achieving student in the particular context in which you work.

5.6 Concluding comments

Now that we have addressed key issues concerning LSP course design and implementation, how should LSP learners be assessed and their courses evaluated? These are the concerns of the following chapter.

Discussion points

1. Consider the language support offered at a university you are familiar with, and discuss to what extent the institution's organisational structure facilitates or inhibits appropriate course design.
2. Consider a subject area with which you have some familiarity. Discuss how you might treat the issue of specific vs generic.
3. Discuss the advantages and disadvantages of learner participation in course design.
4. Discuss the costs and benefits of course design that is informed by language analysis.

6
Measuring LSP Learning and Course Effectiveness

This chapter will:

- Define assessment and evaluation
- Define and discuss validity and reliability in the LSP context
- Describe high-stakes testing and the use of standardised tests
- Present different positions on LSP testing
- Discuss placement tests and the role of self-assessment
- Discuss the matching of testing methods to teaching methods

6.1 Assessment and evaluation

Course design and implementation need to be followed by some measure of course effectiveness, including the assessment of learning. In this chapter, we address both evaluation and assessment, since many of the same concepts apply to both, and they do in any case have a degree of overlap in terms of purpose.

It has been recognised from very early in the LSP literature (e.g. Skehan 1984), that traditional methods of assessment and evaluation would not be adequate for LSP projects. General language tests and programme evaluation procedures have a certain credibility in the eyes of some stakeholders, but where a course claims to have an influence on the effectiveness of the learners' performance in some specific kinds of activity beyond the language classroom, then some evidence must be found to show that performance in those activities is indeed more effective as a result of the course. As we have seen, the high profile beyond the language-teaching community of international statistically-validated tests means that some stakeholders will have a preference for such tests no matter what the purpose of the project, but as practitioners we need to seek authentic data if we are to understand how effective our courses are.

Concept 6.1 Assessment vs evaluation

Conventionally, assessment refers to the testing of learners to check on their progress, whether as a final measure of their achievement over an entire course of study (summative assessment) or as a feedback mechanism as a course of study progresses (formative assessment). Evaluation refers to a measure of the success of the course of study itself. While evaluation may include assessment of learners and their achievements, it may also include indicators such as learner satisfaction, performance indicators for teachers, a critical examination of the materials used, comparisons with courses offered elsewhere and feedback from end beneficiaries such as the workplace colleagues and managers of participants on a workplace training course or subject lecturers of students emerging from a Language for Academic Purposes course.

(Based on Brindley 2001)

Note that the words assessment and evaluation are not always used consistently in the way described here, and care should be taken to check the definitions used by different authors.

Two key terms in assessment and evaluation are validity and reliability. Broadly speaking, validity refers to the extent to which the instruments actually focus on the factors that the course of study aimed to address, while reliability refers to the extent to which you would achieve consistent and stable measurements with different raters, different populations or different measuring instruments.

6.2 Validity

The concept of test validity has undergone serious scrutiny over the past two decades. Whilst conventionally thought of in terms of comprising different types or aspects, the impact of Messick's (1989; 1996) argument that validity is essentially a unitary and all-encompassing concept has shifted thinking of validity towards the social consequences of language tests. In other words, test makers have a duty and responsibility to society at large for the impact that their language test might have (i.e. its impact on a variety of stakeholders beyond simply the learners who sit the test). Such stakeholders typically include sponsors (e.g. parents, employers) and test users (e.g. educational institutions, immigration departments). McNamara and Roever (2006) is a landmark treatise on this aspect of language testing, whilst Weir (2004) provides an evidence-based account of validity that covers both a priori validity evidence and a posteriori validity evidence (including consequential validity).

In terms of LSP testing, the notion of validity does indeed need to take account of the consequences of tests, and this is perhaps best illustrated by example. High-stakes tests (see Section 6.4), such as those used in the case of overseas-trained medical professionals who have migrated to Australia and who need to pass the Occupational English Test, now take account of the consequences of testing. Whereas McNamara (1990) discusses the validation of this particular LSP test using item response theory, a decade later his concern had shifted to investigating the validation issue of setting appropriate criteria in performance-based LSP tests (see Jacoby and McNamara 1999). The latter study notes that in clinical performance, a health professional's communicative competence cannot be distilled in terms of language ability alone, but rather when language use is integrated appropriately with professional practices. In recent studies (McNamara and Elder 2014, Pill and McNamara 2014) the quest for 'indigenous criteria' for health professionals has led to proposals to extend current language-related criteria (intelligibility, fluency, appropriateness of language, resources of grammar and expression) to also include interaction-related criteria (clinician engagement, management of interaction).

Whilst accepting the reality of LSP tests having significant social consequences, it is nevertheless still helpful to understand test validity in terms of different components or facets which provide clarity about key considerations in language testing, which we set out in Concept 6.2. For an evidence-based approach that encompasses many of these facets, Weir (2004) provides an excellent framework for teachers to critically evaluate the validity of their own tests.

Concept 6.2 Traditional aspects of validity

Construct validity

Does the assessment test what it sets out to test? Is it clear that what is tested and any varying results that are obtained are dependent only on the ability on the particular trait or component under examination, or is it possible some other factor is responsible for results? Construct validity depends crucially on our theoretical understanding of language and language learning (see the Introduction to this book).

Content validity

Does the test cover a sufficiently representative sample of the target language however we define this (situations, tasks etc.)? You may see how complex this might be by trying to construct a test along the lines of the Munby model – see Chapter 4. Note again the importance of the description of the target domain to our ability to answer the question of whether a test is or is not content valid.

Face validity

Face validity is not a technical concept – rather it is concerned with whether the test looks valid to the stakeholders – the test-takers, employers, academics and so on. In many LSP contexts this may well be the most important kind of validity.

Washback validity

Washback validity refers to the way that an assessment can influence the way that teachers teach. The practice of 'teaching to the test' is so widespread (since test results may be a key factor in a teacher's continuing employment or a school's marketability) that anyone designing an assessment instrument for use outside the immediate context has to bear washback effects in mind.

Criterion-related validity

Technically, criterion-related validity includes both concurrent validity (i.e. how far does a test result correlate with other test results) and predictive validity (i.e. how far does a test result predict future performance in the target context), but it is the latter that is of most relevance to the LSP teacher, since a major objective of the LSP course is to improve linguistic performance in specific contexts outside the language classroom, so we would always hope to find a positive link between our measurement of classroom-based performance and performance in the targeted situation.

(Based on Hughes 2003)

6.3 Reliability

We will not examine in this book the technical complexities of reliability, nor the statistical instruments that may be used to test reliability. See Weir (2004) for an account of such statistical procedures. As with validity, there are several sub-categories of reliability.

Concept 6.3 Reliability

Consistency of inter-rater rating

If a test is being graded by a number of different examiners, or raters, are we satisfied that all of the raters would arrive at the same conclusions? This might apply to the tests we use ourselves, but it is also a concept that could be explored in our research of tests and examinations in other disciplines, especially where we are concerned with preparing students for academic study (see Candlin, Gollin, Plum, Spinks and Smith 1998 for examples of such research).

Internal consistency between subtests

A large-scale and internationally-validated test will generally expect to find a degree of consistency across the different sections of a test. For the LSP teacher, an initial question is whether you would necessarily expect each subtest to tend towards similar results, or whether there are legitimate reasons for different levels of performance on different kinds of task.

Parallel-form reliability

Where there are different versions of a test (many large-scale tests have a 'bank' of questions and tasks, so that no two administrations of the test are the same), can we expect the same result for each test-taker? In other words, it may be that a particular result is partly attributable to features of the test rather than to the performance of the individual.

(Based on Hughes 2003)

Since LSP is centrally concerned with language in use in specific contexts, LSP teachers will be particularly concerned with validity, and with ensuring that assessment represents the demands of the target context as closely as possible. Authentic communication is of course an ideal which most kinds of assessment will not be able to attain, simply because the testing apparatus itself will interfere with the authenticity. Language use for real communicative purposes will always involve a certain amount of unpredictability, and it might be said that genuine validity would have to allow for and embrace such unpredictability. This would always be at the expense of reliability and in this sense, and especially in LSP assessment, validity and reliability are in competition.

6.4 High-stakes tests

In the case of LSP, a key question for assessment and evaluation, just as for the course design itself, relates to purpose, and the same range of stakeholders needs to be kept in mind.

There are very many special-purpose language assessment instruments that might be classified as high-stakes, where the result of the assessment makes a major difference to the life of the person undergoing the assessment. Tests of this kind perform a gate-keeping role, in that they assess whether or not the test-taker has the necessary competence to undertake a specific activity, and without the attainment of an adequate score to 'prove' their competence, learners are unable to proceed with their careers.

Such tests may include the more general language competence measurement tools such as school-leaving examinations (e.g. baccalauréat, Abitur, suneung) and international standardised tests (e.g. Step-Eiken, IELTS, TOEFL, TOEIC, The European Language Certificates (TELC) of the Common European Framework of References for Languages (CFER), Test de connaissance du français (TCF), Japanese Language Proficiency Test (JLPT) and many others), and specific tests designed to ensure a level of linguistic competence necessary for entry into certain professions or professional courses and where sometimes communication skills are included as part of a more general assessment of professional skills (e.g. the Professional Linguistic Assessment Board (PLAB), the National Admissions Test for Law (LNAT), the Biomedical Admissions Test (BMAT), the Medical College Admissions Test (MCAT), the Pharmacy College Admissions Test (PCAT) and many others past and present).

At the heart of these various tests is the measurement of performance in a second language, especially in terms of speech and writing. McNamara (1996) is a seminal work in understanding the key issues and challenges in undertaking such measurement, and gives a detailed account of how the OET in Australia was designed. At a recent conference McNamara reiterated that 'testing is the art of compromise', in particular in terms of the constraints of resources and costs (McNamara 2014). However, he also noted that despite the OET costing twice as much for test-takers as IELTS (which is also an approved test for health professionals), it maintains high and steady enrolments. This suggests at a minimum that the OET has considerable 'face validity', and this is important to many stakeholders.

Tests such as those enumerated in the preceding paragraphs have to meet high standards of validity and reliability, but reliability is paramount and considerable work goes into ensuring that results are reliable. Many examination bodies charged with the design, implementation and evaluation of tests such as these have a programme of funded research (see, for example, http://www.ets.org/research/ for TOEFL, TOEIC and other ETS instruments, or http://www.ielts.org/researchers/grants_and_awards.aspx for IELTS) and there is clearly much critical research to be done, but you may find resistance and a lack of cooperation if you are trying to conduct independent research outside the testing bodies' own programmes, since international and national high-stakes tests generate large amounts of income and the often private companies that control them are very keen to protect their credibility and their profitability.

Given the plethora of international language tests currently available, comparisons and equivalences of scores between them are becoming more common. For example, IELTS shows how its scores fit with the CEFR framework (http://www.ielts.org/researchers/common_european_framework.aspx); and ETS shows how the internet-based TOEFL test scores relate to both IELTS and the CEFR framework (https://www.ets.org/toefl/institutions/scores/compare/). Cambridge has also compared its Cambridge Advanced English scores with IELTS scores (http://www.cambridgeenglish.org/advanced-ielts/). Increasingly, these major examination bodies are also making public the basis on which the comparisons have been derived.

Traditionally in LSP, this kind of comparative work has not been encouraged. In one early study, Porter (1994) provides an interesting account that compares the TOEFL test with the British TEEP (Test of English for Educational Purposes), a general EAP test. Although the sample size was small (just 16 test-takers) and the TOEFL test was administered in a simulated testing context, the results were quite striking: stark differences in performance at individual macro-skill level were masked by the overall scores in each test; and, in terms of using score results for university admission purposes, there was essentially no difference between the more general English TOEFL and the more academic

English TEEP. In other words, the TEEP academic test appeared to be a 'luxury' rather than a 'necessity'.

The development of the IELTS test presents an interesting case for LSP. It was initially developed as a new test, replacing (in British, and especially British Council, contexts) the English Proficiency Test Battery (EPTB) or Davies test, as it was popularly known. The new test, known as ELTS, appeared in 1980 and was strongly influenced by the wave of enthusiasm for communicative language teaching and ESP (Shaw and Falvey 2008). It was aimed specifically at academic English and was 'intended to reflect the use of language in the "real world"' (Shaw and Falvey 2008: 6). Underlining the effort towards greater specificity, there were seven different versions of the test, designed for five broad academic areas (Life Sciences, Social Studies, Physical Sciences, Technology and Medicine), one 'general academic' area and one non-academic vocational option.

This complexity lasted less than ten years before the complexity and practicality of offering the test precipitated a simplification. Listening and Speaking became 'general', while the specificity of the Reading and Writing modules was reduced from five to three broad areas. In 1995, the three areas were further reduced to one, and the test became available in only two modules, 'academic' and 'general' (Shaw and Falvey 2008: 8).

Whatever the academic justifications for simplification were – and there were certainly serious investigations funded by the test organisation and available in the public domain (e.g. Alderson and Clapham 1993, Clapham 1996, Criper and Davies 1988) – the overall effect was to dilute significantly the initial commitment to a specific-purpose test.

Course designers and researchers in LSP would do well to take note of this example, as it shows how effectiveness and efficiency have to be weighed in the balance in making everyday decisions; many of the decisions in LSP have to take account of stakeholders' expectations and capacities, and economic realities have to be included as a major factor. Providers of academic language support in educational institutions around the world will be only too familiar with the constant struggle with administrators over the different view of the resources needed to do the job, as has already been mentioned in earlier chapters of this book.

6.5 Other purposes testing

In most contexts, however, the LSP teacher will not be working towards a formal standardised test but will need instead to construct assessment tasks for the specific group he/she is teaching. How this testing is conducted and how the test is constructed will depend crucially on purpose.

And, as Douglas (2001) notes, it must address three problems: authenticity, specificity and inseparability (i.e. of language and content).

Tratnik (2008) considers the issue of purpose by way of three views of ESP testing:

1. as a more specific kind of language testing
2. as a measure of the quality of the programme, overlapping with needs analysis
3. as a contribution to the learning process.

Concept 6.4 Tratnik's three views of ESP testing

Firstly, the field of ESP testing has been seen as a separate and distinctive part of a more general movement of English language testing, focusing on measuring specific uses of English language among identified groups of people, such as doctors, nurses, lawyers, civil engineers, tour guides, air traffic controllers and others. Secondly, ESP testing has been viewed in the broader context of the teaching and learning process. From the perspective of Dudley-Evans and St. John (1998) assessment does not stand alone, but occupies a prominent place in the ESP process, giving an ESP teacher a wealth of information on the effectiveness and quality of learning and teaching … [A]ssessment interacts with needs analysis, and is dependent on course (and syllabus) design. Thirdly, tests enhance the learning process and act as a learning device.

(Tratnik 2008: 4)

Building on this, and in keeping with our view that the perceptions of all stakeholders are important, the main purposes for in-class assessment might include:

- Placing students in an appropriate group or class
- Satisfying the funding body
- Checking that learners have in fact made progress in the targeted areas
- Helping learners see what progress they have made
- Contributing to an evaluation of the whole programme, with a view to making adjustments in the current or future programmes

These purposes often overlap and may all be present at the same time. In relation to helping learners see their own progress, it is worth noting here the usefulness of the AfL (Assessment for Learning) movement that has recently developed in English language teaching contexts, and which certainly has merit for wider LSP contexts as well. Black, Harrison, Lee, Marshall and Wilian (2003) set out the principles of AfL and note its strong impact on improved learning. Its deceivingly simple practices include encouraging students to ask questions when they don't understand something, giving useful feedback on student work, encouraging peer and self-assessment, and using summative tests for formative purposes. To our knowledge there are no publications yet of accounts of AfL being applied to LSP contexts.

Differing purposes will also determine how transparent and how public the assessment processes are, ranging from test results that are only available to the classroom teacher and the learners through to results and processes that are made available for scrutiny by all other stakeholders.

6.6 Placement tests

Placement tests will not be relevant to all LSP teachers, but where they do exist – particularly in academic-purpose contexts and in large language schools – they can be stressful experiences for teachers, administrators and learners, and perceptions of fairness are an important factor. While placement testing is often carried out using basic general linguistic competence tests, this may be inappropriate in that it may not match the purposes of either teacher or learner. It may also lead to false expectations of the teaching programme itself.

Self-assessment can have a role to play in placement and can lead to greater enthusiasm for classes that are appropriate to students' self-perceptions of their own skills and abilities (Hall and Kenny 1986), but it may not be practicable in many contexts, is unreliable where there are financial or other significant consequences, and may not be acceptable to all stakeholders. Ross (1998) makes the point that accuracy does not necessarily equate to acceptability.

Quote 6.1 Ross on self-assessment

[This study] underscores the need to design self-assessment of language learning achievement according to specific curricular content. Provided that the content validity requirement is met, the overall picture indicates that there is clear potential for predictive accuracy of criterion skills based on self-assessment measures. Under what circumstances self-assessment procedures will be sanctioned in language teaching and testing programmes remains, however, an open question.

(Ross 1998: 17)

Despite widespread reporting of positive motivational effects of self-assessment, the attitudes of others, and particularly individual teachers, makes a difference to success: ‘differences appeared to be closely influenced by the respective educational environments as well as the individual teacher’s views towards the role of assessment in education’ (Butler and Lee 2010: 25).

6.7 Matching testing methods to teaching methods

We have already mentioned that there can be a conflict between the expectations of funding agencies such as employers and LSP teachers, particularly in the matter of how outcomes are measured. In general, however, and where this can be successfully negotiated with all participants, it is best to aim for assessment practices which reflect both the content and the methodology of the course. Students in a course which focuses on communication for specific purposes in specific contexts are unlikely to be impressed by a multiple-choice vocabulary test, no matter how reliable the test might be. The matching of testing and teaching stems primarily from two sources: the congruence of aims in the two cases, and the importance of face validity. Douglas’s definition of specific-purpose testing (see below) is notable in that it might just as easily be used to define specific-purpose teaching.

Quote 6.2 Douglas on specific-purpose testing

A specific purpose language test is one in which test content and methods are derived from an analysis of a specific purpose target language use situation, so that test tasks and content are authentically representative of tasks in the target situation, allowing for an interaction between the test taker’s language ability, on the one hand, and the test tasks on the other. Such a test allows us to make inferences about a test taker’s capacity to use language in the specific purpose domain.

(Douglas 2000: 19)

The focus here on target situation (a complex concept that we will return to later in Chapter 7) and authenticity is intended to avoid the perennial problem in LSP testing of the unequal impact of prior knowledge on performance. For example, where a test uses a text on the workings of the internal combustion engine as the basis for investigating learners' ability to describe process, sequence and cause-effect relationships, the test will presumably be much easier for a learner who happens to be a car enthusiast than for one who has no interest in cars. There has been a considerable amount of research on this topic (e.g. Peretz and Shoham 1990 on reading tests, Jensen and Hansen 1995 on listening tests, Lee and Anderson 2007 on writing tests) and the perception of fairness of the testing process can clearly be adversely affected if choice of topic appears to favour one group over another. In a recent example, Moore, Stroupe, and Mahoney (2012) found that the IELTS academic module reading subtest disadvantaged Cambodians because the topics were Eurocentric and often unfamiliar to Cambodian test-takers. To remedy this, IELTS preparation course teachers in Cambodia often had to 'educate' their learners about the world beyond Cambodia; thus showing the power and impact of a well-regarded international standardised language test.

Ferenczy and Rudnai (1994) discuss the complexity of choosing medical texts for translation into Hungarian language in a task that forms part of the Hungarian State Language Examination, necessary for obtaining a medical diploma. Amidst the range of sources, text types and styles, they argue that six criteria stand out as necessary: topic, type of text, information density and level of abstraction, syntactic complexity, lexis, and translatability (p. 226). Moreover, these criteria need descriptors for three levels of performance rating: basic, intermediate and advanced. Similar decisions and development work are required across a wide range of subject areas in LSP more generally.

Face validity is important for funding bodies and learners alike and in terms of matching teaching and testing the greatest danger is that the test can dictate the focus and the methodology of the teaching. This so-called washback effect can be very strong. Because of the high-stakes nature of entry tests, teachers on pre-entry EAP courses can find all their energies directed towards teaching strategies for the taking of IELTS or TOEFL tests rather than preparation for the challenges that will be encountered in academic life once the learner is admitted as a student. For less high-stakes testing, the greatest danger is that formal testing procedures may undermine the value of the teaching. When, in the late 1980s, one of the authors of this book was asked to show evidence that his learner-generated Talkbase course was actually improving learner performance, it was suggested to him that traditional before-and-after tests would be appropriate. When new students arrived to begin the course, they were quite happy to take the tests, as they fitted in with previous expectations, but when asked them to take similar tests at the end of the course, they were outraged that we were using traditional tests after spending eight intensive weeks developing learner autonomy and independent research capacities (see Hall 2001).

Given that the ultimate aim of an LSP course is to improve learners' capacity for dealing with the challenges they will encounter in their target environment, assessment of learners' performance when they get into that environment is still comparatively rare, especially compared to the use of 'real-world' as opposed to laboratory testing in other fields such as medicine (e.g. McNamara 1990; 1996) and manufacturing. Some literacy researchers have shown a mismatch between test results and performance in a natural environment (see, for example, Rogers 2003), but such 'real-world' testing can be logistically difficult and expensive for the LSP teacher. The opportunity exists, however, to combine research and evaluation of course effectiveness in an investigative longitudinal project that looks at learner performance and development after the end of formal teaching.

There is a gap between research findings and testing practice, as Quote 6.3 confirms, but they should inform each other, and the questions raised in this chapter all touch on live researchable issues.

Quote 6.3 Taylor and Wigglesworth on usefulness of research for practice

In theory, it is … generally accepted that knowledge and insights gained from research findings should have direct relevance and potential application to a wider practical context. In practice, however, this divide is not an easy one to cross and the extent to which experimental research findings can feed directly into practical, everyday language testing remains constrained.

(Taylor and Wigglesworth 2009: 335)

6.8 Concluding comments

Assessing LSP learning and evaluation LSP courses are integral and vital processes to any LSP programme. In the following chapter we return to explore the issue of 'specificity' introduced in Chapter 5, and how it is challenged by the reality of interdisciplinary and multidisciplinary contexts within which LSP commonly operates.

Discussion points

1. Consider an EAP test with which you have some familiarity. Discuss the social consequences of this test.
2. Discuss the notion that validity and reliability are opposing forces. In other words, to increase one, you must decrease the other.
3. Discuss the notion of inseparability between language and content, and what the implications are for LSP testing.
4. Discuss the implications of LSP tests requiring professional practitioners to inform what can be considered as valid spoken or written performances in their profession.

7
LSP in Interdisciplinary and Multidisciplinary Contexts

This chapter will:

- Discuss the issue of specificity in different LSP contexts
- Introduce and discuss the notions of interdisciplinarity and multidisciplinarity

7.1 Specificity

As we have already mentioned in Chapter 5, many believe that all LSP pedagogy needs to be specific to the individual user in a specific context at a specific time. Dudley-Evans and St. John (1998: 9) suggest that where an academic support course relates to a particular academic course or there is one-to-one work with business people, 'the course becomes really specific … geared to the specific needs of the target situation and of the individuals concerned [making] extensive use of authentic materials'. When such micro-specificity is seen as a desirable goal, it is clear that almost any actual teaching situation will present problems, as it will involve a degree of mixed needs, and the dynamic nature of communication in rapidly changing contexts will necessarily involve concepts such as hybridity, overlap and different interpretations.

In this chapter we will examine LSP in interdisciplinary and multidisciplinary contexts and ask to what extent we can adopt pedagogical practices that can accommodate different needs and different discourses.

Teachers of Language for Academic Purposes will be familiar with the kinds of compromises that have to be made between the teaching of generic and specific skills. Hyland has been most vocal in arguing for discipline-specific approaches, and his views should be considered in light of the issues concerning specificity that we outlined in our Introduction chapter.

Quote 7.1 Hyland on specificity

The imperative to inform classroom decisions with knowledge of the language features, tasks and practices of particular communities has led us to develop and sharpen concepts such as genre, authenticity, discourse community, communicative purpose, and audience which are now common coinage in applied linguistics.

(Hyland 2002: 386).

The discourses of the academy do not form an undifferentiated, unitary mass but a variety of subject-specific literacies. Disciplines have different views of knowledge, different research practices, and different ways of seeing the world, and as a result, investigating the practices of those disciplines will inevitably take us to greater specificity.

(Hyland 2002: 389)

The underlying assumption here is that the learner is seeking to become a member of the scholarly community of practice of the subject they are studying. There are some issues with this assumption. One is that very few academic subjects present a culturally and communicatively distinct unity – they are a mixture of sub-disciplines which may be influenced by and competing with other sub-disciplines with which they come into contact, leading to such phenomena as hybridity and competing discourses (Bhatia 1993). Another is that only a small percentage of university students will go on to be professional scholars. For most, their knowledge and skill sets will be deployed in the world of work outside the academy. Dovey (2006) describes the problems for EAP, or literacy, teachers where university courses are practice-based.

Quote 7.2 Dovey on academic/workplace orientation

Depending on the field, the 'performance' may involve anything from solving a computing problem; to researching a product and its market in order to prepare a strategic plan; to setting up a task force to investigate and report on cost management issues to an imaginary CEO in a company described in a case study; or to developing a project proposal for designing a virtual community. Clearly, tasks like this are able to introduce students to the specific 'tools' of a particular workplace and provide practice at using those 'tools'. When it comes to the literacy goals of such tasks, however, the issue of specificity and transferability becomes more problematic. The first problem that arises with assignments like this is that they elicit hybrid text types, in the sense that the writing 'grafts together' the instrumental purposes of workplace performance and/or writing, and the (inevitably) pedagogical purposes of academic writing. Thus the audience is often simultaneously the tutor and the real or imagined workplace reader.

(Dovey 2006: 394)

Even where a degree course is focused primarily on the future profession or future workplace, the general case remains for the LSP teacher of whether students are being assisted to deal with the immediate communicative demands of the academic courses they are following or whether they are preparing for the world beyond the university. A good example of this with which we are familiar is a university accounting program in which the only assessment of spoken language was the requirement for each student to give a PowerPoint presentation, when in fact practising accountants would very seldom have to perform such a task in the course of their everyday work life. As we saw in Chapter 4, the tension between immediate and predicted future needs is one that is relevant to LSP planning in many different contexts.

Tailor-made programs offered for specific workplaces by LSP providers may be working in a context of relatively well-delineated specificity, but most LSP teachers will find themselves working with heterogeneous groups, with different levels of linguistic competence as well as different interests. Huckin (2003) suggests that the responsibility for specific focus should rest with the learner:

Quote 7.3 Huckin on specificity

Specificity, it is argued, must ultimately be supplied by the student, not by the teacher, for it is the student more than the LSP teacher who is in the process of becoming an insider and whose interests are best served by becoming an astute analyst of the specialist discourse.

(Huckin 2003: 3)

7.2 Inter- and multidisciplinarity

Hall (1994) suggests that classroom heterogeneity actually reflects real-life communicative needs.

Quote 7.4 Hall on heterogeneity

Subject-specialists … may have very narrow concerns, and their interaction with others in the same narrow specialism is likely to take much as common ground. But they also have to communicate with people who do not share their specialism, whether they are students participating in cross-disciplinary seminars, researchers applying for external funding for research projects [or] field workers justifying their work within a larger organisation. … This kind of communication, with people who do not share the same assumptions and experiences embedded in the specialist subculture, is probably the more challenging of the two.

(Hall 1994: 210)

The solution adopted at the Asian Institute of Technology in Thailand was to design a program ('Talkbase') reliant on learner-generated content, using move analysis of the kind defined by Swales (1981a) and Sinclair and Coulthard (1975) as a tool for students to take a critical approach both to their own texts and those of others.

Quote 7.5 Hall on 'Talkbase'

The main distinguishing feature of the course is not just that it is learner-centered and devoted to learner autonomy; it is that the course content, to a very large degree, is generated by the learners themselves. Learners get to choose the topics and to develop topics in cooperation with each other. The course encourages learner interdependence – rather than just independence – as language use is clearly cooperative and goal-directed. Learners go beyond the assimilation of information into their own mental systems to a point where they can confidently articulate and evaluate their own and others' points of view, can assess their own and others' clarity of expression, and are willing to submit opinions to the critical scrutiny of others.

(Hall 2001: 155)

Although most courses do not go so far in comprehensive learner generation of content as Talkbase, the use of target-related tasks, often in the form of simulations, and of project work has become common in LSP work (see Moore and Xu (2014) for a recent example involving simulated accountant-client interactions). It has been recognised that target situations are far more complex than can be captured in a traditional needs analysis, and that approaches involving simulations and projects are better able to approach the actual conditions of real-life experience, taking into account all of the contingencies of specific situations, including the differing levels of participant expertise and linguistic competence, varied linguistic and cultural backgrounds, and local workplace or educational practices.

Much of present-day LSP practice finds inspiration in the work of sociologists as much as in applied linguistics. As long ago as 1989, Philip Riley pointed out the importance of sociological considerations in trying to define what it is that the LSP researcher-teacher is doing.

Quote 7.6 Riley on LSP and the sociology of knowledge

… [a] given variety of language is not 'special' or 'specific' in some absolute or objective way, inherent to its formal structures, topics and norms. 'Specificity' is, rather, the result of a particular relationship between participant and discourse, between two cultures or worlds of knowledge. For these reasons, it is often not particularly helpful to attempt to describe specific varieties in terms of linguistic features. Instead, we need to situate the problem within a general theory of the sociology of knowledge by asking fundamental questions such as 'Specialised for who?' and 'Who knows what?', 'How do they acquire and use their knowledge?'. Such a theory will necessarily be both relative and social: relative to the individual and to the way in which knowledge is socially distributed. But it will also be a theory of discourse, since interactive language-use is the principal mechanism by which individuals acquire, stock and share all knowledge, 'specialised' or otherwise. It is suggested that two factors need to be kept in mind by the didactician interested in LSP. First, is the discourse asymmetric?, i.e. does it assume or contain knowledge which the learner does not have? Secondly, is the discourse non-collaborative?, i.e. one where no attempt is made to share the knowledge with uninitiated participants.

(Riley 1989: 69)

The sociologist Derek Layder (1993; 2006) has developed an approach to sociological investigation and description that he calls a 'theory of social domains' or 'domain theory'. He notes that any such investigation cannot be unitary but must be seen as multiply perspectived, as social life itself consists of varied and distinctive characteristics that cannot be combined into an overall synthesis.

Quote 7.7 Layder on Domain theory

Domain theory suggests that … we should think of the social universe as multi-dimensional – as four interconnected domains. Such a perspective acknowledges the richness, complexity and depth of the social universe, qualities that are denied or obscured by the reductive tendencies of [other] theories. … Describing social reality in terms of … singular 'unifying' processes artificially compacts the nature and scope of social reality. Any sense of its depth, richness and complexity is thereby lost.

(Layder 2006: 273)

Layder's four domains consist of: contextual resources, social settings, situated activity and psychobiography.

This 'multiperspectived' approach has been incorporated into the work of applied linguists (e.g. Candlin 1997, Sarangi and Candlin 2001, Crichton 2003, Bhatia 2004, Sarangi 2005) who are concerned with analyzing language in context and with the development of communicative expertise in professional and organisational contexts.

Candlin and Crichton (2013; 2012; 2011a; 2011b) and Crichton (2010) have more recently formalised their version of a five-perspective model of interdiscursivity, incorporating the text perspective, the participant perspective, the social and institutional perspective, and the social action perspective, linked to a fifth, and complementary perspective, that of the analyst. This concept of five 'different but complementary' perspectives has significant implications for LSP, both in what it suggests about the targets and methods of needs analysis and in the consequences for the design of LSP programs and the varieties of training activities and contextualisations that are undertaken in such programs.

A multiperspectived analysis privileges a holistic approach to workplace analysis and training. It implies a research and course design methodology that engages with the complexity of institutions and organisations with porous linguistic and cultural boundaries, that can 'target learners' actual professional purposes, working in a plurilingual and pluricultural environment across a range of different workplace organisations' (Hall 2013: 4).

In the CEF Professional Profiles project (Huhta, Vogt, Johnson and Tulkki 2013), researchers from a number of different European countries worked with organisations and individuals with a variety of cultural, linguistic and professional backgrounds to produce a holistic picture of professional working life and communication needs, leading into course design characterised by project work, simulations and holistic communicative activities.

Quote 7.8 Huhta et al. on professional profiles

The messages conveyed in communication incorporate *meanings*. Communication can be more than just text (*verbal*); it may incorporate *non-verbal* elements such as tone of voice, gestures, use of space, clothing, tacit knowledge and behaviour, which are less centrally seen as part of English for Specific Purposes. In communication, ***interlocutors*** possess communication skills, which, in the linguistic tradition, have been classified into listening, reading, speaking, writing and mediation …; however, in a *professional setting* they seldom occur separately, but rather as integrated clusters of sub-skills and clusters of source data in meaningful sequences.

(Huhta et al. 2013: 44 [italics added])

While the approach taken by Huhta et al. has some elements, such as the very precise needs analysis instruments, that would support Hyland's 'sharp-ended' view of LSP, it also goes well beyond a model of specificity that implies restriction, limitation and exclusivity. On the contrary, it embraces diversity and recognises that individuals and institutions will have different kinds of communicative practices, different levels of linguistic need, different motivations and goals, and that they operate in dynamic environments. In this way, the holistic approach is both specific *and* inclusive.

A desire to open up LSP to the diversity of the populations it is dealing with and their concerns and ambitions can be seen in much recent work in the field. A critical approach to LSP (e.g. Benesch 2001) engages with learners as active participants in workplace, academic and social processes, aiming to help learners go beyond the role of consumer to that of full participant with the ability to challenge as well as conform. The inspiration for this is a firm view of the learner and the teacher as participants in wider and overlapping communities.

Quote 7.9 Belcher on LSP and critical theory

Key to this critical-theory-informed reconceptualization is recognition that any target discourse community is situated in other, still larger socioeconomic and political realities, and any community member, or would-be member, holds numerous subject positions, as citizen/non-citizen, insured/uninsured, steadily employed/transiently employed, or minority/ majority race/ethnic group member, etc.

(Belcher 2009: 7)

7.3 Concluding comments

This chapter has examined the notion of specificity, how LSP functions in interdisciplinary and multidisciplinary contexts, and some of the implications that arise for pedagogical practices. The following chapter explores further how LSP teachers have taken account of complex contexts to fashion innovative teaching practices.

Discussion points

1. In what ways is the notion of 'discourse community' useful in understanding the needs of LSP learners?
2. Discuss the implications of audience in terms of LSP learner performance.
3. Discuss the idea of teaching integrated skills in LSP courses and what issues or problems might arise.
4. Think of a particular LSP teaching context. How can the notion of a multiperspectival perspective be operationalised in this context?

8
LSP and Methodology/Pedagogy

This chapter will:

- Differentiate LSP teaching from general language teaching
- Illustrate pedagogical practices that are informed by research

8.1 Differentiating LSP teacher practices

In this chapter we address the issue of teaching LSP courses, and the teaching/research nexus. From its early years, LSP pedagogy has often been assumed to be different from that of general language teaching. Its choice of content, the purposes and routines of its testing, its focus and expected classroom behaviours can all, on a sweeping view, be seen as quite different from the traditional language-for-general purposes classroom. The fact that a majority of LSP learners are adults and that many of them already possess some level of professional or at least theoretical or experiential expertise in some features of the course content only adds to the general perception that LSP teaching is different from general language teaching. In reality, it may not be as easy at a more particular level to specify techniques and activities which are found in LSP work but never in general language teaching, but it would, we believe, be fair to say that the two are clearly differentiated in two aspects:

1. The LSP practitioner needs a combination of pedagogical and research expertise in order to devise curricula and classroom activities;
2. Classroom methodology owes as much to the routines, practices and assumptions of the targeted discipline or workplace as it does to the tenets of language teaching pedagogy.

Before presenting various exemplifications of these two aspects of pedagogy specific to LSP, it is also worth considering the practice of team-teaching, where a language teacher and subject specialist co-teach a group of learners. Although not widely practised, it is arguably another example of LSP teaching being differentiated from general language teaching.

Dudley-Evans (2001: 226) categorises three levels of 'liaison' between language specialists and subject specialists: cooperation, collaboration and team-teaching. As examples of team-teaching he cites follow-up tutorials that focused on the content of a specific lecture, with the actual lecturer attending the tutorial; and a session in which possible examination questions were unpacked and discussed in terms of what would be a suitable answer, again in the presence of the course lecturer. Stewart and Perry (2005) discuss team-teaching in the context of EFL support to subject specialists in an undergraduate programme at a Japanese university, and argue that such interdisciplinary collaboration provides a model for teacher development. Ferris and Tagg (1996) address the under-researched area of the academic oral communication needs of EAP students, and draw attention to the wide variety of needs arising from different subject areas, class sizes and lecturer preferences. In an interesting counter-intuitive study, Basturkmen and Shackleford (2015) report on the surprising extent to which subject specialists teaching first-year accounting courses at a New Zealand university actually addressed language issues incidentally in the course of their teaching. Arnó and Mancho (2015) discuss the increasing presence of content and language integrated learning (CLIL) programmes at the expense of ESP programmes at universities in Spain, and note that language support is not generally included in CLIL programmes. Thus, in this specific context, the gap between subject specialists and language specialists remains and can only be bridged through 'team' collaboration.

In the rest of this chapter, we will examine some instances of the development of curricula or pedagogies that exhibit different aspects of the reciprocal influences between theory, research and practice.

8.2 Research-informed pedagogy practice

The first example comes from a context which is not generally thought of as representative of LSP pedagogy, elementary school L1 literacy classes in the north of England. The engagement of children, however, in real issues with real outcomes and in ways that combine both learner choice of content and learning about genre characteristics provides many parallels with programmes such as Talkbase and shows that LSP is not restricted to what have become its conventional contexts.

Elaine Millard, working with school teachers and children in Sheffield, in the north of England, has conducted a series of action research projects starting from a series of questions that might just as easily be posed in relation to adult LSP learning and teaching.

Example 8.1 Millard on transformative work in schools

Teachers have been prompted to answer questions such as:

- What use can be made of the knowledge which children bring with them in the classroom contexts devised for reading and writing?
- How can their personal, current knowledge be transformed to facilitate a more critical understanding?
- What might the making explicit of the transformative process look like?
- How can school literacy be framed to develop the habits of critical consciousness that are at the heart of a productive literacy responsive to changing times?

(Millard 2006: 237)

Among other classroom activities, Millard notes how genre was introduced not by looking at exemplars of a specific genre and then finding some relevant topic for the children to practise, but by starting from a real-life problem and then identifying an appropriate genre with which to try to work towards a resolution of the problem.

In our second example of research-informed pedagogy practices, Candlin, Bhatia and Jensen (2002b) report on a research project that investigated available textbooks for teaching legal writing and found that they were generally inappropriate for L2 learners and, importantly, L2 teachers. Their solution is set out in Example 8.2.

Example 8.2 Candlin et al. (2002b) on approaches for developing ESP legal writing materials

Three approaches for developing core ESP legal writing materials of wide applicability and use:

- First, the materials can be customized for use in an L2 context by using more effective rhetorical devices; involving students more in the learning process; and including materials for the teacher.
- Second, the materials can adopt a more language and discourse-based approach by grounding them in research and evidence-based linguistic and discursive analysis of legal language; introducing the concepts of discourse and discourse communities; adopting a genre-based approach; and by focusing centrally on the discourses of the law, rather than on legal content.
- Thirdly, instead of packaging such materials exclusively in book form, materials can be made available, desirably computer-mediated, as a resource bank of authentic data, explanatory information, and learning-centred tasks.

(Candlin et al. 2002b: 316)

This example highlights two important points. First, the benefits of a discursive approach, as opposed to what might be called a language-analytic approach, are clear as a means to better understand how language achieves its multiple social purposes. When such understanding is improved, it follows that more appropriate teaching and learning tasks can also be devised. Second, modern technology affords many and varied approaches that can appeal to a wide range of teaching styles and learning preferences. LSP is not constrained by a 'one size fits all' mentality in its pedagogical practices.

Also working in the domain of English for legal purposes, Sophie Cacciaguidi-Fahy reports on an LSP methodology directly linked to disciplinary methodology, namely the use of case studies in teaching legal French. Cacciaguidi-Fahy (2004) is based on a seven-year empirical study using cases in teaching legal French on an interdisciplinary undergraduate Corporate Law programme at the University of Galway in Ireland. She adopted a 'descriptive, interpretivist' approach to teaching as a counter to traditional didactical approaches that she found to be 'excessively positivist'. The case method consists of 'borrowing the content of the French legal process (French law) and applying the business case study approach to a legal situation' (p.356). Cacciaguidi-Fahy goes on to describe the characteristics of a good case as follows:

> [I]t must be short and focused to retain student interest. It must lead to information retrieval and appraisal of legal information and situation. It must contain enough legal terminology, legal semantics and

> plain French, which require a search for legal vocabulary. Its purpose is to help students of legal French to learn more about French law, French model of legal reasoning and French legal writing skills. Cacciaguidi-Fahy (2004: 356)

Cacciaguidi-Fahy also makes the important point that case study methodology is not meant to displace 'appellate language teaching' but rather that it should be used in conjunction with existing teaching methods to add educational value.

Example 8.3 Cacciaguidi-Fahy on benefits of case study teaching

The results of this research indicate that the case study method provides a stimulating and emotional climate for language learning, conducive to enhance the development of a set of legal language, analytical and immediate oral and written application skills for students whose primary area of studies is not a foreign language. It is a positive way to integrate the theory and practice of law, legal culture and language in the learning process. The approach is interdisciplinary in nature and is advocated because of the realism of case studies, which are based on real facts, raising issues that occur in real life, thus allowing students to go beyond the classroom and explore more closely the challenges of the common and civil legal language systems and find solutions to legal translation equivalence dilemmas.

(Cacciaguidi-Fahy 2003: 1)

David Bond's description of a ten-month management communication programme for disadvantaged South Africans provides an excellent example of teaching that is geared to the 'routines, practices and assumptions of the targeted discipline or workplace'. Bond (2000) provides an account of how developing multiliteracies for the workplace can be implemented in a flexible curriculum, through using the 'Multiliteracies' framework developed by the New London Group (Cope and Kalantzis 2000b). The course structure consists of three main parts.

The first part is concerned with access, and includes the principles of communication and learning, the fundamentals of reading and writing in academic and business contexts, and analysis and development of argument. The second part (see 'Negotiation module' below) expands access to include critical engagement – negotiation, critical language awareness, recruitment and selection, as well as equity in the workplace. The third part develops the theme of productive diversity and is concerned with management and leadership in the South African context and involves a workplace research project.

Bond (2000: 314) describes one module (negotiation) in the second part of the course as follows:

'Negotiation module'
Situated Practice
Exercises and role plays
Review of group dynamics within [programme]
Overt Instruction
Definitions of 'negotiation' (metalanguage)
A model
Critical framing
Identifying metaphors in framing
Transformed Practice
Assignment: applying a model and metalanguage to a real-life negotiation
Development: feedback, review, discussion, possibly more Overt Instruction and rewrite, learning points for next modules

Example 8.4 Bond on Mutiliteracies framework

Bond observes that the Multiliteracies framework 'forces practitioners to stand back and critically review their pedagogy by providing a succinct and coherent means of designing, developing, articulating, and assessing the teaching of language and communication'.

(Bond 2000: 320)

A further example of research-informed pedagogy practice is John Knox's report of an ESP project in the final year of a four-year Bachelor of Tourism degree in Thailand. Knox (2007) discusses the challenges for innovating in a set curriculum and, in particular, the effort needed to allay fears of various stakeholders and to 'win them over' to the benefits of such innovations. His study concerns a project in which students were required to visit Bangkok International Airport to interview departing foreign tourists to find out about their experiences in Thailand. The purpose of the project was to provide a structured, collaborative series of tasks in an authentic context for using English.

Example 8.5 Knox on language task integration

Learners were required to use language heuristically to develop their questionnaires, collect the data, and finally report in English, creating a tangible English language product.

(Knox 2007: 122)

The theoretical basis of the project design was provided by Legutke and Thomas's (1991) project stages (Knox 2007: 190):

Legutke and Thomas 1991	**Thai Airport Project Stages**	
1. Opening	1. Opening and orientation	
2. Topic orientation		
3. Research and data collection	2. Research and data collection	
4. Preparing data presentation	3. Reorientation	
	4. Preparing data presentation	Evaluation
5. Presentation	5. Presentation	
6. Evaluation		

This example shows that LSP teachers can innovate very effectively in their own teaching practices through drawing on established theories, frameworks or conceptualisations and then making these relevant to their own particular teaching context and the specific needs of their language learners.

Our last example of LSP and pedagogy is a case in which an ESP discourse-focused research project led to a clear set of implications for ESP teachers and their teaching practices. Burns and Moore (2008) investigated the spoken discourse of accountants by way of simulations involving university accounting students participating in authentic accounting interactions. The students (in the role of accountant) and non-accounting participants (in the role of client), generated interactional data that was subsequently analysed for question typology. Six question types were found in advice-giving interactions: information, clarification, client-specified, backchannel, discourse-related and interpersonal (322).

Example 8.6 Burns and Moore on question types in advice-giving interactions

The [question] typology … could be used to show learners the range of questioning techniques likely to develop in such professional consultations. Learners can be given opportunities to enhance their understanding of the functions of each questioning technique and the kinds of responses they are intended to elicit. They can be introduced to the questioning techniques primarily utilised by the accountant in contrast with those that clients might introduce.

(Burns and Moore 2008: 333)

Readers might also be interested in Burns and Moore (2007), in which the same data set is investigated using Conversation Analytic (CA) techniques. This paper also has a focus on pedagogical implications, in particular turn-taking and co-construction of clarification.

It is worth noting that the issue of joint problematisation involving specialist stakeholder and LSP specialist is another area in LSP that is receiving attention in current research. Moore (2013), for example, investigates the discourse of telephone-based financial planning consultations. Using a range of discourse analytic tools (i.e. SFL theory, CA techniques and concordancing programs) authentic data were analysed to address on the one hand the concerns of the stakeholder (a major financial planning firm in Australia) about how to improve the uptake by clients of further billable advice; and on the other the concerns of the LSP specialist about the clients' ability to understand financial discourse and take appropriate actions regarding their financial well-being.

8.3 Concluding comments

All of the examples discussed in this chapter have highlighted aspects of LSP and methodology/pedagogy that distinguish the LSP field from that of general language teaching. In the following chapter we step back from a research perspective and take a more practical view as we explore the contexts within which LSP teaching takes place from the perspectives of management and professional development.

Discussion points

1. Other than law, in which other subject areas might case studies be particularly well suited?

2. Think of an LSP context in which multiliteracies are needed by language learners. What particular challenges does such a context present to the LSP teacher?
3. Consider an LSP context with which you are familiar. How might simulated role plays be an effective learning task for learners in this context?
4. Discuss to what extent authenticity of interaction is more important than authenticity of materials in LSP learning activities.

9
LSP Classroom Management and Professional Development

This chapter will:

- Outline and discuss key issues concerning managing classrooms in LSP programmes
- Discuss the issue of LSP professional development

9.1 Working in an LSP environment

In this chapter, we round off Part II by examining a few important issues that are complementary to those research-informed issues covered in the preceding chapters. In fact, many of the issues and concerns surrounding management and professional development in LSP have been touched upon in previous chapters, but it is nevertheless helpful to bring them together here as an important focal point in LSP more generally. They constitute a significant dimension of the 'practical' side of the theory/practice nexus, and present challenges to LSP practitioners that are less common for other language practitioners. We will explore management issues at both classroom and programme levels, and consider staff development issues in terms of professional development and career pathways.

9.2 Managing classrooms in LSP

The main management issues in LSP classrooms relate to who the learners are (i.e. adult or child), how knowledgeable they are about the specific purpose subject area, and their level of proficiency in the target language. Managing adult learners presents different challenges from managing younger learners. Adults usually have fully developed cognitive systems that they can utilise to create effective and efficient learning strategies that suit them as autonomous learners, whereas younger learners may need much more 'teacher-led' support in their language studies. On the other hand, adults may find language learning stressful since it constantly creates opportunity for losing face in front of both teacher and other learners. It should be noted that it is often the case in LSP courses that classes are comprised of a mixture of seniority and age levels, and older, more senior managers may find learning more difficult than their junior, younger colleagues. To be constantly exposed to displaying weakness in performances in front of colleagues can be deeply troubling for some workers, and this situation requires the LSP practitioner to be aware of this possibility and to plan ways of minimising the risk of face-threatening-acts occurring on a regular basis. Skill and tact are required in these situations. One of the authors of this book faced this issue in Vietnam in the mid-1990s in several ESP courses he taught that involved government officials in the Ministries of Finance, Health and Environment. In each course, there was at least one senior-level participant who seemed to be a poor language learner and whose face was constantly threatened by communicative language methods that involved performing in pairs or small groups. Such participants need more support, but it needs to be administered discreetly. Pre-adult learners do not face the same level of stress in this regard, but obviously the LSP practitioner should remain sensitive to this issue for learners of all ages.

On a more positive note, learners may be quite knowledgeable about the special-purpose area in their first language, but simply need to be able to function with it in a second language. In this scenario, it is the LSP practitioner who is under more stress to understand the content area sufficiently well to be able to provide worthwhile language activities in relation to it. Sarangi (2005, September) suggests a 'threshold' level of familiarity is needed by applied linguists who collaborate with professional practitioners in other fields such as medicine, engineering and accountancy, and we would argue that a similar requirement pertains to LSP. In other words, the LSP practitioner does not need to be (or have been) a professional in the subject area in question, but he/she does need to have a 'threshold' knowledge of the subject in order to competently fulfil their role as teacher. Such knowledge can often be acquired through close collaboration with a subject specialist in a team-teaching relationship (see Chapter 8.1).

Moore (1997) is an interesting account of an ESP teacher who does have a subject specialist background as well (i.e. in accounting), and discusses how the cognitive requirements of learning to think like an accountant are quite foreign to those required of a language teacher, particularly in respect of case study learning. Certainly it takes time for LSP practitioners to develop threshold familiarity with a content area, but years of working within a particular field enable deep understanding and a level of LSP expertise that is not available to a novice practitioner. However, it is often the case that more experienced LSP teachers do not have their expertise recognised in their remuneration, which is usually not very different from that of novice LSP teachers. For sponsors who fund LSP programmes, it is not easy to appreciate the tremendous advantage that a subject-knowledgeable LSP practitioner has over one lacking such knowledge; they tend to view LSP teachers as language teachers, not subject-specialist language teachers.

Programme-level management has its own set of challenges, but most revolve around the maintenance of good relations amongst the various stakeholders: sponsors, teachers and learners. As noted in Chapter 4, stakeholder expectations are often unrealistic for LSP programmes, particularly short, intensive courses. Language learning can be accelerated through intensive learning programmes, but becoming a proficient user of LSP requires working within a medium to long-term timeframe. Accordingly, what counts as success on an LSP programme may be viewed quite differently by different stakeholders because the criteria used to measure success will vary according to the interests of each stakeholder. For example, learner autonomy and the development of self-study skills might be an important (and achievable) outcome for teachers, but this might not resonate with sponsors or learners. An ability to translate expressions from L1 into the target language might rank highly amongst sponsors, but not with teachers or learners. Thus, managing the design, delivery and evaluation of an LSP programme is a considerable challenge, to say the least.

9.3 Professional development in LSP

Managing human resources is never easy, but managing teachers is often particularly difficult. Teachers seem by their very nature to not want to be managed. They prize their independence and autonomy in the classroom and often seem to resent (and resist) any attempt at 'being managed'. This is obviously problematic in a context where LSP teachers work within a department or other configuration of teachers, and have duties and responsibilities that extend beyond their own classroom and its immediate concerns. Nevertheless, they can be (and are) managed more or less successfully by their line managers. What often facilitates successful LSP management is having respect for the manager, and this happens when the manager truly understands the challenges and issues faced by LSP teachers, usually through personal experience in the field themselves. This provides the manager with insights and sensitivities that if lacking would in some cases lead to misunderstandings and confrontation.

The LSP manager's tool kit comprises 'carrot and stick' mechanisms. We shall discuss the former below, but the latter do not need a great deal of discussion. They essentially concern sanctions available to the manager, including reducing privileges and, ultimately, contract renewal. Teachers tend to respond better to positive inducements such as rewards, including greater privileges, more choices and better prospects for contract renewal.

It may be useful to briefly separate LSP into academic and other specialist streams when considering the important issue of career development for LSP practitioners. In particular, comparing EAP and ESP reveals an important fact in the LSP world. It would be fair to say that EAP teachers work within a pyramid hierarchy in which the base is populated with many EAP teachers and the pinnacle is held by a Director of Studies (or an equivalent position). In between these two levels, especially in larger organisations, there may be a layer of 'middle managers' who might coordinate certain specialty areas (e.g. curriculum development, syllabus design, testing and assessment) or serve as Assistant Directors of Study. (One of the authors of this book worked in a large language school in Cambodia in which there was one ADoS responsible for 'General English' and another responsible for 'English for Business Purposes'. The 'Academic English' programme was operated outside of this structure, with its own coordinator reporting directly to the DoS, due to it being funded directly by Australian aid money.) The point being made here is that there is some prospect of career progression with EAP, either within one organisation, or by crossing over (and up) to another organisation. This is not generally the case in ESP programmes. Such specialist teaching programmes have more opportunities for 'horizontal' movements rather than 'vertical' movements up a hierarchy. Whereas an EAP specialist accumulates experience that opens doors for ambitious practitioners, the ESP specialist typically either stays in their area of specialisation, deepening their understanding and value in that area, or they move across to challenges in another discipline within ESP (e.g. switching from 'English for Business' to 'English for the Hospitality Industry').

A very important component of staff development in LSP is the ongoing professional development of LSP practitioners. Arguably, language teachers who deal with a specialist subject have a greater need to stay engaged with developments in their field than do more general language teachers. Thus, while in-house workshops might enhance the knowledge and skills of all language teachers, specialist reading and attendance at specialist conferences is a particular need of LSP practitioners. Access to relevant language and specialist journals and resources to attend conferences must be budgeted for and equitably distributed, preferably based on merit rather than longevity in the job.

Evaluating LSP staff is an important part of LSP management and maintaining (and ensuring) quality control. Typically, new staff serve a probationary period comprising a formal induction process to the end of a first period of teaching. Target levels of achievement are set at the outset, and these are then checked against actual performance at the first review. If satisfactory progress is deemed to have occurred then the new staff member can expect to have his/her performance reviewed on an annual basis thereafter. Needless to say, as in other management contexts, it is important that the staff member has a say in the goals and objectives of their period of employment. They are much more likely to be motivated to achieve such goals than in the case when all goals are dictated top-down from management. Annual goal setting offers an excellent opportunity for managers to assist in the development of LSP practitioners' skill sets. For example, more junior members can be nurtured to develop their expertise in one or more specialist subject area; more senior members can be encouraged and supported to write up their experiences for conference presentations or publication in specialist language or subject journals.

9.4 Concluding comments

This chapter has addressed two important aspects of LSP rarely reported in the literature, namely classroom management and professional development, and concludes our exploration of LSP in the classroom. As we have seen, the field of LSP has grown considerably since its nascent years in the 1970s. As it has matured, its teaching practices have also become more sophisticated. We now turn to Part III, which provides a focus on the rich body of research that underlies and informs how and why LSP teachers teach as they do.

Discussion points

1. How might an LSP teacher go about attaining a threshold of understanding for the specific subject area of his/her learners?

2. Apart from age and seniority, what other issues might present management problems in an LSP classroom?
3. To what extent is a general lack of upward mobility a problem for LSP as a field?
4. What skills does an LSP manager need and why?

Part III
Conducting Applied Research in LSP

10
Research Practices in LSP

In Part II we examined how LSP planning, administration and the classroom are all informed by research. We now turn our attention to the practical matter of doing research in LSP.

This chapter will:

- Provide an overview of the nature of research in LSP
- Define some key research terms
- Outline some general paradigms, approaches and methods that are used in researching LSP
- Briefly overview the key features of some research approaches that are commonly used by LSP researchers

10.1 The nature of research in LSP

We noted earlier that the field of LSP has drawn heavily on applied linguistics and second and foreign language teaching for its underlying theories and practices. Sociology, psychology, learning theory and rhetoric have also been influential (Hewings 2002). In the area of applied research, LSP has frequently broken new ground. Swales (1985) provides a fascinating account of many of these early developments.

As we emphasised earlier, the teaching of LSP has traditionally been practically oriented, by its very nature focused on the needs of particular students or cohorts of students in identifiable situations, so that in their daily praxis, teachers have always needed to be involved in researching the contexts in which students will use the target language, and the written, spoken and visual modes of communication with which they will engage. Although relatively few LSP practitioners would describe themselves primarily as researchers, these days most undertake some kind of research as part of their training, and nearly all investigate problems informally as part of their daily work even if the results are not intended to be published. At the same time, in recent decades, the field of LSP has become more oriented towards formal research, partly as a result of more stringent graduate level training for language teachers, and partly because of the opportunities provided by specialist journals where peer-reviewed research in the field can be published in English or other languages. As LSP is interdisciplinary, there are many different journals that publish relevant research. The most well-known venue is *English for Specific Purposes*, the international peer-reviewed flagship journal for the field, set up in 1980 as the *ESPJournal (ESPj)*. As ESP has developed, other journals such as the *Journal of English for Academic Purposes*, *ASp* (from Groupe d'Etude et de Recherche en Anglais de Spécialité), *Fachsprache*, *Ibérica* and many others have appeared, including some that are exclusively online, for example, the *Asian ESP Journal* and *ESP World*. In addition, LSP articles regularly find their way into *TESOL Quarterly*, *System*, *Applied Linguistics*, *The Modern Language Journal*, the *Journal of Second Language Writing*, the *Journal of Business Communication* and the *Journal of Asian Pacific Communication*, to name but a few (see Chapter 13 for a longer list).

10.2 What are the contexts for research in LSP?

As discussed in Chapter 1, the field of LSP is vast and diverse, with different motivations, opportunities and barriers for research. Sites may be local, institutional, regional, national or international, and research ranges from individual case studies to large scale multi-site projects. Foci for research typically include needs analysis, curriculum development, materials development, assessment and evaluation and policy making, as well as discourse analysis and investigations of identity or communities of practice. Although LSP research can be conducted in any context where it is used or taught, including classrooms, in reality there is much more research for publication being carried out in university contexts than in the professional or industrial workplace or the community.

10.2.1 What approaches are valued in journals that publish research in LSP?

While there have been a number of important reviews of research trends in applied linguistics over the years, and some impressionistic overviews of directions in the field of LSP, there have been only a few empirically-based overviews of the research that has been published.

Martin Hewings (2002) wrote an informative history of the field of ESP in which he reviewed the geographical origin, topics of research and literature that was cited in 20 volumes of *ESPj* between its inception and 2001. He noted the growth of ESP worldwide, and a substantial increase in published papers originating in Central and South America, China and Hong Kong. Although female researchers finally outnumbered male, those cited were still predominantly male, possibly because of the historical predominance of male 'experts' in the field. He also saw a growing trend away from researching 'general' ESP, and towards EST and EAP, but continuing low rates of publication of articles on EOP and EPP. He did not set out to compare the relative frequency of different approaches or methods, but he did note that text and discourse analysis had increased steadily throughout the period. This he related partially to 'the growing realisation that to provide convincing and effective ESP courses or materials, we need to know a considerable amount about target situations' (6), and partially to the development of more powerful analytical tools such as genre and corpus analysis. There was a dramatic drop in simple programme description, which he suggested was due to either the growing maturity of the profession, or the fact that increasing specialisation makes it more difficult to generalise from specific cases. He also noted a bias towards reporting on written language rather than spoken, perhaps because of the greater ease of analysis of written texts, or perhaps because of the continuing popularity of Swalesian written genre analysis. Hewings predicted the following trends in ESP: greater internationalisation, increasing specialisation, the further growth of Business English, continuing influence of genre analysis, corpus analysis and systemic functional linguistics, and more emphasis on English as an international language.

In 2005, Peter Master provided a briefer 'snapshot' of the field, again restricted to *ESPj*, but only considering the volumes between 2000 and 2002. He found a continuing focus on '(a) macrolinguistic concerns such as writing, authenticity, and oral communication, (b) microlinguistic elements such as vocabulary and grammatical categories, and (c) descriptions of various ESP programs' (102). Of these three concerns, macrolinguistics accounted for 60%, microlinguistic 21% and programme descriptions 19% (102). Provocatively, in his conclusion (111), he reiterated calls that had been made over the past 30 years for ESP to 'establish its empirical validity as a viable means of second language acquisition', partly through 'the publication of experimental studies based on inferential statistics'; he also noted 'a dire need for research in the occupational and sociocultural aspects of ESP as well as the training of ESP practitioners'.

Gollin-Kies (2014) surveyed the two leading peer-reviewed LSP journals, *English for Specific Purposes* (*ESPj*) and the *Journal of English for Academic Purposes* (*JEAP*) between 2003 and 2012 to find out what approaches to research were most used by contributors to those journals. While she found *JEAP* to be more narrowly focused on academic topics, there was little difference between the kinds of research published in the two journals; overwhelmingly, both published research that was qualitative, with a high emphasis on the analysis of written discourse, especially using electronically stored corpora. Although some corpus analyses based on frequency and distribution counts were clearly quantitative, there were noticeably few other kinds of quantitative studies published. Of these, most were quantitative studies based on surveys and questionnaires; experimental and quasi-experimental research was very rare. These results contrast with journals in the broader fields of language learning and applied linguistics which, in spite of growing acceptance of qualitative approaches, have continued to favour quantitative research, and have been slow to place qualitative research on an equal footing (Lazaraton 2000, Gao, Li and Lü 2001, Benson, Chik, Gao, Huang and Wang 2009).

10.3 Research trends in LSP

The findings referred to in the previous section indicate that today, the LSP field, much more than the wider field of TESOL, seems less concerned with areas that traditionally have lent themselves to quantitative research, such as second language acquisition, testing, reading and cognition, and more concerned with discourse and social issues. In discourse analysis, an initial emphasis on quantitative analysis of purely textual features has given way to a focus on understanding the social contexts and processes in which discourses are implicated. It is interesting to note that as a counterpoint to the continuing qualitative agenda, the use of electronically accessible large and small corpora which may be analysed quantitatively has also expanded dramatically. Another emerging trend is a shift to 'mixed' (both qualitative and quantitative) methods.

While there is more analysis of trends in ESP publication than for any other language, it is likely that what is true for English may also hold for other languages for specific purposes, with the exception that translation studies are an important part of the larger world of LSP. Since the early 1980s English for Academic Purposes (EAP) and English for Science and Technology (EST) have been the most common areas of research published in *ESPj* (Master 2005). Studies in English for Professional Purposes

(EOP), especially in the field of business, English for Medical Purposes (EMP) and English for Academic and Legal Purposes (EALP) are increasing. Other areas that need more exposure include Vocational ESL (VESL) and English for Occupational Purposes (EOP).

Recent reviews of research trends in ESP (Belcher, Johns and Paltridge 2011, Paltridge and Starfield 2011) note the recognition by researchers of an increasingly interconnected world, and the prevalence and importance of genre studies and corpus-based research, English as a Lingua Franca (ELF), advanced academic literacies and identity issues. In particular they support an ongoing qualitative agenda with greater attention to ethnographic methods that provide rich contextual information.

The next section describes and discusses a range of approaches and methods that have been reported in published research articles, mostly in the two most widely known journals in the field, *ESPj* and *JEAP*, but including some from other sources. In each category there are references to several examples which the interested reader may wish to follow up. In addition, we provide detailed analyses of several research projects in Chapter 11.

10.4 Research terminology

When it comes to discussing research, it is first of all important to be clear about terminology. Not all researchers are agreed on the meaning of the terms they use. For example, in research literature, the terms *approach* and *method* are sometimes used interchangeably, as are *method* and *methodology*. While each researcher may have well-grounded reasons for using a particular terminology, it can be confusing for beginning researchers. In the journals Gollin-Kies (2014) examined, most researchers tended to identify their approaches and methods in their abstracts. Sometimes, however, closer examination of the articles revealed the labelling to be inconsistent with the processes described. It is beyond the scope of this book to debate the relative merits of particular terms, but for consistency in our analyses we apply labels based on the descriptions in Concept 10.1.

Concept 10.1 Research terminology

Guba and Lincoln

Guba and Lincoln (1994) define a *paradigm* as a 'basic belief system or worldview that guides the investigator, not only in choices of method, but in ontologically and epistemologically fundamental ways' (105). Examples include positivism, constructivism, critical theory and so on (109).

Denzin and Lincoln

> A paradigm encompasses four terms: ethics (axiology), epistemology, ontology, and methodology. *Ethics* asks, 'How will I be as a moral person in the world?' *Epistemology* asks, 'How do I know the world?' 'What is the relationship between the inquirer and the known?' … *Ontology* raises basic questions about the nature of reality and the nature of the human being in the world. *Methodology* focuses on the best means for acquiring knowledge about the world. (2008: 245)

Lillis

Lillis (2008), writing about ethnography, usefully distinguishes among *method*, *methodology* and *deep theorising*. She reserves the term *method* for kinds of data collection (e.g. interview, observation or case study). For her, *methodology* is a broader term that would incorporate all the methods used in a particular study. She introduces *deep theorising* as a higher level of abstraction that brings data and its context together.

Creswell

Creswell (2014) defines *research approaches* as 'plans and the procedures for research that span the steps from broad assumptions to detailed methods of data collection, analysis, and interpretation' (3). He recognises three broad categories: qualitative, quantitative and mixed methods, but stresses that these are not watertight categories; instead they are best viewed as a continuum.

The differences between the terms *methodology and approach* can seem quite slight, and sometimes writers seem to use them interchangeably. For this reason, we prefer to use the term *approach* rather than *methodology*, simply because there is so much confusion around the similar sounding terms. Likewise, some writers use the terms *methodology* and *method* interchangeably (for a discussion, see McGregor and Murnane 2010). We use *methods* to mean specific ways of data collection such as pre- or post-testing, observation, structured or semi-structured interviews, closed or open-response questionnaire items, surveys, verbal reports, diaries and corpus analysis. A research *design* (qualitative, quantitative, or mixed) can incorporate various methods

(Creswell 2014). We would add that an *approach* can also be a mode of inquiry, for example, narrative inquiry, case study, ethnography, action research, phenomenology or grounded theory; all may involve several different methods of data collection and analysis, but the choices that are made will be consistent with the overarching research paradigm and theoretical position.

10.4.1 Research paradigms

Research paradigms can be categorised in many different ways. For example, Denzin and Lincoln (2005a) broadly divide research into qualitative and quantitative, while recognising that these basic terms mean different things to different people. They note that both qualitative and quantitative approaches were initially influenced by positivist and post-positivist traditions. Positivists and post-positivists hold 'naïve' and 'critical realist' positions respectively when it comes to 'reality and its perception' (11). That is, while positivists hold to the belief that the truth is out there, post-positivists accept that reality can only ever be approximated, so it is important to use multiple methods. Post-positivists emphasise 'the discovery and verification of theories … internal and external validity … and … qualitative procedures that lend themselves to structured (sometimes statistical) analysis. Computer-assisted methods of analysis that permit frequency counts, tabulations, and low-level statistical analyses may also be employed' (11). However, unlike purely quantitative researchers, qualitative researchers in the post-positivist tradition generally eschew inferential statistics (11).

Denzin and Lincoln (2005a) note other key features of qualitative approaches such as capturing individual viewpoints, gaining an 'emic' or insider's perspective, and development of a 'thick' or rich description, very often through a case study which cannot be generalised. (Quantitative researchers, on the other hand, want to generalise their findings to other situations or populations.) Again, these characteristics are very common in the LSP research literature (see Chapter 11 for extended examples). At the further end of the continuum, qualitative researchers of the critical theory, constructivist, poststructural and postmodern schools reject a post-positivist position. These traditions prefer to evaluate their research by such criteria as 'verisimilitude, emotionality, personal responsibility, an ethic of caring, political praxis, multivoiced texts, and dialogues with subjects' (12).

Many guides to research tend to gloss over the philosophical debates, assuming that researchers are ready to choose a suitable approach and

Table 10.1 Characteristics of research paradigms

Philosophical aspect	Positivist paradigm	Post-positivist paradigm	Constructivist/ interpretivist paradigm	Critical theorist paradigm
Ontology: the nature of reality and being	naïve realism (the truth is out there)	critical realism (absolute truth may never be uncovered)	relativist (multiple and equally valid realities are possible)	reality and power relations constructed within a socio-historical context
Epistemology: relationship between knower (participant) and would-be knower (researcher)	objectivism/ dualism; researcher, participant and topic remain independent; rigorous procedures; values of researcher irrelevant	modified objectivism/ dualism; researcher recognises he/she has some influence over results	transactionist, subjectivist; reality is jointly constructed; dynamic interaction; 'lived experience' of participants is key	transformative; reality is jointly constructed; empowerment of participants is an important goal
Axiology: role of researcher values	values of researcher must not be taken into account	values of researcher not taken into account	values and lived experience of researcher cannot be separated from research process – must be recognised and bracketed	proactive researcher values egalitarianism, democratic change and transformation; works with participants to promote change
Methodology: processes and procedures	quantitative; experimental procedures; variables controlled or manipulated; aims to uncover and explain relationships; replication and generalisability important	quantitative or qualitative; experimental/quasi-experimental procedures; variables controlled or manipulated; aims to uncover and explain relationships; 'etic' (outsider) perspective	qualitative; naturalistic; seeks 'emic' (insider) perspective; seeks to understand the meaning of social phenomena; studies may be longitudinal, non-replicable, non-generalisable	qualitative; naturalistic; dialogic; cultural/social criticism aims to disrupt/ challenge existing power relations
Rhetoric: language of research report	'objective', precise; keeps distance between researcher and researched	'objective', precise; keeps distance between researcher and researched	subjective, interactive; may include participants' and researcher's 'voices'	subjective, interactive; may include participants' and researchers' 'voices'

Adapted from Ponteretto (2005)

methods that are consistent with one another. However, Ponterotto (2005) argues that all researchers should be certain to 'explicate their operating paradigm in the reporting of studies' (132) so that all the elements of the subsequent research design are coherent. Table 10.1 summarizes Ponteretto's (2005) comparison of four important paradigms identified by Guba and Lincoln (1994).

Note, however, that the research landscape can be divided up in different ways. Creswell (2014) for example, considers research approaches on three levels: worldviews, designs and methods. A research approach is selected according to the research problem(s) identified, and the research questions that arise, the researcher's personal training and experience, and the expectations of the proposed audience. He recognizes four philosophical paradigms or worldviews: postpositivist, constructivist, transformative and pragmatic. Within these world-views it is possible to choose from qualitative, quantitative or mixed method designs. Specific methods are then chosen that will be a good fit with those designs.

10.5 What kinds of research are possible in LSP?

The range of research that is done in LSP generally straddles the fields of applied linguistics and education. Theory is commonly derived from fields such as linguistics, sociology, psychology and anthropology, although some have cast their nets much wider, for example utilising activity theory (Russell 1997), neo-Marxist and feminist theory. Although there is no reason why researchers cannot draw on quantitative or 'mixed' methods, the paradigms and approaches that predominate in LSP today are overwhelmingly naturalistic. By 'naturalistic', we mean that the research is carried out in existing social settings and tends to collect qualitative data, as opposed to experimental settings that may be specifically set up to collect data which is primarily numerical. This is not to dismiss the importance of empirical scientific investigation. Indeed, over the years there have periodically been calls for more (quantitative) empirical studies that would provide hard evidence of the efficacy of ESP (e.g. Johns and Dudley-Evans 1991, Master 2005, James 2014).

10.5.1 Quantitative research

Historically, quantitative research has followed the so-called 'scientific method', which prefers to use controlled settings and is driven by the need to collect numerical data, with findings presented in the form of statistics. In the public mind, quantitative research tends to be seen as the default as it generally represents the traditional 'scientific' positivist (and post-positivist) worldviews. Quote 10.1 summarises the key features of a quantitative approach.

Quote 10.1 Creswell defines what makes research 'quantitative'

Quantitative research is an approach for testing objective theories by examining the relationship among variables. These variables, in turn, can be measured, typically on instruments so that numbered data can be analysed using statistical procedures … like qualitative researchers, those who engage in this form of inquiry have assumptions about testing theories deductively, building in protections against bias, controlling for alternative explanations and being able to generalize and replicate the findings.

Creswell (2014: 4)

Creswell (2014) also notes that a quantitative approach generally follows either an experimental (or quasi-experimental) or a survey design (13). Statistical techniques that are commonly used in applied linguistics include ANOVA, Pearson correlation, t test, regression analysis, chi-square, multiple analysis of variance (MANOVA) and analysis of covariance (ANCOVA), and factor analysis (Lazaraton 2000: 178–179).

Purely quantitative LSP research continues to be rare in the two leading LSP journals (Gollin-Kies 2014). One exception is Farris, Trofimovich, Segalowitz and Gatbonton (2008), who analysed the implications of cognitive factors for training and assessment of air traffic communication in a second language using a simulated pilot navigation task in a highly controlled experiment (see summary and discussion in Chapter 11). Other kinds of quantitative research consist of closed-item surveys and, very rarely, experimental or quasi-experimental studies. Corpus-based discourse analysis that simply measures the frequency and distribution of linguistic or rhetorical features, and which also incorporates some kind of statistical analysis, can also be considered quantitative. The quantitative research reported in the LSP journals tends to use descriptive statistics only, but occasionally inferential statistical methods such as chi-square, ANOVAs, Cronbach Alpha and Mann-Whitney are seen.

10.5.2 Qualitative research

A very wide range of disciplines undertake qualitative research but the epistemological underpinnings of those disciplines can be very different, and this leads to a wide range of understandings of what is meant by the term *qualitative*. In Quotes 10.2 and 10.3 different researchers summarise what they see as the distinguishing characteristics of qualitative research.

Quote 10.2 Merriam defines what makes research 'qualitative'

The key to understanding qualitative research lies in the idea that meaning is socially constructed by individuals in interaction with their world. The world, or reality, is not the fixed, single, agreed upon, or measurable phenomenon that it is assumed to be in positivist, quantitative research. Instead, there are multiple constructions and interpretations of reality that are in flux and that change over time. Qualitative researchers are interested in understanding what those interpretations are at a particular point in time and in a particular context. Learning how individuals experience and interact with their social world, the meaning it has for them, is considered an *interpretive* qualitative approach.

(Merriam 2002: 4)

Quote 10.3 Denzin and Lincoln on qualitative research

Qualitative research is multimethod in focus, involving an interpretive, naturalistic approach to its subject matter. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret phenomena in terms of the meanings people bring to them. Qualitative research involves the studied use and collection of a variety of empirical materials – case study, personal experience, introspective, life story, interview, observational, historical, interactional, and visual texts – that describe routine and problematic moments and meanings in individuals' lives. Accordingly qualitative researchers deploy a wide range of interconnected methods, hoping always to get a better fix on the subject matter at hand.

(Denzin and Lincoln 1994: 2)

Freeman (2009) emphasises that qualitative research is not so much characterised by the kinds of data, or the means of collection or analysis, as by the overall approach. Research questions are not set in stone; they may be re-shaped by emerging understandings within the context in which they are studied. The process is *iterative*; patterns of information emerge gradually from the background. The analytical process is more cyclical than linear; new questions and new complications emerge. What is important is the meaningfulness of the claims or findings to those in the setting that is researched.

The approaches to research in the key LSP journals are overwhelmingly qualitative (Gollin-Kies 2014); however, within that category there are many different sub-types, the most common being the case study, which sometimes includes methods used in ethnography, narrative, action research, grounded theory or phenomenology. Multiple qualitative data collection methods are commonly used, involving combinations of the following: interviews, detailed observations, recording in diaries or journals, meetings with focus groups, collection of documents or other artefacts, and audio and video recording. Spoken, written or visual texts collected in this way are sometimes subjected to discourse analysis.

10.5.2.1 Case studies

In the flagship LSP journals, case study is the second-most popular research approach after discourse analysis (Gollin-Kies 2014). The obvious distinguishing feature of case study is in fact, the case, yet most resource books on research expend a great deal of ink explaining what, exactly, a case is, and is not. Stake (2005: 443) stresses that research involving case study 'is neither new nor essentially qualitative' and that it 'is not a methodological choice, but a choice of what is to be studied'. Others have noted that case studies can be qualitative or quantitative, or even involve mixed methods. Yin (2009: 19) explains that a case '[c]an include, and even be limited to, quantitative evidence'. Nevertheless, our focus in this chapter is primarily on qualitative case studies, since these are more common in LSP.

Merriam (1998: 34) notes that 'the qualitative case study can be defined in terms of the process of actually carrying out the investigation, the unit of analysis (the bounded system, the case), or the end product'. In Quotes 10.4–10.6 we provide the views of different scholars regarding their conceptions of a case study.

Quote 10.4 Van Lier defines a case study

Case study research is primarily a form of qualitative and interpretive research, although quantitative analyses are sometimes used if they are deemed relevant. It relates in various ways to other kinds of research, such as action research, ethnography, and experimental research (van Lier 2005: 195) … Case studies are contextual forms of research … one of the inherent problems is to draw the boundaries around the case. Another variable concerns the degree of intervention in the setting that is designed into the study. At the least intervention end research is more ethnographic, and at the more intervention end research becomes action research.

(van Lier 2005: 197)

Quote 10.5 Creswell defines a case study

A case study is an exploration of a 'bounded system', or a case (or multiple cases) over time through detailed, in-depth data collection involving multiple sources of information rich in context.

(Creswell 1998: 61)

Quote 10.6 Yin defines a case study

A case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident.

(Yin 2009: 18)

Stake (2005: 445) categorises case studies as *intrinsic* (interested in a single individual, site, context or process), *extrinsic* (to 'provide insight into an issue or to redraw a generalization' or to advance understanding of some 'external interest') or *multiple or collective* (involving several instrumental case studies). Duff (2008) describes qualitative case studies in these terms: *boundedness*, *in-depth study*, *multiple perspectives*, *particularity*, *contextualisation* and *interpretation*. In Concept 10.2 different researchers elaborate on these characteristics.

Concept 10.2 Characteristics of qualitative case studies

Boundedness: Michael Hood explains that 'A bounded system is composed of an individual (or institution) and a site, including the contextual features that inform the relationship between the two' (2009: 68). However van Lier (2005) cautions that contextual boundaries are often hard to determine, and that 'if the case study draws the boundary rigidly, it may oversimplify and isolate the case' (196).

In-depth study: 'qualitative case studies are often longitudinal, which means that researchers typically collect a large amount of data over a long period of time' (Hood 2009: 75).

Multiple perspectives: 'Data, methods, perspectives, theories, and even researchers can be triangulated [drawing on several different sources of information on the one problem] in order to produce converging or diverging observations or interpretations' (Duff 2008: 30).

Particularity: 'a single case or non-random sample is selected precisely *because* the researcher wishes to understand the particular in depth, not to find out what is generally true of the many' (Merriam 1998: 208). However, note that Stake (2005) distinguishes between 'intrinsic' and 'instrumental' case studies (as described above), which might be used as secondary data 'to provide insight into an issue or to redraw a generalization' (445).

Contextualisation: Case study 'recognizes that each human case is complex, operating within a constellation of linguistic, sociolinguistic, sociological, and other systems, and the whole may be more than – or different from – the sum of its parts' (Duff 2008: 37). Duff also notes that learning is seen as socially situated (Lave and Wenger 1991), and that the context, whether small or large scale, is not contrived.

Interpretation: Qualitative case studies are not seeking to generalise, rather to gain an in-depth view from different perspectives. 'In qualitative studies, data collection and analysis occur simultaneously and continuously'; it is a recursive and 'cumulative process' with 'categories, themes and patterns' emerging, and being coded (Hood 2009: 78). Consistent coding helps keep track of information on a 'macro' level, and also enables and refines analysis on a 'micro' level (79).

A case in LSP might involve an individual student (e.g. Dressen-Hammouda 2008), a group of teachers (e.g. Wu and Badger 2009) or a company (e.g. Cowling 2007). (Detailed discussions of these cases are presented in Chapter 11.) Sometimes multiple cases are used to provide a bigger picture for comparison or contrast. For example, Leki's (2005) investigation of how English learners in tertiary education in the US experienced interactions with faculty in across-the-curriculum courses involved multiple interviews, cases and critical analysis. Lee (2009) investigated the participation in graduate seminar discussion of a group of six Korean students, three in each of two quite different classes, over a semester. Here, individual cases were nested inside larger cases; each student constituted a case, and each class was also a case.

The strengths of the case study can also be seen as weaknesses, depending on whether one takes an interpretive or a positivist view. On the one hand, case studies offer opportunities to develop an in-depth, 'thick' description and to include multiple perspectives through triangulation of data; exploratory case studies have potential to open up new areas of research and may play a role in theory building; unique or atypical cases can provide evidence against existing theories or claims; longitudinal research, and consideration of many cases over time can provide new insights (Duff 2008: 45–46).

On the other hand, from a positivist perspective, case studies raise

> (1) concerns about generalisability, (2) the use of abnormal cases to construct a model of 'normal' behaviour, (3) issues connected with thick description and triangulation, (4) objectivity vs subjectivity in research, (5) the data-driven rather than theory-driven approach, (6) attrition, (7) constraints on quantitative analysis of small sample (nonparametric) data, and (8) ethics, especially difficulties protecting the anonymity and privacy of case study participants. (Duff 2008: 47–48)

Duff suggests that these criticisms may be countered, in part, by careful consideration of the representativeness of the cases chosen, self-reflexiveness with regard to subjectivity or bias by the researcher, careful attention to modes of reasoning and inference used in analysis and interpretation, and addressing alternative explanations from other researchers.

The range of possibilities for case study in LSP is wide, and a case study approach can include elements of narrative inquiry, ethnography, action research or even mixed methods (van Lier 2005). Table 10.2 summarises the main characteristics of these research approaches.

Table 10.2 Case study and compatible approaches

Characteristics	**Case Study (based on Hood 2009)**	**Narrative Inquiry (based on Murray 2009)**	**Ethnography (based on Heighham and Sakui 2009)**	**Action Research (based on Zuber-Skerritt 1992)**	**Mixed Methods (based on Ivankova and Creswell 2009)**
Goal(s)	identify, describe and analyse a case (or cases) in detail	elicit and document the lived experience of one or more individuals	describe and interpret the common cultural patterns of a group	address practical issues in one's local teaching and learning context	provide a balanced understanding of the object(s) of research
Distinguishing characteristics	longitudinal; comprises a 'bounded' system of individual or entity within a setting; uniqueness or typicality of the case	the 'story' is interpreted in terms of the literature of the field; techniques of thematic analysis used	culture is central; a 'thick' description; balance of 'emic' or insider's view with 'etic' or outsider's view; natural setting	collaborative; systematic; cycles of planning, action, observation and reflection; critical awareness leading to change	findings based on both qualitative and quantitative data
Examples of unit(s) of analysis	an individual learner or teacher; a class, school, education area, country, class activity or language programme	one or more individuals	a group that shares the same cultural or learning environment	an individual or group of learners or teachers; one group or class of participants in a department or learning programme	an individual or group of learners, teachers or language users
Data collection methods	interviews; observations; diaries; verbal reports; discourse analysis; documents and other records; questionnaires; triangulation of data may confirm inferences or provide a multifaceted view	in-depth interviews; documents and other records; self-recording also used	fieldnotes based on lengthy participant observation; interviews; documents; artifacts; archival records; triangulation to validate claims and discover inconsistencies	interviews; observations; recordings of interaction in the learning environment; questionnaires; diaries; verbal reports; documents; textbooks; class materials; learners' texts; discourse analysis (Burns 2005)	combines qualitative (textual) and quantitative (numeric) data in a single study; research design may be *weighted* qualitatively or quantitatively; one type may be *embedded* in the other; or research types may be *sequenced* or carried out simultaneously

Main advantages	cases may *explore* issues for further quantitative study; may *describe* in detail for a contextualised picture; or may *explain* cause-effect relationships	an in-depth view; may resonate with other studies; implications for practice, other research, theory building	may provide in-depth cultural understanding; may resonate with other studies	direct action may effect procedural or organisational change	different types of data can validate each other; both numbers and stories help understand phenomena
Main disadvantages	may be time-consuming; objectivity, neutrality and control of intervening factors not always possible (or desirable)	may be time-consuming; issues of trust and reliability of informants; cannot be generalised	very time-consuming; informants may not be typical; cannot be generalised; subjectivity seen by some as a disadvantage	effects may only be local; cannot be generalised; may be difficult to get published	epistemology and ontology underlying the methods may be in conflict; potential weaknesses of all methods must be addressed

10.5.2.2 Ethnographic approaches

Ethnography began as a research method in anthropology, but ethnographic methods and approaches are now commonplace in a wide variety of fields, including language education. Atkinson and Hammersley (1994) argue that 'across the spectrum of the social sciences, the use and justification of ethnography is marked by diversity rather than consensus ... one has to recognize different theoretical or epistemological positions, each of which may endorse a version of ethnographic work' (257). Thus, it is extremely difficult to arrive at an overarching definition of ethnography. Concept 10.3 outlines characteristic features of an ethnographic approach that are relevant to the field of LSP.

Quote 10.7 Merriam defines ethnography

An ethnographic study is one that focuses on human activity with the goal of describing and interpreting the culture of a group…ethnography has come to refer to both the method (how the researcher conducts the study) and the product (a cultural description of human social life)…*the mere use of data-gathering techniques associated with ethnography does not result in an ethnography unless there is a cultural interpretation of those data.*

(Merriam 2002: 236) (our italics)

Concept 10.3 Characteristics of ethnography

- Description and interpretation of the culture of a group
- Extensive fieldwork (including participant observation and intensive contact with a few informants)
- Immersion in the site (formal and informal interviews, analysis of documents, records, artefacts)
- Regular, detailed, and critically reflective diary or journal entries completed by the researcher
- A 'thick' or detailed description that contributes to a cultural interpretation
- A principled classification scheme derived from the data (giving an 'emic' or insider's perspective)

(Merriam 2002: 237)

It is sometimes difficult to separate ethnographies from case studies, particularly as many investigations are described by researchers as 'ethnographic' case studies. However, 'although not all case studies are ethnographic, or even qualitative, all ethnographic research involves case study' (Brewer 2000: 77). As Duff explains,

> one main difference between case study and ethnography is that, whereas the former focuses on the behavior and attributes of individual learners or other individuals/entities, the latter aims to understand and interpret the behaviors, values, and structures of collectivities or social groups with particular reference to the *cultural* basis for those behaviors and values. (Duff 2008: 35)

She gives as an example of an ethnographic case study, her own research into the implementation of bilingual education in Hungary, where several smaller cases involving different students, teachers and schools were all nested inside the larger case (Duff 2008: 34).

Probably the most widely-cited ethnography in education is Brice-Heath's (1983) longitudinal study of the processes of child literacy development in two communities of North and South Carolina in the USA. Anyone reading her in-depth account would have to conclude that most LSP teachers are not in a position to carry out a full-blown ethnographic study. In fact, there are few true ethnographies in LSP. Nevertheless, many techniques popularised by ethnography are well-suited to other forms of qualitative or naturalistic research. Examples include participant observation, individual or group interviews, audio or video-recording, document collection, and detailed field notes. Restraint should be used in referring to research which merely uses a mix of some or all of these methods as 'ethnography'. Watson-Gegeo (1988) cautions that any study labelled 'ethnographic' should be 'conducted with the same standards of systematicity and rigor expected of quality ethnographic research' (589). She warns against what Rist (1980) memorably labelled 'blitzkrieg' qualitative research: 'The researcher dive-bombs into a setting, makes a few fixed-category or entirely impressionistic observations then takes off again to write up the results' (Watson-Gegeo 1988: 576).

While full-blown ethnographies are not generally found, ethnographic principles and techniques are used very frequently in research studies in LSP. For example, in a 'microethnography' the researcher takes 'a more focused approach (do less than a comprehensive ethnography) to study a particular aspect of everyday life and cultural practices of a social group' (Green and Bloome 1997: 183). For an example of a microethnography see Seloni (2012). Other examples of research using ethnographic methods include Blue and Harun (2002), a rare example of a study based on English for workplace (EOP/EVP) and Louhiala-Salminen's (2002) 'interpretive ethnographic' case study that shadowed a business manager in a multinational corporation for one day. In another investigation using ethnographic methods, Cheng and Mok (2008) spent six days collecting data on professional communication among professionals in a civil engineering consultancy in Hong Kong. For detailed analyses of research using ethnographic approaches see Molle and Prior (2008) and James (2006) in Chapter 11.

10.5.2.3 Action research

Action research as a form of inquiry originated in social psychology (Lewin 1946), and has since been taken up in a number of fields including language teaching, and general education. The underlying principle in action research is that it is inquiry generated and undertaken by practitioners themselves, rather than outside 'experts'. Action research is motivated by a desire to understand issues or problems in one's own working environment with a view to improving one's own practice so that it is more closely aligned with particular social and educational values. Thus action research is characterised by a self-critical attitude, a desire to generate knowledge, and to make meaningful real-world social change (McNiff and Whitehead 2006). Action research is often the most accessible and the most practical place for novice researchers to start because the practising teacher has the opportunity to see day-to-day issues or problems that need researching and can often get ready access to researchable data. Action research can be rewarding, both in terms of professional advancement and on a personal level, and it does not have to be large scale. Even where the practitioner is not involved in preparing for a higher degree, or seeking promotion, much useful classroom-based research can be done.

Zuber-Skerritt (1992) has described action research as practical, participative, emancipating and critical. Action research is practical in that it is not only of theoretical importance to advancement of knowledge in the field, but because it also leads to real-world improvements. It is participative because it can involve the collaboration of co-workers rather than outside experts. It is empowering because it is anti-hierarchical; the people involved are equal participants. It is critical because it involves a self-critical community of participants, who act to make change within local socio-political constraints (12–14). Thus action research can be seen as closely aligned with the broader-scale critical approaches described later in this chapter. Concept 10.4 outlines the main characteristics of participatory action research.

Concept 10.4 Participatory action research

Action research is generally described as a cycle characterized by phases of observation, reflection, action, evaluation and modification that can be repeated any number of times. 'The process is ongoing because as soon as we reach a provisional point where we feel things are satisfactory, that point itself raises new questions and it is time to begin again' (McNiff & Whitehead 2006: 9). Kemmis and McTaggart (e.g. 1986; 2005) originally developed four basic iterative steps or 'moments' of planning, action, observation and reflection. For a researcher this means:

- Plan: Critically examine an area of your own practice, identify a question or issue that concerns you, and develop a plan to make improvements.
- Act: In a systematic, disciplined way, attempt to make changes based on your plan.
- Observe: Carefully observe and document what happens, and collect observational and other data that show whether, and how, changes are occurring.
- Reflect: Analyse the data, and critically evaluate progress towards your goal. Reflect on processes, problems and issues, as well as any constraints or personal biases you recognize. Develop new perspectives and understandings on the situation.
- Repeat: Modify plans and repeat the cycle as necessary to achieve the desired change.

(See also Kemmis, McTaggart and Nixon (2014) on critical aspects of action research.)

We would add another important dimension: dissemination. Disseminating the results of the action research by presentation at professional development activities with colleagues, or by publication means that the results of this research can inform and benefit others.

In the LSP journals Gollin-Kies (2014) reviewed, Some researchers utilized a primarily action research model without explicitly labelling it as such. See, for example, Holme and Chalauisaeng's (2006) comprehensive and self-reflective account of critical engagement by Thai pharmacology students in analysing their own EAP reading needs. Only one published article (Rose, Rose, Farrington and Page 2008) described its methodology explicitly as 'action research'. This case study of scaffolding academic literacy with Australian indigenous health sciences students lays claim to be action research in a critical sense because 'its goals were to introduce pedagogic change, at the same time as interpreting and evaluating that change, and the researchers were agents introducing the changes' (167). However, this report of action research focused on the smooth and apparently unproblematic implementation of a pedagogical strategy rather than the messier stages of planning, critical reflection and further iterations based on what the teachers learnt. Wharton (2007) makes the point that one of the issues for teachers and teachers-in-training who do action research is that reporting modes that capture its cyclical, self-reflective and recursive nature in all its complexity are not clearly established. She identifies three variations on the problem-solution discourse pattern in published action research reports, and suggests that teacher-educators need to address alternative ways of writing up action research projects with their students.

Although action research is not yet highly visible in publications in the LSP field, we have included it here for three reasons. Firstly, action research is a relatively easy entry point to research for teachers as it is based on the teacher's own context; for this reason it is often included in teacher education programmes. The research can be, though is not necessarily, small-scale, restricted to a single class, or even a single student, and can be conducted over a short time frame such as a term or semester. Secondly, although the initial research may only have a local impact, perhaps in terms of improvement in some aspect of the individual's teaching, and may initially be simply reported at an in-house seminar, there is no reason why possibly modest beginnings cannot lead to a more extensive project that could generate wider systemic changes. Thirdly, publication in a peer-reviewed journal could also be an outcome. Table 10.3 outlines methods and techniques used in classroom action research (Burns and Hood 1995).

10.5.2.4 Other qualitative approaches

There are many other qualitative approaches that could be used in LSP research. Purely narrative or feminist approaches are extremely rare in published articles in LSP, however elements of narrative are frequently found in case studies where the researcher uses vignettes to bookend the reporting of the case, or inserts sections of narrative to illustrate particular issues. Narrative is also often a feature of feminist or critical approaches. One example in LSP is Grey (2009), who uses extensive stretches of narrative in her report on students who were attempting to understand diversity in their university community via a critical ethnographic approach.

Table 10.3 Methods and techniques used in classroom action research

Method	**Description**
Journals or Diaries	Regular dated accounts of teaching/learning plans, activities and classroom occurrences, including personal philosophies, feelings, reactions, reflections, observations, explanations.
Teaching Logs	More objective notes on teaching events, their objectives, participants, resources used, procedures, processes, outcomes (anticipated or unanticipated).
Document collection	Sets of documents relevant to the research context, e.g. course overviews, lesson plans, students' writing, classroom materials/texts, assessment tasks/texts, student profiles, student records.
Observation	Closely watching and noting classroom events, happenings or interactions, either as a participant in the classroom (participant observation) or as an observer of another teacher's classroom (non-participant observation). Observation can be combined with field notes, recordings, logs or journals.
Field notes	Descriptions or accounts of observed events, including non-verbal information, physical settings, group structures, interactions between participants. Notes can be time-based (e.g. every five minutes) or unstructured according to the researcher's purpose.
Recording	Audio or video recordings, providing objective records of what occurred, which can be re-examined. Photographs or slides can also be included.
Transcription	Written representations of verbal recordings, using conventions for identifying speakers and indicating pauses, hesitation, overlaps or any necessary non-verbal information.
Surveys or questionnaires	Sets of written questions focusing on a particular topic or area, seeking responses to closed or ranked questions/ options/and or open-ended personal opinions, judgments or beliefs. Used in non-face-to-face situations.
Interviews or discussions	Face-to-face verbal sessions conducted by researcher as unplanned, planned or structured interactions. The researcher can use previously planned questions, structured interview schedules or allow the interview to unfold spontaneously.
Stimulated recall	Use of previously recorded or transcribed data to prompt responses from participants on actions, feelings, thoughts, attitudes, beliefs, following events or activities being researched.

Source: Burns and Hood (1995: 8).

10.6 Discourse analysis

One of the largest categories of research in LSP involves the analysis of texts. In this section we will focus on discourse analysis in some of the forms commonly used in LSP, and also on the analysis of corpora of spoken and written texts, which are now readily available to researchers in digital format. At the most basic level, discourse can be defined as language in use, but many definitions incorporate significantly more than this (see Concept 10.5). Discourse is implicated in expressing people's points of view and value systems, many of which are 'prestructured' in terms of what is 'normal' or 'appropriate' in particular social or institutional settings. Discourse practices can therefore be seen as the deployment of, and indeed sometimes as acts of resistance to, dominant ideologies. The focus of discourse analysis will usually be the study of particular texts (e.g. conversations, interviews, speeches etc., or various written documents) although discourses are sometimes held to be abstract value systems which will never surface directly as texts (Jaworski and Coupland 1999: 6–7).

Concept 10.5 What is 'discourse'?

The term 'discourse' at its simplest refers to any instance of 'language above the sentence or above the clause' (Stubbs 1983: 1).

The term can also include non-verbal communication such as gesture, symbolic or pictorial and some scholars (e.g. Kress and van Leeuwen 1996, Kress, Ogborn, Jewitt and Tsatsarelis 2001) believe the scope of discourse analysis ought to be extended even further to encompass a wider definition of discourse itself that underscores the social nature of language in use, and the power relations inherent in all modes of human communication.

Discourse analysis is sometimes described narrowly as a mode of data collection in the service of some other research approach, for example in case study, ethnographic or action research, where techniques such as conversation analysis (CA), speech act analysis, cohesion analysis, contextual analysis or interaction analysis are employed (Lazaraton 2009). Under the broader umbrella of discourse analysis, we will begin our coverage with genre analysis. We will also briefly introduce Systemic Functional Analysis (e.g. Halliday and Martin 1993, Ravelli and Ellis 2004), and critical approaches, including critical pedagogy and critical discourse analysis (CDA) (e.g. Fairclough and Wodak 1997).

10.6.1 Genre analysis

Since the mid-1980s, the notion of genre has taken an increasingly important place in LSP, and today genre analysis is one of the most commonly practised modes of discourse analysis in the field. As a theoretical construct, genre has deep and diverse roots and several branches. Hyon (1996) identified three distinct approaches to genre analysis: ESP, New Rhetoric and the Sydney School. While initially this was a very useful exercise, in the decades since then, there has been considerable evolution in thinking, and the trend among practitioners is now towards a hybrid approach that draws on two or more of the original 'traditions' (Molle and Prior 2008, Flowerdew 2011).

The ESP approach to genre analysis is undoubtedly the most popular among LSP researchers. Based primarily on extensive work on academic genres by John Swales, the focus is on how the communicative purposes of members of a discourse community are realised through identifiable stages and moves within texts. Swales' original CARS (Create a Research Space) model of the moves and steps in the introductory section of the Research Article (RA) genre (1981a), and his revised CARS model (1990: 140–141) have been highly influential. Embraced by scores of graduate students and teachers worldwide, the CARS model has been tested for robustness and variation across many different disciplines. The approach has since been extended to other aspects of the RA such as the abstract (e.g. Lorés 2004), and discussion and results sections (e.g. Basturkmen 2009), as well as related academic genres such as the thesis or dissertation. Other academic genres that have been investigated following the ESP model include the conference poster session (Rowley-Jolivet 2002), the 'occluded' or hidden genres of the tenure committee (Hyon 2008) and the blind referee report (Fortanet 2008). The ESP line of genre research continues to expand in different languages, for example, in Hungarian (Arvay and Tanko 2004), Brazilian Portuguese (Hirano 2009), and Arabic (Fakhri 2004).

Another very influential contributor to genre studies using an ESP approach is Vijay Bhatia (1993), whose analyses have been based primarily around legal and business genres. Bhatia has extensively researched the dynamic complexity and hybridity of professional and academic genres, noting not only that related genres within a professional field can colonise one another and overlap, but also that 'a particular genre with a deceptively similar surface-level appearance across two very different disciplines behaves entirely differently in the context of the two disciplinary cultures, i.e. cases in business and law' (2002: 34).

10.6.1.1 Systemic Functional approaches to genre analysis

What Hyon described as the 'Sydney School' is an approach to genre based on Systemic Functional Linguistics (Halliday 1985; 1994, Martin 1992). SFL approaches to genre are well-represented in the LSP literature, especially in Australia, New Zealand and China, while in North America it is lesser-known than the ESP and New Rhetoric approaches. There has been some criticism in North America that the 'Sydney School' is too reductionist in its depiction of genres. While early work was based on 'elemental' genres such as the recounts and narratives typically found in primary and secondary school contexts, the more recent work in academic and workplace genres is much more nuanced. SFL is used as the basis for analysis of 'macrogenres' such as essays and reports (Martin 1990). Ravelli and Ellis' edited volume, *Analysing Academic Writing* (2004), contains a variety of detailed genre-based studies in EAP using SFL. Other published work focuses on aspects such as technicality and abstraction (e.g. Woodward-Kron 2008), Theme (e.g. Gosden 1992, Martínez 2003, Forey 2004) and appraisal (e.g. Wu 2007). A strength of the SFL approach to genre analysis is that it is applicable not only to the analysis of written texts, but also to spoken, visual and multimodal discourse. See, for example, the work of Eggins and Slade (2012) on conversation during medical shift handovers, the contributions of Kress and van Leeuwen (1996) on visual design, and Kress et al. (2001) on multimodality in the science classroom.

10.6.1.2 The New Rhetoric approach

New Rhetoric draws upon the classical rhetorical tradition which underpins mainstream English composition in the USA, as well as notions of hybridity and intertextuality found in the work of Bakhtin (1986). Instead of closely analysing the linguistic structure and staging of texts, new rhetoricians are more interested in larger issues such as the social purpose of genres and the actions used by participants to achieve those purposes. Important early proponents of this approach are Miller (1984), Bazerman (1988) and Freedman and Medway (1994). The New Rhetoric approach has been seen as difficult to apply in LSP, as it offers relatively little in the way of explicit support for non-native speakers to develop the linguistic structures and routines they need for success in academic, workplace or professional genres. One important contribution of the New Rhetoric approach is a reminder that genres are ever-changing, fluid and dynamic, and that one cannot become a credible member of a discourse community purely by following form; one has to engage as well.

10.6.1.3 Merging and extending genre-based approaches

A growing trend among genre-analysts is to draw on the strengths of one or more of these so-called 'schools'. Molle and Prior (2008) provide a critical evaluation of the strengths and weaknesses of the three approaches to genre when applied to needs analysis in an academic setting. In their own work they found that academic genres both within and across disciplines were not only part of larger systems of related genres, but also multimodal, internally ambiguous, complex and dynamic. They incorporated some insights from ESP, but more from New Rhetoric and activity theory (Russell 1997) to account for these complexities. Another example of combining genre approaches is Ann Johns' 'socioliterate approach' (2002), which outlines pedagogical strategies that draw on all three conceptions of genre. Her approach aims to 'destabilize' and 'enrich' freshman university students' school-based ideas about pedagogical genres such as the 'research paper' by having them research the genres of their own academic community. More recently, John Flowerdew (2011) has succinctly summarised the arguments for a combining approach, and provided examples of it that can be achieved. He suggests that the ESP and 'Sydney School' have most in common, as they are both linguistically based, and contrasts them with the New Rhetoric approach. In the same chapter he describes how he and Alina Wan combined a 'linguistic' and a New Rhetoric approach in researching the genres of auditing and tax accounting in an international firm in Hong Kong. A further development in genre analysis is textographies: the combining of genre studies with ethnographic approaches (Swales 1998, Paltridge 2004).

10.6.2 Critical approaches to discourse analysis

The idea of a 'critical' approach to research may seem redundant. In one sense or another, all research paradigms claim to be critical. For example, in a positivist mode of research, a critical attitude could equate with objectivity. However in this section, by 'critical' we mean a particular disposition towards addressing socio-political and cultural inequalities relating to issues of power, identity and access, and in particular to critiquing the status quo with a view to achieving social change. Two approaches that are of particular interest in LSP are critical pedagogical research and critical discourse analysis (CDA). A critical approach does not imply any particular method of research. In both these critical approaches, discourse analysis (using some combination of Systemic Functional Linguistics, conversation analysis or pragmatics) is commonly used, often in conjunction with critical ethnographic techniques. The overall concern is with the extent to which research can address larger moral and political questions.

The fact that there are still relatively few research articles in LSP that explicitly apply a critical approach has been commented upon by several writers. Pennycook (1994) suggests that opening up issues of 'education and race, ethnicity, gender, sexual orientation, minority languages, literacy, and cultural difference' unsettles mainstream (positivistic) approaches to knowledge (692). He continues that 'a critique of objectivity is not an argument that everything is subjective but rather that this dichotomy is untenable', and that 'all knowledge production is situated in a particular social, cultural, and political context' (693). In addition, Canagarajah (2005) notes that 'research reporting can itself impose values uncongenial to critical research … the dominant IMRD (Introduction/Method/Results/Discussion) structure is more amenable for reporting descriptive studies informed by Enlightenment values, enabling a detached, inductive, controlled, and authorially imposed version of the findings' (945). Belcher, reviewing research trends in teaching English for Specific Purposes, concludes that

> we appear to be only on the cusp of understanding how to help people accomplish change through language. … Researchers could help ESP achieve more of a community-oriented outlook by assisting in the development of improved means of promoting dialogue, consensus building, and values clarification among diverse, unequally empowered stakeholders. (Belcher 2004: 178)

Examples of critical discourse analysis include Koutsantoni (2006), who found differences in the density and functions of hedging expressions in engineering research articles and theses depending on the status of the author as professional or student; and Fortanet's (2008) analysis of evaluative language in a corpus of peer reviews in the 'occluded' or hidden genre (Swales 1996) of referee reports. She compared 50 reviews of articles submitted by Spanish non-native speakers of English to ten different international English language journals in the fields of business organisation and applied linguistics.

Critical pedagogical research, described in Quote 10.7, has much in common with critical discourse analysis, in particular a strong political flavour. Some examples of a critical pedagogical approach published in LSP journals include Grey (2009), who takes a challenging feminist poststructuralist ethnographic approach in examining the socialisation of

Quote 10.8 Pennycook defines critical pedagogical research

Critical pedagogical research could be defined, first of all, by its focus on questions of social and cultural inequality in education. The aim of this research, however, is not merely descriptive; rather, it aims also to be transformative. Thus, a second defining feature of critical pedagogical research would be that it aims to change those conditions of inequality that it describes: it requires research to be answerable to a broader politics of social transformation. Finally, a great deal of critical pedagogy has also focused on the broad question of knowledge production. Although there is still a positivistic tradition of neo-Marxist-inspired research into, for example, how schools reproduce social class, a larger body of research has questioned the whole positivistic framework of knowledge. Typically, this work has sought to explore alternative approaches to research such as memory work, narrative accounts, genealogy, participatory ethnography, and so on. The third defining feature, therefore, would be a critique of positivistic knowledge, an attempt to pursue different possibilities for research and a self-reflexivity about the types of knowledge produced by academic inquiry.

(Pennycook 1994: 691).

international students to the university; Benesch (1999), who studied how power relations between students and instructors are constructed and resisted in a paired EAP/psychology course; and Chun (2009), who used multimodal discourse analysis to critically analyse neoliberal influences in visual images and verbal text in online and other curriculum material used in Intensive English Programmes or English for Academic Purposes classes. Chun suggests that a US university functions as 'an institutionalized discursive space of neoliberalism' (111), and that students and teachers should critically engage with these discourses as a way of developing self-reflexivity and contesting neoliberalist ideologies.

10.6.2.1 Critical discourse analysis in the workplace

Roberts (2005) notes that research into the language of the workplace (EOP, EVP, EPP etc.) has tended to follow second language socialisation theories, and methodology drawn from a variety of sources, including

Systemic Functional Linguistics, conversation analysis, pragmatics and interactional linguistics, as well as ethnographic techniques (118–119). One such approach is practitioner action research, where the teacher is

> an active ethnographer of the workplace, one whose professional investigations and tasks are always to be set in the context of an appreciation of the structures and relations of power in the workplace in question, in particular in respect of its channels, modes and practices of decision making (Candlin 1999: xiv).

There are still very few examples in the key LSP journals of research in non-professional workplace settings. This echoes Roberts' (2005) finding that not only have there been very few books on 'the practice of teaching language and literacy in the [non-professional] workplace, and its social implications', but also there have been 'surprisingly few articles in well-known refereed journals' (119). She suggests that this may be because manufacturing and service industries are difficult places to conduct research; debilitating factors include restrictions imposed by management, industrial noise, the short duration of workplace education courses and the fact that any achievements participants make are so narrowly tied to specific (non-linguistic) workplace objectives.

Thomas Orr (2002) in *English for Specific Purposes* provides some diverse examples of research-based workplace ESP programmes ranging from English for brewers (Orsi and Orsi 2002) to an ESP programme for union members in 25 factories (Garcia 2002). Koester (2006) is an accessible book-length resource for practical research related to workplace discourse, and which takes an SFL approach.

10.6.3 Corpus-based discourse analysis

Gollin-Kies' (2014) survey of published LSP studies found increasing reliance on corpora in discourse analysis. In most cases, the writers specified that the corpus used was electronic. Some were analysed completely electronically, leading to sets of quantified data. Others also used hand-tagging of specific items to assist in analyses that were both quantitative and to various degrees, qualitative.

While a corpus is just a dataset that can do nothing on its own, it can be manipulated electronically to reveal the frequency of particular linguistic features, including single base words (lemmas), and their associated parts of speech, phrases and collocations (the way particular words typically co-occur with other words). Flowerdew (2012) provides comprehensive coverage of corpus-based work in language education, so we will limit our focus here to a few areas that are particularly relevant to LSP.

Corpora can provide statistical information about how the language works. This information may be counter-intuitive, even to native speakers, and it may go against the prescriptions of school grammar books which until recently have been developed from native speaker intuitions. This kind of information is invaluable in developing syllabi and materials for specific purposes. For example, drawing on the findings of different corpus studies, Eli Hinkel's book, *Teaching Academic ESL Writing: Practical techniques in vocabulary and grammar*, was able to make authoritative statements on the relative infrequency in academic writing of particular grammatical features such as existential 'there', modals of obligation like 'must', and 'that' noun clauses in subject position (Hinkel 2004: 52–53). This kind of information is invaluable to syllabus designers, as it provides verifiable evidence that it is not necessary to teach every feature of the target language in particular courses.

Powerful concordancing tools are becoming more readily available, and it is becoming easier for relative novices, including students, to use them. For example, Swales (2004) described 'an experimental course in which international senior doctoral students from the health and social sciences were able, with relatively little training and guidance, to construct paired corpora of their own research writings and of published articles from their own specialties' (1). Several of the students found this exercise so useful that they purchased *Wordsmith Tools* (Scott 1996–2004) so that they could continue to research on their own after the course ended.

There are increasing numbers of very large corpora available; some of which are able to be accessed by researchers for free. The optimum size of a corpus depends on the kinds of texts it includes, and the uses to which it will be put. Extremely large corpora, such as the Bank of English (http://www.titania.bham.ac.uk/docs/svenguide.html), which had by 2010, reached over 450,000,000 words (with a sub-corpus of 56 million words for teaching), are useful when researchers want to measure the frequency of linguistic features in the language overall (although it must be remembered that a corpus is still only a sample, even if it is large, and it will still reflect the genres and contexts of the texts included).

The types of corpus, and the uses to which they are put, are continually expanding. In Concept 10.6 we focus on those that are particularly useful in LSP research and pedagogy.

Concept 10.6 Corpus types used in LSP research

A *specialised corpus* consists of texts of a particular type. For example MICASE (The Michigan Corpus of Academic Spoken English) at http://quod.lib.umich.edu/m/micase/ is a moderately-sized corpus, of almost two million words, of spoken-word texts collected from a university setting. It includes samples of formal and informal speech by students, faculty and administrators in different genres in a range of academic disciplines. BAWE (the British Academic Written English corpus) at http://ota.ahds.ac.uk/headers/2539.xml contains 6.5 million words contains 2,761 samples of assessed proficient student academic assignments across 35 disciplines and four levels, including undergraduate and graduate work, and categorised by genre.

A *general corpus* consists of the largest possible variety of texts, either spoken or written, or both, usually from as many different genres as possible. An example is the British National Corpus (BNC). These corpora are used for compiling reference material such as dictionaries and grammars, and for baseline comparison with specialised corpora.

Comparable corpora may contain comparable varieties, and numbers of texts or words in two or more languages, or even varieties within the same language. For example, the International Corpus of English (ICE) is an ongoing project containing one million words each of different varieties of English from 1989 to the present. Comparison of corpora from former British colonies such as India, Singapore and Hong Kong or East Africa would be useful, for example, in developing teaching syllabi and materials for international students. (See the special issue on the ICE project in *World Englishes,* 23(2), May 2004.)

Parallel corpora are 'two (or more) corpora in different languages that have been translated from one language to the other' (Hunston 2002: 15). These are useful both to translators, and to learners looking for equivalent expressions in the target language.

A *learner corpus* is a 'collection of texts – essays, for example – produced by learners of a language' (Hunston 2002: 15). It can be used to compare learner language with native speaker language, or to compare among learners. Examples include the International Corpus of Learner English (ICLE), which contains several different corpora, 20,000 words each by learners of particular European languages. There is a comparable Corpus of Native English Essays (LOCNESS) (16).

A *pedagogic corpus* consists of all the language learning materials a student has been exposed to in a pedagogic setting, including textbooks, readers and audio material. This is useful in raising student awareness of what they have been exposed to, and could be compared to a corpus of naturally occurring language in the target setting.

Note: Categories adapted from Hunston (2002).

Corpora enable applied linguists to discover word frequencies and collocations as well as features such as semantic prosody, pragmatic meaning and phraseology, based on naturally occurring data, rather than relying on native speaker intuition. On the other hand, weaknesses of corpora that have been noted (e.g. by Widdowson 2000) include the fact that a corpus can only provide data on frequency and attested examples of use, and cannot provide information on whether an utterance is possible or contextually appropriate in a language, or explain what it may mean. Intuition is still needed, therefore, to make those deductions and can be very important in interpreting the results of corpus findings (Hunston 2002). Ultimately, a corpus is at best a representative sample of a language or a particular variety of language, and thus cannot be used to generalise. Hunston (2002) reminds us that corpora are decontextualised, and thus cannot (at least, as yet) be linked with visual, spatial or paralinguistic data. However, corpora such as MICASE, which is accompanied by contextual information such as the genre, discipline and academic status of the speakers, and BASE (Nesi 2000), which consists of video-recordings of academic lectures, to some extent address these issues.

10.6.3.1 Application of corpora in LSP

As noted earlier, corpora are increasingly being used in LSP research, either quantitatively, or in conjunction with other methods that supply the link with context. Lynne Flowerdew (2005) has addressed some of the criticisms of corpus studies, in particular the lack of socio-cultural context, and the focus on 'atomized, bottom-up' approaches, in her critical analysis of several research studies that integrated corpus-based methodologies and genre. One of the main disadvantages of these approaches was that the 'tagging' of specific discourse features such as move structures needed to be done manually. Hand-tagging requires close scrutiny of a text, often relies on contextual features, and is very time-consuming, making it unsuitable for large corpora, or even for corpora consisting of mixed genres (327). She also found that combining corpus analysis with an ethnographic approach enabled more insightful analyses. For this approach, small specialised corpora, where the researcher is both compiler and analyst, and familiar with the context, work best.

There are increasing numbers of corpus-based analyses of academic language, for example, Simpson and Mendis' (2003) useful work on idioms in academic speech, and Hyland's body of work on written academic discourse, for example, on self-citation and the use of personal pronouns in a corpus of 240 research articles in eight disciplines (Hyland 2001).

10.7 Mixed method research

The epistemological barriers that kept qualitative and quantitative researchers confined to separate camps now seem to be weakening. Duff (2008) reports on a growing acceptance of qualitative research in the social sciences and education, and at the same time, scientific researchers seem to be more accepting of the uncertainty, dynamism and complexity within natural as well as social systems (Ellis and Larsen-Freeman 2006). Although researchers have been mixing methods informally for some years, and have variously used the terms '*integrating, synthesis, quantitative and qualitative methods, multimethod*, and *mixed methodology*,' the term *mixed methods research* (MMR) is now generally used to describe this specific approach (Creswell 2014: 217). See Quote 10.8.

Quote 10.9 Creswell defines 'mixed method' research

- It involves the collection of both qualitative (open-ended) and quantitative (closed-ended) data in response to research questions or hypotheses.
- It includes the analysis of both forms of data.
- The procedures for both qualitative and quantitative data collection and analysis need to be conducted rigorously (e.g. adequate sampling, sources of information, data analysis steps).
- The two forms of data are integrated in the design analysis through merging the data, connecting the data or embedding the data.

- These procedures are incorporated into a distinct mixed methods design that also includes the timing of the data collection (concurrent or sequential) as well as the emphasis (equal or unequal) for each database.
- These procedures can also be informed by a philosophical worldview or a theory.

(Creswell 2014: 217)

Various qualitative researchers have expressed reservations about using a mixed methods approach. Denzin and Lincoln (2005a: 9–10) have summarised their concerns: they see a fundamental and potentially dangerous incompatibility between qualitative and mixed methods, as mixed methods by default leans towards the positivist experimental model; qualitative research tends to take a lesser role in the overall approach, and it may be difficult if not impossible to maintain a critical, interpretive, democratic and dialogical stance within a mixed methods approach. On the other hand, others believe that the development of more rigorous theorising, modes of inquiry and reporting within naturalistic research methodologies will lead to more constructive dialogue between the two paradigms, and should encourage even more research based on mixed methods in language learning and teaching. For an in-depth analysis of the opportunities, issues and challenges of MMR see Riazi and Candlin (2014). There are, as yet, few examples of explicitly mixed method research in LSP, but see Gimenez (2008) and Mazdayasna and Tahririan (2008) on undergraduate nursing education and Dueñas (2007) on self-mention in business management research articles.

10.8 Concluding comments

In this chapter we have provided an overview of the current trends and practices in research in LSP based on work that has been published recently in leading LSP journals. We have also outlined the relevant terms, paradigms, approaches and methods that underlie approaches that are commonly used by LSP researchers.

Discussion points

1. What are the most significant barriers to initiating research projects of your own? How would you address these barriers?

2. How important do you think it is for all research projects to be designed with publication in mind? What factors would you take into account in designing a project that would lead to a manuscript for publication?
3. Examine the abstracts of three different published research articles. How is the methodology described? How does this description fit the methodology outlined in the paper itself? What modifications to the abstract, if any, would you suggest that would make the description of the methodology more accurate?
4. Imagine you have developed a new method for teaching students to read technical manuals in a particular field, and that you want to find out how well it works. (You may find it helpful to review some of the paired research examples in Chapter 11 for some ideas.) Outline three possible research designs: qualitative, quantitative and mixed. Discuss the relative merits of these three designs for achieving a specific research goal. How might your research aims be affected by the design you chose?
5. Think of a different problem in LSP that you would like to research, and repeat this exercise.

11
Case Studies in LSP Research

This chapter will:

- Provide case studies of LSP research that have been published in key journals
- Showcase particular approaches and methods that novice or developing/emerging researchers could apply

11.1 Introduction

In choosing the cases that follow we have been mindful of the fact that LSP is a global enterprise, so we have selected studies that come from a variety of geographical areas and from second language as well as foreign language teaching situations. We have also chosen to highlight research that has potential to be replicated, to be applied to different subjects or cohorts, or to be enhanced or extended in some way, or research that has pedagogical applications. Although some of the projects originated in masters or doctoral coursework, others have emerged from stakeholders' concerns about issues in the field, and some from the curiosity of classroom teachers. We have also chosen to present pairs of case studies falling within topic areas covered in Part II. This pairing, we believe, serves to highlight the variety and flexibility common to LSP research.

The language focus of the majority of the projects is English, simply because there is more LSP research published in English than other languages, and because this book is written and published in English. Furthermore, as noted by Swales (1997) and other commentators, it is (unfortunately, in our view) the case that bilingual researchers who want international recognition of their work need to publish in English. Several projects highlighted in this chapter were carried out by bilingual researchers who drew on their own expertise in a language other than English when working in an EFL environment, and in some cases (e.g. Dressen-Hammouda 2008) carried out discourse analysis on texts in two languages, but published in English. In other cases (e.g. Mazdayasna and Tahririan 2008) survey information was collected in more than one language and translated. We believe it is important to recognise the benefits of bilingualism in LSP research, not only for translation, but also for the intercultural insights that are available. As globalisation continues, such research is bound to become even more valuable in the field.

While it is impossible to represent all possible types of research and all possible topics, the studies set out in Table 11.1 represent a range of qualitative, quantitative and mixed methods, as well as important topics in LSP.

We have provided examples of several approaches discussed in Chapter 10. However, as previously noted, the reader should be aware that because researchers in LSP seek various kinds of data and use various methods according to their purposes and resources, different approaches are often incorporated in a single study. For example, it is not unusual to find ethnographic methods of data collection combined with discourse analysis or a mix of quantitative and qualitative methods. In keeping with the findings from an analysis of the key journals, *ESPj* and *JEAP* (Gollin-Kies 2014), most of the examples provided are naturalistic in approach, but we have also included some quantitative and mixed method studies. In reading these examples, it may be noted that the authors did not always provide explicit research questions; in naturalistic research, questions are often implied, or allowed to emerge from the data rather than being posed at the outset.

In line with our purpose, the focus in this chapter is mainly on research approaches. However, it is impossible to provide all the details without reproducing each original study in its entirety. Therefore, what we have aimed to do is provide an overview. It is hoped that interested readers will access some of the original research articles to study them in more depth. With this in mind, we have deliberately restricted the examples to published studies from well-known journals that should be readily accessible through institutional databases.

Table 11.1 Overview of research examples serving as case studies

Research topic	Context	Approach	Design features
Needs analysis			
Planning a syllabus for a series of intensive workplace courses at a leading Japanese company (Cowling 2007)	Japan business workplace training	Small-scale qualitative multi-method	interviews; focus groups; triangulation
Developing a profile of the ESP needs of Iranian students (Mazdayasna and Tahririan 2008)	Iran EAP nursing and midwifery in seven universities	large scale mixed methods qualitative/ quantitative	interview; survey; triangulation; statistics
Student learning and assessment			
Transfer of learning from a university content-based EAP course (James 2006)	Canada CBI/EAP: engineering	qualitative multi-method	interview; journal; observation; text samples
Scaffolding academic literacy with indigenous health sciences students: An evaluative study (Rose et al. 2008)	Australia Indigenous EAP: health sciences	longitudinal action research quasi-experimental	three groups pre- and post analysis of writing; qualitative & quantitative assessment
Issues of professional identity			
ESP teachers' strategies for dealing with unpredicted problems in subject knowledge during class (Wu and Badger 2009)	China ESP: maritime college	small-scale qualitative case study	unstructured interview; observation; stimulated recall; semi-structured post observation interview
From novice to disciplinary expert: Disciplinary identity and genre mastery (Dressen-Hammouda 2008)	France French and English for academic and professional purposes: geology	single subject longitudinal qualitative case study	genre-based analysis of discourse in two languages

(*continued*)

Table 11.1 Continued

Research topic	Context	Approach	Design features
Professional communication			
Air traffic communication in a second language: Implications of cognitive factors for training and assessment (Farris et al., 2008)	Canada Air traffic control	quantitative experimental	simulation; pre-test; three groups; audio-recording; transcription; statistics
International medical graduate doctor-to-doctor telephone communication: A genre perspective (Pryor and Woodward-Kron 2014)	Australia English for professional purposes: medical	qualitative multi-method	simulation; telephone calls recorded; transcription; SFL genre analysis
Materials development			
Workplace texts: do they mean the same for teachers and business people? (Forey 2004)	Hong Kong Business workplace training	qualitative; comparative discourse analysis	genre-based; SFL (Theme); compared views of two groups
Multi-communication and the business English class: Research meets pedagogy (Gimenez 2014)	UK Business English	qualitative 'ethnographic' multiple data sources	survey; interviews; shadowing; artefact collection
Discourse issues			
Academic vocabulary in agriculture research articles (Martínez et al. 2009)	Argentina EAP: agriculture	mixed methods qualitative/ quantitative	electronic corpus; WST analysis
Multimodal genre systems in EAP writing pedagogy (Molle and Prior 2008)	USA EAP in four disciplines	qualitative	multimodal; comparative genre analysis

Note: CBI – Content Based Instruction; SFL – Systemic Functional Linguistics; WST – Wordsmith Tools.

11.2 Needs analysis

In Chapter 4 we discussed the centrality of needs analysis in LSP. Indeed, in a large number of the papers published in LSP, needs analysis is either the primary goal, or an important step towards the development of curricula, syllabi, materials or pedagogies that reflect the needs of the stakeholders. The following two studies demonstrate very different approaches to needs analysis. The first one (Cowling 2007) was a small-scale needs analysis based in a Japanese company. It took a naturalistic approach to the data collection, and relied on triangulation of information from all stakeholders to ensure that a well-rounded picture of the language needs emerged. This information was then utilised in syllabus design.

The second study, Mazdayasna and Tahririan (2008), is a needs analysis on a national scale undertaken in Iran. This study mixed qualitative and quantitative methods to ascertain not only what students and faculty thought of the centrally designed courses and materials used to support the learning of English for nursing and midwifery in seven medical science universities, but also what they thought students needed to learn. The results were used to make recommendations for curriculum renewal.

11.2.1 Cowling (2007)

Needs analysis: Planning a syllabus for a series of intensive workplace courses at a leading Japanese company. *English for Specific Purposes*, *26*(4), 426–442.

11.2.1.1 Overview

Cowling undertook an analysis of workplace English needs at the request of a large corporation in Japan. Complicating factors were tight budget and time constraints and, very importantly, cultural differences. A major cultural issue was that staff trainers had preconceived ideas of what should be taught, but also expected to be ‘hands off’, with the ‘experts’ coming up with a syllabus without consulting them directly. Working within these constraints, the consultant resorted to a ‘humanistic’ approach that drew directly on the views of the target group students (employees) and their teachers, and indirectly on the views of former students then working for the company. The resulting data sets were triangulated to ensure that all stakeholders were properly represented.

11.2.1.2 Background

At Mitsubishi Heavy Industries (MHI), Japan, the stakeholders included the sales director responsible for language training contracts, MHI training staff, EFL full-time and part-time instructors, and the learners (1st to 3rd year company employees). For some years, Mitsubishi had been providing weekly training in general English for new employees over their first three years of employment.

11.2.1.3 Aims

The consultant's brief was to analyse the English language needs of the employees, and then design a new syllabus for a communicative business English course to be provided to these workers (three days a week, three times a year, over three years) that would enable them to adapt their general English skills to business situations in their future working lives. Each course should cover one area of business, for example meetings, telephone calls and presentations.

11.2.1.4 Methods

Budget and time constraints made a full language audit impossible, and there was no time for class observations. Working within these constraints, the researcher decided on a naturalistic approach that would triangulate multiple sources. Four main methods of data gathering were used.

(i) *Informal unstructured, open-ended interview with the client:* It was hoped that more relevant detail would be gathered in this way than through a structured interview, however this step turned out to be largely unsuccessful due to cultural barriers. Staff in the training section of MHI were supportive, but showed little interest in the needs analysis process; they had preconceived ideas of what should be taught, and simply wanted the outside specialists to prepare a syllabus they could approve.

(ii) *Semi-structured interviews with the target group teachers:* Although the EFL teachers were not experts in the MHI business, they were able to give their impressions on several points: the students' language needs in the company were difficult to predict as they worked in many different sections; the range of English language ability was low-intermediate to low-advanced, with low confidence levels in speaking; students had little experience using English at work, with rare contact with foreigners at the training stage; and future English needs included a high possibility of contact with visitors, or foreign travel after training.

(iii) *Interviews with the target group students:* The students were given an open-ended questionnaire to discuss in small groups in class, but their responses were not very informative. They either did not know or could not predict what their future roles in the company would be. They did, however, confirm their lack of confidence in using English, for example, in telephoning and performing business greetings.

(iv) *Open-ended structured questionnaires for students to complete with senior employees:* In an innovative homework task, an oblique approach was used where students interviewed their workplace superiors, 'domain experts', about their work tasks using a questionnaire, and then submitted a written report to their teachers. The senior employees related their own experience that cultural differences were a huge barrier in meetings and negotiations. They suggested many topics (some expected and some unexpected) to include in the course, for example negotiations, placing orders and describing business trends. They also suggested topics for first-time contacts with foreign business representatives, for example introductions and small-talk. In their opinion, authentic tasks would be important in the new courses.

Based on the needs analysis, the new syllabus was designed to be communicative and authentic, and to take into account cultural issues. It provided for nine areas of study: one for each intensive course. The researcher decided on a content-based notional-functional syllabus, involving meaningful tasks, and which was loosely structured to allow instructors the latitude to adapt to contingencies and student feedback. Materials, textbooks and teachers' manuals were to be based on authentic tasks.

11.2.1.5 Comments

In the real world, needs analysis for LSP can often be much more complicated than the way it is described in the literature. This project gives a candid account of the issues and frustrations in a needs analysis process that preceded syllabus and materials design in a particular workplace. The ideas in this article are applicable to needs analysis situations where access is limited and cultural issues make traditional data collection difficult. It is often the case that requirements set by the client are based on personal experience of English language courses as well as 'folk' notions about language and learning. The client and the learners themselves may not perceive the actual language needs and the goals of learning in the same way. At the same time, the consultant needs to be sensitive to the cultural environment, for example, when introducing unfamiliar new teaching and learning practices. The flexibility and ingenuity the researcher used to collect data and the triangulation of that data enabled a syllabus that could accommodate most stakeholder needs to be developed.

11.2.1.6 Resources for researchers

The appendices in this article provide replicable examples of the student and student/senior employee questionnaires, and the bare-bones syllabus designed in response to the needs analysis.

11.2.2 Mazdayasna and Tahririan (2008)

Developing a profile of the ESP needs of Iranian students: The case of students of nursing and midwifery. *Journal of English for Academic Purposes*, *7*(4), 277–289.

11.2.2.1 Overview

In contrast to the previous study, this one is a large scale survey investigating ESP needs in nursing and midwifery courses in seven medical science universities in Iran. A mixed methods design was used to discover the needs of students from the point of view of faculty, ESP teachers and the students themselves. The focus was on stakeholders' perceptions of student proficiency in the four macroskills, the need for technical, semi-technical and core vocabulary, and attitudes towards the English courses that were currently in place. The study highlights problems that can exist in situations where English is taught as a foreign language, and where students have little opportunity to engage with the target language beyond their textbooks (i.e. as in Type C scenario in Chapter 4).

11.2.2.2 Background

It is worth noting that Iran was the initial site of the groundbreaking *Nucleus* ESP series (Bates and Dudley-Evans 1976) sponsored by the British Council in the 1970s. Under Iran's post-revolutionary government, SAMT, the official centre for materials development in humanities, took over responsibility for producing English language materials for use across the country. The researchers found that university ESP courses used an examination-based approach that relied on centrally produced materials with a rigid topic-based instructional format focused on reading comprehension.

The language of instruction in Iranian universities is Farsi, but medical personnel generally use English to write or speak about patients. Concerns had arisen that students in health sciences were memorising technical and semi-technical vocabulary for tests, but were unable to use grammatical structures or medical terminology in English in professional contexts. Students lacked confidence to speak in English, not only for academic presentations and group discussions, but also on the job; during internships, students had trouble following instructions and understanding terminology in medical prescriptions. The researchers' theoretical assumption was that pedagogy should be based on students' interests and needs, and the discourses of the discipline.

11.2.2.3 Aims

The project aimed to 'investigate the foreign language learning needs, wants and desires of undergraduate medical sciences students studying in faculties of nursing and midwifery in various universities' (278). The research questions were:

(i) What are the specific English language needs of Iranian nursing and midwifery students?
(ii) What language skills do … [they] need to develop?
(iii) What types of content, methods and class activities are appropriate for … [them]?
(iv) What factors should be considered in designing syllabi for … [them]?

11.2.2.4 Methods

The mixed method research design consisted of two phases: a pilot study, then two questionnaires, one for students and one for instructors.

Pilot study: Undergraduates, EFL teachers and subject-specific instructors from medical programmes in three universities were first interviewed about student learning needs, areas of difficulty, and their attitudes and expectations about the current ESP course. Interviews were transcribed and analysed, and the information was used to inform the questionnaire in the second phase.

Questionnaires: The student questionnaire elicited opinions on academic English needs and attitudes to the current ESP course (i.e. a combination of questions on a six-point Likert scale and multiple choice questions). The instructors' questionnaire elicited opinions on EFL needs of medical students, the English language proficiency of their students, and students' attitudes to the current course.

Overall, 681 undergraduates, 168 subject specific instructors and six EFL instructors were surveyed. To maximise participation, the large-scale questionnaires (one for students and one for instructors) were translated into Persian for all except the EFL instructors. Researchers personally distributed and collected the questionnaires to get a higher rate of return. Students who had already completed the subject specific English course were also included to check whether their objective and subjective needs had been fulfilled, to find out if they thought their

English proficiency was now sufficient for specialised studies, and to see if language needs or perceptions had changed over four years of study. Data from the different categories of interviewee were triangulated to gain a balanced view. Both qualitative analysis and statistical analyses were carried out using the Statistical Package for Social Sciences (SPSS) software. Pearson chi-square values were computed for each question. No significance between-group variation was found across the universities.

11.2.2.5 Findings

Students generally perceived their English language proficiency to be insufficient for their academic studies; in some cases, reading ability was so low that instructors were forced to translate. Problems with using technical and semi-technical vocabulary, and communication during internships were indentified. Over one-third of students were dissatisfied with class size, teaching methods, evaluation methods, and foreign cultural aspects in class content, as well as the state mandated textbooks.

The critique of the existing course was negative on almost every point: '(1) learning needs, (2) present level of foreign language proficiency, (3) objectives of the course, (4) resources available in terms of staff, materials, equipment, finances and time constraint, (5) the skill of the teachers and the teacher's knowledge of the specific area' (277). At the same time, students, EFL teachers and subject-specific instructors submitted positive suggestions to improve the courses; in their eyes, the need for authentic language learning experiences was paramount.

11.2.2.6 Comments

This was a large-scale project, so a quantitative survey approach was clearly called for in terms of budget and time constraints. At the same time, the smaller pilot study enabled the researchers to gather some qualitative information to guide the development of their survey. Triangulation of results from different stakeholders was also important. In situations like this, for both syllabus and materials development, it is useful for researchers to conduct a follow-up study to collect more qualitative information on the kinds of genres that students are exposed to, and those that they need to produce.

11.2.2.7 Resources for researchers

The article contains a sample questionnaire that could be adapted to similar research projects.

11.3 Student learning and assessment

An often-posed question, but one that has received few responses that can be empirically verified is, 'Does ESP work?' Assessment and evaluation in LSP were discussed at length in Chapter 6. However, in this section, we present two very different evaluations of student learning that attempt to answer this question. James (2006) used naturalistic methods including interviews, journals, classroom observation and course artifacts to ascertain whether students in a Canadian school of engineering had transferred learning from an EAP course using Content-Based Learning (CBI) methods to their other subjects. Rose et al. (2008) describe the outcomes of a year-long action research project with Australian Indigenous students. The project used a mixed methods approach, using an experimental pre-test, post-test design coupled with qualitative and quantitative analysis of student writing samples to provide empirical evidence of literacy gains.

11.3.1 James (2006)

Transfer of learning from a university content-based EAP course. *TESOL Quarterly*, *40*(4), 783–805.

11.3.1.1 Overview

This research evaluated outcomes of an EAP course for engineering students that used content-based instruction (CBI). It attempted to discover what, if any, learning outcomes transferred to other courses that the students were concurrently taking such as algebra, civil engineering and technical writing. The researcher used an open-ended, ethnographic approach that triangulated data from transcribed interviews, students' journal entries, classroom observations, samples of instructional materials and students' writing. At the core of the research were the student interviews that were informed by the researcher's analysis of the other data.

11.3.1.2 Background

The EAP course in question was a non-credit course that was required for first-year students of engineering at a Canadian university when their performance on an English proficiency placement test indicated ESL-related concerns. The EAP course used content-based instruction (CBI) and a theme-based syllabus designed around topics relevant to engineering. Reading was based on popular technical magazines, and the students were formally assessed for writing on both content and language.

Although this type of course is common, little is published about how much learning transfers from EAP courses to disciplinary contexts, or what the optimal conditions would be to effect learning transfer.

11.3.1.3 Aims

James assumed that students of non-English speaking background have a need for language support that is relevant to their overall goals, but that transfer of ESL learning to university studies cannot be assumed. Furthermore, if learning transfer does occur, the conditions for transfer are often unclear, and if the content in a CBI course is mismatched to content in other courses, the students may not see the relevance. He set out to investigate:

(i) 'What, if anything, do students transfer from a university CBI course to other university courses?
(ii) What factors influence transfer of learning from a university CBI course to other university courses?' (784).

11.3.1.4 Methods

For this longitudinal qualitative case study, James approached 75 students from three sections of the CBI EAP course that they were taking concurrently with their other first year courses. He managed to recruit just five first year international students of engineering who were in Canada for educational purposes.

Data were collected over one year from these five students, two EAP instructors, 16 Engineering faculty and one administrator. Data were mainly from transcripts of semi-structured interviews with students and instructors. This information was supplemented by student journal entries, class observation notes from four CBI EAP classes and 21 engineering classes, and samples of instructional material and students' coursework. Qualitative data analysis software was used to code interview responses referring to learning transfer. Positive learning outcomes were categorised in terms of language skills and study skills; null or negative outcomes were coded using a grounded theory approach. To check reliability, another researcher was asked to recode 10% of the units of analysis, and a 91% level of agreement was reached with the author. The author also re-coded 10% after six months, with 96% agreement to the original codings. The author admitted possible threats to reliability in students' self-reporting (e.g. inaccurate memory or desire to please researcher), and the possibility that students did not recognise when transfer of learning had occurred.

11.3.1.5 Findings

Most students reported transfer in reading comprehension and writing skills, some reported transfer in listening and studying, and only one or two reported transfer of speaking skills and affective outcomes. Transfer of learning was influenced by eight factors:

(i) when a particular activity or skill learned in CBI was required for other courses (e.g. clear organisation in writing);
(ii) when other courses afforded an opportunity to use a skill learned in CBI (e.g. reading textbooks that contained a lot of text as opposed to calculation);
(iii) when students were faced with challenging situations (e.g. timed tests) where they could draw on skills learned in CBI;
(iv) when students could draw on CBI training (e.g. guessing meaning from context) to overcome personal weaknesses;
(v) when instructions for a task were lacking in other courses and students could draw on information learned in CBI to know what to do;
(vi) when content taught in the CBI course was seen as relevant to other subjects;
(vii) when CBI learning occurred in close time proximity to a similar task in another course;
(viii) when the demands of the CBI course were actually greater than in the other courses (e.g. CBI instructors talked faster than the professors).

11.3.1.6 Comments

There is relatively little in-depth research in LSP that measures the outcomes of particular pedagogies. This doctoral study only investigated five students, so its generalisability is low. Future research could use a similar approach to investigate learning transfer in larger groups of students in engineering or other disciplines, or with different pedagogies. Using a survey instead of an interview approach could reach more students, and a more controlled research design could manipulate instructional variables.

11.3.1.7 Resources for researchers

This study provides a model of clear procedural description and rationale that would be readily adaptable by others.

11.3.2 Rose, Rose, Farrington and Page (2008)

Scaffolding academic literacy with indigenous health sciences students: An evaluative study. *Journal of English for Academic Purposes*, *7*(3), 165–179.

11.3.2.1 Overview

This article describes an action research project that evaluates a form of pedagogy that had been trialled successfully with disadvantaged students in Australian schools, and then adapted to the higher education context. 'Scaffolding Academic Literacy' involves a four-stage process: *preparing for reading*, *independent reading*, *preparing for writing* and *independent writing*. In this pedagogy teachers at first guide students intensively through in-depth reading of texts in their academic curriculum; they draw attention to features of textual organisation and language patterns and also explicate field-based concepts, definitions, arguments and academic or technical terminology. Students are also guided in writing the genres in their field, based on the readings. As students gain skills and confidence, the 'scaffolding' is gradually reduced, and students read and write independently. The researchers measured the effectiveness of the pedagogy using qualitative analysis and a numerical score.

11.3.2.2 Background

Indigenous students entering university tend not to have completed formal education, and their literacy needs are rarely met by standard pedagogies. These students need to increase academic reading and writing skills rapidly if they are to succeed in fast-paced tertiary education. This study's participants were Indigenous students of health sciences in a preparatory programme and the Bachelor of Health Science degree course at the University of Sydney.

11.3.2.3 Aims

An innovative pedagogy, 'Scaffolding Academic Literacy', aims to accelerate learning by integrating the teaching of academic reading and writing skills within the undergraduate curriculum. Researchers wanted to know the extent to which this pedagogy improved the academic literacy of Indigenous students in the context of their health sciences curriculum.

The researchers worked from a research-based perspective that claims students who are not skilled at independently reading and writing academic texts are severely disadvantaged in the traditional academic model that assumes students are already efficient at reading and writing numerous and lengthy academic texts. Therefore, pre-emptively, all students should be actively taught how to read and critique difficult texts. Furthermore, the process needs to be scaffolded so that learning occurs within the Zone of Proximal Development between what students can do independently and what they can do with some support (Vygotsky 1978).

11.3.2.4 Methods

This was a longitudinal case study of students at three different levels over three semesters: Preparatory course; Year 1 and Year 2 of a Bachelor's degree programme. The new pedagogy was implemented by faculty volunteers, who were first required to attend professional development seminars in selecting and analysing texts for classroom use and in the strategies of the pedagogy, and to observe specialist teaching demonstrations. All students in the three treatment groups were taught using the pedagogy, but only students who gave informed consent to have their work analysed for research purposes were assessed for literacy gains. Classes where the pedagogy was consistently implemented were compared with other classes where it was not so rigorously applied.

11.3.2.5 Data collection

Writing samples were collected from the students at three stages: the beginning of the year, and at the end of first and second semester (27 samples in total). In the treatment groups, the reading and writing tasks became progressively more challenging at each stage, and students were involved in reading one or more texts based on their academic course content, summarising and providing critical comment or interpretation.

11.3.2.6 Data analysis

All students in the cohort were pre-tested for academic reading and writing proficiency; they read a short academic text, then wrote a short summary of the key information in the prompt. The writing was evaluated using a test assessment schedule which provided both qualitative feedback and a numerical score. All writing samples were initially ranked as low, average or high proficiency. A representative text from each sample was then analysed using an assessment schedule based on Systemic Functional Linguistics (Martin and Rose 2007) that provides a numerical score for 11 criteria in five categories: *genre*, *register*, *discourse*, *grammar* and *graphic features*. The overall goal for writing was text coherence; each level was given an equal weighting so that surface features such as punctuation and minor grammatical errors were not unduly penalised. Texts were given a score of 0–9 for each criterion (maximum possible score was 99).

11.3.2.7 Results

Results for this pedagogy in the university context were consistent with earlier results when it was trialled in schools. On average, over one year, while simultaneously accessing academic curricula in sciences and social sciences, and within 60 hours of class time, adult Indigenous students improved their academic literacy by the equivalent of at least four years of secondary schooling. The most rapid improvement was in Years 1 and 2 where the pedagogy was consistently applied. It is thought students' changing fields from social science to science from one semester to the next was a factor in slowing progress.

11.3.2.8 Comments

Action research is typically aimed at empowerment (as noted in Chapter 10); it is classroom-focused, practitioner-led, cyclical and critically self-reflective. The authors describe this project as action research because its primary goal was to achieve empowering change in a population of students who traditionally struggle to gain entry to higher education, and then struggle to graduate. The researchers themselves were the ones initiating change, and interpreting and evaluating the results over an extended period. This project is one of the few in LSP that provide hard numerical data to back up claims for student learning gains.

The authors claim that the 'Scaffolding Academic Literacy' pedagogy could be adapted to the needs of international and other students whose first language is not English. It would be interesting to apply some or all of the stages in another educational context, for example with *Generation 1.5* students (immigrants who have completed some or all of their secondary schooling in their new country, speak English as a second language, and who frequently experience difficulty with academic literacy in higher education contexts) (Harklau et al. 1999).

11.3.2.9 Resources for researchers

The pedagogical process and assessment schedule is described in detail in the article.

11.4 Issues of professional identity

An emerging area of interest for LSP researchers is the development of a professional identity within a community of practice: a group with members that to some extent share common beliefs, behaviours and genres. In this section we examine identity issues from the perspective of teachers, students and other stakeholders. The first study (Wu and Badger 2009) looks at how ESP teachers grapple with being confronted in class with their lack of knowledge in a specific subject area, an issue we have discussed in Chapter 8. The second (Dressen-Hammouda 2008) is a longitudinal case study of the progress of a student of geology towards disciplinary mastery and academic and professional identity in his field in French (and also in English).

11.4.1 Wu and Badger (2009)

In a strange and uncharted land: ESP teachers' strategies for dealing with unpredicted problems in subject knowledge during class. *English for Specific Purposes*, *28*(1), 19–32.

11.4.1.1 Overview

This study focuses on an issue that is somewhat controversial in the field of LSP, namely the tension between what the LSP teacher knows and what the subject specialist knows. Debate has long continued over the extent to which LSP teachers can or should engage with the content of the field when teaching the language that is used in that specialisation. Meanwhile, in the reality of the classroom, how can LSP teachers avoid dealing with specialised content?

11.4.1.2 Background

This case study is about English teachers in a vocational college for mariners in China. None of the three Chinese teachers of English in the study had training in maritime English or experience on board a ship. The ESP teachers recognised there were limits to their disciplinary knowledge and that they frequently faced ISKDs (In-class Subject Knowledge Dilemmas). The ISKD can be a problem for ESP teachers in general, but it is particularly challenging for NNS ESP teachers, and may be even more so for teachers from a Confucian culture, where a teacher is always expected to be the subject expert. The study focuses on teacher cognition and responses in the teaching/learning process.

11.4.1.3 Aims

The researchers' goal was to investigate the fuzzy area between what ESP teachers and subject specialists know, and how much Chinese ESP teachers are influenced by desire to protect their own 'face'. The specific aim was to describe the interactive decisions made by ESP teachers when faced with ISKDs, situations where they unexpectedly had to display subject knowledge.

The research questions were:

(i) How do teachers respond to situations in class where they do not have the requisite disciplinary knowledge?
(ii) What decisions do they make when faced with an ISKD?
(iii) What strategies do teachers adopt?
(iv) What factors influence their choices?

It was hypthesised that key factors would include the conceptualisation of relative subject knowledge of ESP teacher and subject specialist, the roles of teachers and students and maintenance of face.

11.4.1.4 Methods

The method involved collecting multiple types of data from multiple sources. Firstly, to avoid bias, an unstructured interview was carried out with one ESP teacher who was not involved in the rest of the research to find out if teachers ever reported ISKDs. Then classroom observations were made using unobtrusive audio-recordings. The teachers had given their lesson plans to the researchers before the class so that the researchers could see where the lessons deviated from the plan. After the class, the students were asked if their teacher's performance had been different from usual (triangulation). By examining the audio recordings, the researchers were able to identify potential ISKDs. Then in a follow-up stimulated recall activity, individual teachers were asked to respond to a segment of the audio recording of their lesson that contained the supposed ISKD and to recall the cognitive process that led them to behave the way they did (this response was also audio-recorded). Finally, in semi-structured post-observation interviews (again, audio-recorded), teachers were asked to comment on the strategies they used when faced with ISKDs.

Bilingual triangulation was done to ensure accuracy. Transcripts of stimulated recall and post-interviews were translated back into Chinese and checked by the teacher for accuracy. The method of data analysis is based on *grounded theory* (Glaser and Strauss 1967, Creswell 2007). By using a winnowing process the researchers identified two strategies (avoidance and risk-taking) and five tactics for dealing with ISKDs.

11.4.1.5 Results

When faced with unknown vocabulary, teachers chose either to avoid the question or to take a risk and try to answer it. Examples of avoidance tactics included moving to the next topic, giving an example sentence or focusing on morphology. Risk-taking tactics included literal translation, and asking students if they knew the meaning. No teacher chose to admit ignorance. All followed the lesson plan as closely as possible, and showed strong preference for risk avoidance.

11.4.1.6 Comments

Study of the teaching/learning process, and in particular teachers' thinking processes is fairly uncommon in LSP. It would be interesting to replicate this study with teachers of different cultural and linguistic backgrounds, and to extend the study beyond issues of vocabulary to more complex problems of epistemology (the way the target field conceptualises itself and explains itself to members of the field). These results could inform teacher training and professional development: LSP teachers should know that ISKD situations are common, that they do not necessarily reflect badly on the teacher, and that there are useful strategies and tactics available.

11.4.1.7 Resources for researchers

This is a good example of naturalistic research using grounded theory, and a great example of the use of triangulation to improve reliability.

11.4.2 Dressen-Hammouda (2008)

From novice to disciplinary expert: Disciplinary identity and genre mastery. *English for Specific Purposes*, *27*(2), 233–252.

11.4.2.1 Overview

This longitudinal case study follows the development of a French student's professional identity from undergraduate to doctoral candidate. Evidence of an emerging professional identity is found in the increasing sophistication of his academic writing, first in French and later in English. The researcher engages in a 'situated genre study of fieldwork writing in geology' within a broader theoretical framework based on the concepts of *habitus* (Bourdieu 1984) and *frame* (Minsky 1975).

11.4.2.2 Background

As Swales (1997) and many others have observed, international publication in the sciences is increasingly dominated by English, so this student needed to publish in English for his work to achieve wider exposure. The author assumes that students gradually take on their disciplinary identity as they engage with 'the processes of genre production' (234), and that access to communities of practice requires acquiring specialised beliefs and practices embodied in genres. However, knowledge of the surface (textual) characteristics of genres is insufficient for students to gain mastery and to present themselves as fully-fledged professionals in a field. The author draws on the concepts of *habitus*, *frame* and *genre* to provide an explanation for the formation of disciplinary identity that involves both materialised (textual) and cognitive frames.

11.4.2.3 Aims

The aim is to describe a framework that synthesises aspects of identity based on identity theory, frame theory and genre theory, and, via a case study, demonstrate how the framework operates. The research questions were:

(i) 'What … must be learned in addition to genres that allow students to master the discipline's genres?
(ii) How does the construction of a disciplinary identity contribute to genre mastery?' (235).

11.4.2.4 Methods

A single student was followed over six years in his study of geology from undergraduate to doctoral level. The student was interviewed at intervals, and an ESP-style genre analysis on a corpus of his writing was carried out.

11.4.2.5 Findings

The author identified 14 textual 'cues' clustered around three rhetorical moves:

> (i) showing *explicit* … implication in the research account, … [by drawing] overt attention to their physical activity in the field. … (ii). providing *disguised* indications of … activity in the field by signaling … field activities, and (iii). demonstrating disciplinary membership *using specialist terminology*. (240–241) (our italics).

Although not generalisable from a single case, the study contributes a strong argument that students who are in the process of induction to a discipline 'must master an entire semiotic genre chain that underlies their discipline's specialist activity in order to begin writing like specialists' (249). Experienced writers skilfully use 'typified sets of textual cues' that signal their competence and membership status. There are also 'discoursal silences', implicit propositional content that is not on the page, but that can be inferred by insiders. The author concludes that genre-based EAP/ESP courses need to include instruction on the *symbolic genres* of the target discipline as well as *material genres* such as reports. To do this effectively, writing courses should be linked to disciplinary content and practices.

11.4.2.6 Comments

This is an example of research in LSP carried out by a fluent bilingual researcher who is able to deal with the linguistic and cultural nuances of a discipline in two languages, and to shuttle between the two. Based on work done for a doctoral thesis, the report draws on fieldwork and a framework developed for the thesis, and on the author's previously published work. The idea of 'discoursal silences' is also a possible topic for further research.

11.4.2.7 Resources for researchers

This is a good example of meticulous case work over an extended period. Case studies in other disciplines could follow this method and test the analytical framework in other domains.

11.5 Communication among professionals

In Chapter 7 we discussed the complexity of multi-disciplinary contexts. Here we highlight research that illustrates different approaches to investigating the language of the workplace and the professional world. The first, Farris et al. (2008), uses an experimental research design to investigate cognitive overload in air traffic control, a professional area that places top priority on safety in operational procedures. The second, Pryor and Woodward-Kron (2014), is a genre-based examination of intra-professional telephone communication in a medical context, another field where accuracy of communication is paramount.

11.5.1 Farris, Trofimovich, Segalowitz and Gatbonton (2008)

Air traffic communication in a second language: Implications of cognitive factors for training and assessment. *TESOL Quarterly*, *42*(3), 397–410.

11.5.1.1 Overview

This study reports on a controlled experiment on the effects of cognitive overload on L2 speakers' speech production and information retention in English. In an experimental environment designed to simulate a pilot navigation task in which pilots communicate with air traffic controllers, 60 engineering students (divided into three groups: 20 native speakers of English and two groups of non-native speakers divided by high and low language proficiency) played the role of pilots. Presented with recordings of air traffic controllers' messages in English, the participants listened, repeated and responded under simulated low and high workload conditions. Unsurprisingly, native speakers were more accurate in repeating messages overall, however all students, regardless of background, were noticeably less fluent in a high workload situation. Fluency declined more with low English proficiency. An interesting finding was that the accent of low proficiency L2 participants was only perceived as problematic in the high workload situation.

11.5.1.2 Background

Air traffic control is a high-stakes profession that requires employees to communicate clearly and accurately at all times so as to avoid air incidents. Apart from using an L2, other factors such as 'high workload and the inherent complexity of radiotelephonic communications (e.g., invisible and unfamiliar interlocutor, congestion due to high traffic, radiotelephonic frequency constraints)' create challenges (398). Where pilots and controllers do not share the same language, English is used. Therefore air traffic controllers' and pilots' proficiency in English (or, more particularly, Airspeak, a restricted international code in English) is vital to air safety. While the cognitive performance of native speakers when undertaking concurrent tasks has been quite extensively studied, the authors had found no comparable previous research on the speech production of L2 speakers.

11.5.1.3 Aims

'To explore the implications of cognitive factors for the training and assessment of professionals whose jobs involve high cognitive workload' (398).

11.5.1.4 Methods

The authors relied on cognitive load theory and models of working memory. For the pilot-controller simulation, 40 L2 English speakers (all native speakers of Mandarin who were in Canada for the purposes of higher education) were divided into two groups of high or low proficiency, and a third group consisted of 20 native speakers of English. English listening proficiency for L2 speakers was established using a TOEFL-based diagnostic pre-test, and spoken proficiency via a brief oral interview. Each interview was transcribed, and scored for speaking accuracy based on a computation of lexical and morphosyntactic errors.

Ten independent native English speaker judges separately rated a 20-second excerpt of each participant's interview for accentedness, comprehensibility and fluency on a nine-point Likert scale. The ten scores were then averaged for each speaker. In order to analyse the pattern of difference between means, one-way ANOVAs were followed by pair-wise comparison using the Tukey Honestly Significant Difference (HSD) post-hoc test, which established means and standard deviations for each measure of proficiency.

A simulated pilot navigation task following normal Airspeak protocols was adapted from a previous study and modified to incorporate the high workload condition. In the exercise, first, under 'low workload conditions', the students listened to a recording that simulated oral instructions from air traffic control, repeated the instructions to verify comprehension, and then carried out the required action on a computer screen (navigating from square to square on a grid). Under 'high workload' conditions, the participants followed the same procedure while simultaneously completing a very simple mental arithmetic task that appeared randomly on the screen. All students performed 12 practice trials followed by responding to 36 messages. Each session was audio recorded. A different set of ten native speaker raters listened to samples of the participants' recorded responses (12 per participant) and, relying on their native speaker intuition, rated them on the same nine-point Likert scale for accentedness, comprehensibility and fluency. The researchers compared the accuracy of the students repeating the instructions under low and high workloads, and also measured accent, comprehensibility and fluency based on their non-expert native speaker intuition.

11.5.1.5 Findings

Regardless of workload conditions, the native speakers performed most accurately, but even they suffered some loss of fluency such as hesitation, false starts and repetitions under a high cognitive workload. Both groups of non-native speakers showed some negative effects of high cognitive workload. Non-native speakers were perceived by the raters as more accented, less comprehensible and less fluent, and the lower proficiency group performed least well on these measures.

11.5.1.6 Comments

Experimental studies are quite rare in the LSP literature, as are studies of cognition. This is a good example of a carefully controlled experimental research design in response to a research question about intra-professional oral communication.

11.5.1.7 Resources for researchers

This is a rare example in the LSP literature of using an artificial, highly controlled simulated environment rather than a more naturalistic approach. The method is clearly explained, and might be adapted to research on professional communication in other fields where focused attention is a primary safety concern. Sullivan and Girginer's (2002) needs analysis of air traffic controllers in Turkey offers an interesting study to compare with this one.

11.5.2 Pryor and Woodward-Kron (2014)

International medical graduate doctor to doctor telephone communication: A genre perspective. *English for Specific Purposes*, *35*, 41–53.

11.5.2.1 Overview

This multi-method qualitative study was conducted in an Australian teaching hospital where international medical graduates (IMGs) were trained in telephone communication with senior doctors using simulated patient situations. In this case the researchers conducted genre-based linguistic analyses on the call data, and they also had professional staff at the hospital interpret it from the perspective of their medical expertise. Although doctor-patient communication has been a popular research subject for some years, spoken communication between doctors is a key intra-professional genre that has not received the same attention.

11.5.2.2 Background

International medical graduates are increasingly finding employment in hospitals in Western countries. The safety and well-being of patients is paramount, and junior doctors (JDs) in the early stages need to rely on the support of senior doctors (SDs) to develop their expertise in dealing with patients; clear, effective communication is vital, particularly if a patient's condition is deteriorating. IMGs are drawn from a wide range of cultural and linguistic backgrounds and, for many, using English clearly and effectively in such a high-stakes professional environment is a challenge. At one Australian teaching hospital, as an integral part of their training, all JDs are required to attend a one-day training session once a month over five months. The groups typically consist of five to 12 JDs and four to five instructors. In the existing training model, student doctors are taught to follow a call protocol called SBAR (Situation, Background, Assessment, Recommendation) or for IMGs, a variation (Identity, Situation, Background, Assessment, Request).

11.5.2.3 Aims

The aim of this study was to determine the effectiveness of telephone calls made by IMG junior doctors to more senior doctors in simulated medical situations. The research questions were:

(i) What is the generic structure (including language features) of effective calls?
(ii) What is the generic structure (including language features) of ineffective calls?

11.5.2.4 Theoretical background

Systemic Functional Linguistics (Halliday and Matthiessen 2004) was used as an analytical tool to examine extended written or spoken discourse in natural settings. The researchers used a systemic functional linguistic framework for a genre-based analysis that was extended using both Hasan's (1996) notion of generic structure potential and Eggins and Slade's (1997; 2012) analytical framework for analysing conversation.

11.5.2.5 Methods

After the required ethics approval was gained, informed consent of all participants (IMGs and SDs) was sought. Eight out of 14 IMGs that were approached agreed to be audio-recorded as they carried out telephone calls to their SDs to seek clinical advice on the deteriorating condition of a simulated 'patient'. The data were collected during regular training sessions with two different intake groups over ten months.

Two data sets were collected for analysis: telephone calls and feedback from senior doctors. The researchers recorded, transcribed and analysed 12 telephone consultations regarding critically ill 'patients' that were made by IMGs to SDs during training sessions. The researchers then used SD informants to identify which calls were in their eyes, 'successful' or otherwise. The successful calls were then analysed functionally for generic structure and important linguistic features.

For each call, the SD involved was asked for feedback on the success or otherwise of the call; these comments were then transcribed and analysed using a method that looked for recurrent themes. Information from the genre-based analysis of the successful calls was combined with the SD feedback to develop an analytical tool with which to examine less effective calls.

11.5.2.6 Findings

Two out of the eight IMGs completed calls that the SDs deemed successful. For effective calls, a nine-stage generic structure was identified. Less effective calls showed these junior doctors experiencing difficulties with information sequencing, the realisation of stages and the management of interaction between themselves and their senior partners. The researchers noted shifts back and forth between 'workplace' discourse and 'apprenticeship' discourse, with the SD needing to resort more often to an instructional mode in the less successful calls. Beyond the generic and linguistic analysis of the researchers, the insights from the SDs highlight the institutional, professional and situational variables that contribute to effective calls.

11.5.2.7 Comments

The research is an excellent example of a collaborative effort between ESP/EOP teacher-researchers and professionals in the field under investigation. Compared with the currently used SBAR and ISBAR protocols, which follow a highly structured monologic communicative model, the proposed nine-stage generic potential model recognises that this communication genre is co-constructed, and has recursive elements. The model has potential to improve the effectiveness of intra-professional communication between international medical graduates and their senior doctors. The theoretical framework and research methods are very clearly outlined, and could readily be extended to other professional contexts.

11.5.2.8 Resources for researchers

The article contains detailed analyses of telephone calls and tables showing the generic stages of successful calls, and also some pedagogical suggestions.

11.6 Research informing materials development

In Chapter 5, we discussed issues of course design. The following two studies are motivated by the desire for more authentic materials for LSP courses in the business workplace. Forey's (2004) study uses discourse analysis to investigate how teachers and business professionals interpret two memos, one an authentic piece of business communication, and another based on the first memo, but 'cleaned up' by LSP teachers. The second study, Gimenez (2014), investigates the cognitive demands of the modern phenomenon of multitasking using communication technology, and develops some sample pedagogical tasks that may assist language learners to manage the challenge.

11.6.1 Forey (2004)

Workplace texts: do they mean the same for teachers and business people? *English for Specific Purposes*, *23*(4), 447–469.

11.6.1.1 Overview

This article contributes to the development of teaching resources for English in the workplace. The qualitative method combines a social context perspective with close textual analysis using a Systemic Functional Linguistic framework. The SFL notion of Theme (Halliday 1994) is used as a way to explore how interpersonal meanings are encoded in texts, and differently interpreted by readers. The researcher used two focus groups, one of business people, and one of EFL teachers to interpret two versions of the same business memo.

11.6.1.2 Background

In Hong Kong, English is seen as vital to competitiveness in business yet there is a lack of research into the specific language needs of the workplace and the pedagogic resources needed to address them. Few studies have looked at how trainers and people in the workplace understand the texts they are working with.

11.6.1.3 Aims

This research aimed to discover how thematic choices in written texts are interpreted by different readers; in this case, teachers and business people.

The researcher's theoretical assumption is that authenticity is important in teaching LSP. As written texts are part of the larger intertextual environment of the workplace, there should be consistency between the culture and perceptions of business and the language that teachers or trainers are attempting to teach the workers. SFL was chosen as an analytical tool because it understands language as a social phenomenon, and it regards the whole text as a unit of meaning rather than meaning simply residing in individual sentences. SFL explains Theme as the point of departure of any message, and an important clue to how a message is organised.

11.6.1.4 Methods

Two focus groups were set up, one consisting of 12 business people (Cantonese L1 speakers) and the other of 15 EFL teachers (eight fluent bilinguals and seven native speakers of English). The participants responded to two sample workplace memos, one (Memo A) from a corpus of authentic workplace texts and another (Memo B) constructed by textbook authors from the first memo as a 'pedagogic' text that was supposed to be more 'business-like'. Participants read the same two texts, and underlined features they thought signalled a relationship between writer and reader; they then discussed in the group what they thought was important or interesting about the language used in each text.

11.6.1.5 Results

Teachers and business people reacted very differently to the two memos. Teachers generally thought A was inappropriate, even aggressive in tone, whereas some business people thought it was friendly, and were not offended by it. Both groups thought B was more business-like, but not all participants could offer a linguistically-based reason for this. SFL analysis was able to demonstrate that some differences in reader interpretation were related to Thematic choices in the texts. For example, the choice of Subject/Theme was crucial to the relationship set up between writer and reader. Memo A used many more personal pronoun subjects such as *I* and *you*; Memo B thematised institutional entities such as *anyone* or *all staff*. Thematic choices in A shifted excessive responsibility onto the reader, and made the memo seem aggressive or authoritarian; the choices in B read as less emotive and more business-like.

11.6.1.6 Comments

SFL analysis carried out on authentic real-world texts can provide linguistically-based explanations for the effects brought about by a writer's or speaker's textual choices, and these can be used to enhance pedagogy. This kind of analysis can be carried out in different contexts and with different kinds of text. For example, the reactions of faculty and LSP teachers to student essays, or the reactions of faculty and students to syllabus documents or examination prompts could be compared. Close textual analysis and discussion can illuminate features that make particular texts effective or not. It can be instructive for teachers to step back from their own (often prescriptive) assumptions about what makes an effective text, and see texts from the perspectives of different kinds of reader, and also readers from different cultures.

11.6.1.7 Resources for researchers

This study shows very careful attention to selection of the texts for analysis and comparison; it controls the variables of field and mode (i.e. complementary components of register) so that the variations in tenor are thrown into contrast. In Forey's broad approach Theme is analysed as 'everything up to and including the Subject of the main clause' (450). Marked Themes and Subject/Themes are then identified within this overarching 'Theme' (Martin and Rose 2007). Such an approach may make Theme analysis, which can be daunting to those unfamiliar with SFL, more accessible.

11.6.2 Gimenez (2014)

Multi-communication and the business English class: Research meets pedagogy. *English for Specific Purposes*, *35*, 1–16.

11.6.2.1 Overview

This ethnographically oriented study examined the multi-communication (MC) practices in four multinational companies in the telecommunications, management consultancy, marketing and banking industries based in the UK. The multi-data qualitative approach combined a web-based survey, interviews, shadowing sessions and collection of documents and artefacts. This article looks at implications for teaching Business English and includes research-informed pedagogical interventions to better prepare students for MC in workplace communication.

11.6.2.2 Background

The modern business workplace is a high-pressure environment where employees are increasingly expected to do more in less time. This leads employees to engage in Multi-Communication (MC), 'multiple, face-to-face and electronically mediated conversations at the same time'. For example, a person might be speaking with a client or colleague on the telephone, and simultaneously emailing or texting via instant messaging (IM). Whether or not such multi-tasking is a more effective mode of communication than old fashioned 'serial' communication, it is something that Business English students will eventually have to deal with. Little is known about the main MC skills and combinations of skills that may be required, and how these skills might best be developed.

11.6.2.3 Aims

This study 'set out to examine some of the emerging tendencies in MC in the contemporary workplace' (3).

The research questions were:

(i) What skills are required for MC in today's workplace?
(ii) How does MC relate to the traditional notion of effective communication in the workplace?
(iii) How many simultaneous communication tasks would people normally get involved in before communication breaks down? (3)

11.6.2.4 Methods

The study used a multi-data approach, involving 'a survey, a series of interviews, three shadowing sessions, and documents and artefacts (e.g. computer screenshots) as its datasets, collected from four multinational corporations representing four industries: telecommunications, management consultancy, marketing and banking' (3). To triangulate the data, the researcher used a 'zoom-in' 'zoom-out' technique, shuttling from the general issues identified at macro-level to the specific detail at the micro-level and back again.

First, informed consent was obtained from 50 participants. Then, to obtain a participant viewpoint on the MC practices at the different workplaces, an anonymous web-based 26-question survey was conducted; it was divided into four sections: (a) demographic information, (b) communication practice, (c) communication tools and (d) communication experience. A five-point Likert scale was used for (b) and (d).

The survey was followed by semi-structured interviews of 13 of the original 50 participants, randomly selected. Structured observation (shadowing) of these interview participants was then conducted over three days to give an outsider's view of the MC practices. A schedule of structured observations was followed, consisting of ten minute observations and five minute recordings over 45 minutes. Two independent researchers systematically coded information from the shadowing and the interviews following a codebook that was specially designed for the study. The categories were 'thematic threading, topic discussed, media packaging, media involved, presence allocation, audience profiling, and other' (6).

11.6.2.5 Findings

It was found that MC requires four key skills: 'thematic threading', that is making strategic decisions about combining communication tasks on the same topic, 'frees up cognitive resources allowing communicators to attend to multiple theme-related tasks almost simultaneously and to handle demands more efficiently'; 'presence allocation' enables a communicator to spread his/her virtual presence over several instances of communication while online; 'media packaging' involves combining 'compatible' media such as email and IM so more can be done simultaneously; and 'audience profiling' enables communicators to group and classify audiences they are dealing with according to their shared features. This kind of profiling enables the development of 'scripted suggestions' for clients, such as those used in call centres. Gimenez suggests that in future, corporations will need to provide staff with media and training for dealing with multi-communication.

11.6.2.6 Comments

This research is interesting because it investigates new uses of technology, and the very important question of how language learners can cope cognitively and linguistically with its multiple demands.

11.6.2.7 Resources for researchers

This study contains examples of pedagogical tasks derived from the research and appendices with copies of the observation schedule and the codebook.

11.7 Discourse issues

In Chapter 5, we touched upon the issue of language analysis. A very large proportion of the research in LSP revolves around discourse analysis, which is often used for determining student needs, and also to inform curriculum and materials development. In this section we look at several different approaches to analysing discourse. The first is a corpus-based approach, Martínez et al. (2009), which takes advantage of the powerful data-searching capabilities of Wordsmith Tools to interrogate a corpus of electronically-stored research articles. The second, Molle and Prior (2008) is a multi-modal genre-based analysis of academic discourse in several different disciplines. The study is particularly interesting because it challenges theoretical assumptions about the nature of genre, complicates the needs analysis process, and makes some surprising new findings. The general research approach was ethnographic, aiming for a 'thick' description. Written and visual texts were collected and analysed as part of the process.

11.7.1 Martínez, Beck and Panza (2009)

Academic vocabulary in agriculture research articles: A corpus-based study. *English for Specific Purposes, 28*, 183–198.

11.7.1.1 Overview

This research examined the academic words in a corpus of research articles in the field of agriculture. A mixed quantitative/qualitative approach was taken. This is one of many recent articles based on research using the Academic Word List (AWL) (Coxhead 2000). One important aspect of this particular piece is its critical approach to the use of the AWL for teaching vocabulary in a highly specific sub-field like agriculture, and its recognition that the rigid separation of vocabulary into categories such as the General Service List (GSL) (West 1953) and AWL can be misleading.

11.7.1.2 Background

In Argentina, Spanish speaking researchers and graduate students urgently need to use English to read research articles and write for publication in English even though their language of instruction is Spanish. Although their reading skills in English are generally high level, the students are time-poor when it comes to learning English, and are motivated to learn only those aspects of the academic and technical language that they need to write articles for publication. The AWL consists of 570 word families that occur frequently in academic genres across a wide range of academic disciplines, and which, in combination with the words in the GSL, are said to account for about 90% of words in academic texts.

11.7.1.3 Aims

The researchers aimed to discover the frequency, coverage, distribution and meaning of academic words in an electronic corpus of peer-reviewed scientific research articles in agricultural science. It was hypothesised that in highly specialised courses like agriculture, it might be possible to identify and teach only the vocabulary students need instead of the whole AWL. Martínez et al. theorised that although the AWL and the GSL together may cover up to 90% of words in (generalised) academic text, this may not hold true for specialised sub-fields. Also, some GSL words may have academic or technical meanings in agriculture, and may need to be included in course curricula.

11.7.1.4 Data collection

Experimental research articles in agriculture published over a four-year period by academics in English-speaking universities were taken from on-line versions of journals that were indexed in the Science Citation Index and also recommended by subject specialists at the researchers' university. All articles had a clear Introduction, Methods, Results and

Discussion (IMRD) structure and these sections were used for analysis. Numbers, abstracts, references, acknowledgments, captions and appendices were excluded from the word count. The resulting 'AgroCorpus' consisted of 826,416 words in 218 research articles.

The data analysis was both corpus- and genre-based. Wordsmith Tools (WST) (Scott 1996–2004) was used for corpus analysis. The program's Wordlist tool generates alphabetical lists of tokens and number of tokens of each type found in the corpus. Frequency and distribution of word types and tokens (in whole articles and across sections) were determined and compared against GSL and AWL wordlists. Some qualitative analysis of specific academic words was also included. Only 'frequent' words occurring above the mean of the total number of academic words were counted. The mean was identified both for full text and the individual (IMRD) sections. Word families were built for those words above the mean. Qualitative observations were made on certain specific words.

11.7.1.5 Findings

The lists of frequent words from the AWL and the AgroCorpus were significantly different; of the 92 most frequent word families in the Agro-Corpus and the 60 most frequent in the AWL, only 26 were the same. Most items in the AgroCorpus had only one member of the family represented, and 37.5% of the AWL word types were not found at all. It was also noted that some AgroCorpus words like *culture* had technical rather than academic meanings in agriculture, and that some words from the GSL can have, for agriculture, academic meanings (e.g. *effect*, *show*, *find*) or technical meanings (e.g. *pest control*), so students need to be aware of these.

11.7.1.6 Comments

In an EFL university context, where students are focused on a highly specific field, a corpus generated list of field-specific words based on semantic and pragmatic criteria rather than simply high frequency, may be more useful than the AWL, and could improve student motivation and competence to read and write academic texts in the target language. This area of investigation offers an opportunity for other researchers to build up a rich picture of the specialised vocabularies in a wide range of disciplines over time, and to contribute to overall knowledge of the role of lexis in academic texts.

11.7.1.7 Resources for researchers

The procedure for corpus building and analysis is well-documented in this article, and would be a useful starting point for a researcher wishing to do a similar study based on another academic field.

11.7.2 Molle and Prior (2008)

Multimodal genre systems in EAP writing pedagogy: Reflecting on a needs analysis. *TESOL Quarterly*, *42*(4), 541–566.

11.7.2.1 Overview

A needs analysis was conducted for an EAP course at graduate level at a major public university in the USA. Academic genres in three disciplines were investigated over two semesters using ethnographic methods including interviews, class observations and examination of course documents and student texts. Contrary to the researchers' expectations, neatly describing genres in the disciplines proved difficult; the genre sets and systems were discovered to be complex, hybrid and multimodal. The research suggests that teaching students the discourses of their fields requires more than a text-based approach; it should also include a multimodal study of systems and practices in the field.

11.7.2.2 Background

EAP courses aim to prepare students for the language demands of studying in specific disciplines, and needs analysis is considered to be a necessary step in syllabus and materials design as well as curriculum renewal. However, needs can be conceptualised in different ways according to the agendas of stakeholders and researchers, and it is not always straightforward or even possible to define all needs. In this particular case, the researchers took a genre-based approach that owes more to the New Rhetoric than the Swalesean or Sydney schools of genre studies (See Hyon 1996).

11.7.2.3 Aims

The initial aim was to 'reexamine the basis for a common EAP writing course for international graduate students'. By sampling several disciplines, it was hoped to identify the key academic genres and compare them with those being taught in the existing EAP course. The questions guiding the research were:

(i) Which genres should be taught in an EAP classroom?
(ii) What kinds of features will best characterise those genres?
(iii) How are genres best taught or learnt? (543).

At the outset, the researchers assumed a conventional EAP stance that genres would be readily identifiable, that common textual features for particular genres in specific contexts could be described and that each genre would have a basic unity of discourse, voice or style. All these assumptions were challenged by the data that were collected.

11.7.2.4 Methods

Disciplines to investigate were chosen on the basis of their students being highly represented in the EAP course. Over two semesters, the researchers:

- conducted in-depth interviews with EAP students and faculty;
- collected documents from the courses in the disciplines as well as students' written texts collected from faculty, and from the EAP course (with students' informed consent);
- observed classrooms;
- used contextualised genre analysis of texts students were asked to write.

11.7.2.5 Results

The researchers were surprised to find the extent to which writing styles and discourses varied not only across, but also within disciplines. Complex relations were discovered among genres and genre sets, and multimodality, including visual representations, was common. They reported

> (a) that academic genres existed in genre sets and systems that involved process and pedagogical genres as well as genres of disciplinary or academic presentation; (b) that genres were routinely multimodal in process and form; and (c) that the discursive character of particular texts was routinely quite hybrid (541).

11.7.2.6 Comments

This study was conducted for a master's thesis. It clearly shows how initial assumptions and simple research questions can become more complicated (and more interesting) as the research process goes on. The naturalistic approach to data collection allowed these complicating factors to emerge; a more instrumental or more narrowly focused approach, as in say a questionnaire for faculty, would probably not have brought the complexity of genres and genre systems to light. This study has wide implications for the concept of needs analysis. Most significantly, it emphasises that multimodal and hybrid genre systems need to be taken into account, that students need to become 'ethnographers' of their own disciplines, and that EAP teachers need to collaborate closely with faculty in the disciplines.

11.7.2.7 Resources for researchers

This study provides insights into the reality that the path of research seldom runs smoothly; researchers need to be open to the possibility that approaches to data gathering and analysis, and assumptions too may have to change in the light of preliminary findings.

11.8 Concluding comments

The research showcased above is but a small sample of the kinds of topics and methodologies that are taken up in the field of LSP. We have paired certain research examples to highlight a particular research topic or issue, but there are many other synergies to be found among these examples. Some topics to discuss follow.

Discussion points

1. How many of the examples above are related in some way to needs analysis? What conclusions can you draw about methods of needs analysis from reading these accounts?
2. Farris et al. (2008) and Gimenez (2014) both examined the cognitive effects of multi-tasking in a professional environment. What are the relative merits of the methodologies used? What could each researcher learn from the other that could enhance their research?
3. Take any other pair of research articles from those presented, and compare the relative merits of the approaches or techniques used.
4. Make your own thematic pairing of any of the research examples and discuss the strengths and possible weaknesses of the methodologies that have been used.

12
Researchable Projects

12.1 Introduction

Following on from the case studies in LSP research presented in Chapter 11 we are now in a good position to suggest research projects that readers might be interested in taking up. These could be followed as set out below, or with certain modifications to better suit your particular context or circumstances. (In particular, we encourage projects that focus on languages other than English.) In any case, we have reached the culmination of our review of knowledge and skills pertinent to LSP and we feel that you should now have sufficient confidence to be able to follow through, if you wish, with well-informed research on your own.

The projects presented in this section are all meant to be performable within the time constraints placed on a full-time worker, whether he/she is in LSP or a related field. Depending on the project and the resources available to you, we believe that the time needed to conduct and complete good quality research would range between a minimum of six months and a maximum of one year. In academic terms, such a project would be equivalent to a postgraduate research project without the dissertation style write-up. We do hope, however, that any project followed to completion would warrant writing up as an article for publication in a relevant LSP journal, and that is one of the main considerations that has guided our choice of topic for each recommended project. We conclude the chapter by providing some insights and tips about getting LSP research published.

Note: We have assumed that in undertaking any of the projects enumerated in this chapter all relevant ethics approvals have been requested and approved, and all participants have freely consented to participate in the research. This is increasingly a requirement for publication in reputable journals.

The question that motivates this chapter is: 'What are the important research issues in the field that readers can undertake in an action or practice-based way?'

12.2 Eighteen researchable projects

12.2.1 LSP stakeholders

Research question: For a particular LSP project to which you have access as teacher or researcher, who are the stakeholders (principal and peripheral), what are their specific interests, and how best might they be reconciled?

Problem: LSP is distinguished by the often conflicting interests of a variety of stakeholders, ranging from a variety of sponsors (e.g. governments, institutions, parents) to administrators, teachers and students. Each LSP program is to some extent unique and requires an appreciation of who the key stakeholders are and how their interests can best be reconciled.

Procedure:

(i) Arrange to gain access to representative stakeholders in the LSP project.
(ii) Prepare data collection instruments (e.g. questionnaire and/or interview questions) that address issues in common but also issues of particular importance to specific stakeholders.
(iii) Collect the data.
(iv) Analyse the data by focusing (a) on the common questions, the answers to which can be compared and contrasted; and (b) on the specific concerns of each stakeholder (or stakeholder group). Use interaction analysis to go beyond simply analysing the 'content' of responses. Then, with all this knowledge, draft a framework within which the interests of key stakeholders are seen to be taken account of in any of the following areas: how the LSP course is planned, designed, implemented, taught or evaluated.

12.2.2 LSP needs analysis (1)

Research question: In a workplace context with which you are familiar, what languages are used and in which specific contexts?

Problem: In many countries across the globe workplaces are increasingly characterised by multilingual workforces, whether they be 'multicultural' societies such as Australia, formerly 'monolingual' societies such as Japan, or longstanding 'plurilingual' societies such as South Africa. Whichever the case, the work being done in these workplaces is essentially conducted through language and, increasingly, through several languages. To properly understand how communication takes place in such environments, a systematic investigation is needed.

Procedure:

(i) Identify a linguistically diverse workplace.
(ii) Prepare data collection instruments (e.g. questionnaire and/or interview/focus group questions) that clarify what languages participants use in the course of their daily work, and in which contexts they are used.
(iii) Collect the data.
(iv) Analyse the data, both for content and meaning encoded in interactional practices, with a view to profiling language use patterns and areas in which specific language training (i.e. LSP) could make a positive impact.

12.2.3 LSP needs analysis (2)

Research question: In a workplace context with which you are familiar, what are perceived to be the main communication needs of non-native speakers of the main language in use?

Problem: As noted in the preceding project, workplaces are increasingly becoming multilingual settings. Whilst this has many benefits, for some workers it may actually marginalise them and reduce their ability to participate as fully as their potential would dictate.

Procedure:

(i) Identify a linguistically diverse workplace.
(ii) Source available documents from the institution to inform exploration of communication needs. Prepare data collection

instruments (e.g. questionnaire and/or interview questions) that clarify the contexts in which non-native speakers work, the kinds of tasks they need to perform, and the kinds of tasks that their language skills may prevent them from carrying out either fully or partially.

(iii) Collect the data.

(iv) Analyse the data to see to what extent LSP training of non-native speakers in this workplace could address any perceived problems.

12.2.4 LSP course design (1)

Research question: How and to what extent does the written discourse of a high-achieving student compare with a low-achieving student from the same language background in the same course?

Problem: It is fairly common for the work of novice (L2 or L1) writers to be contrasted to that of 'expert' writers in order to identify and diagnose what remedial action needs to be taken. However, it would also be very useful to know in what ways lower-performing learners could realistically improve their language skills to at least attain a higher (if not native-like) level of performance.

Procedure:

(i) Indentify two language learners of the same background but of significantly different performance levels in the same course.

(ii) Prepare interview questions to find out about their language learning background and motivation for undertaking their particular course. Also prepare a request for copies of a variety of samples of their written work.

(iii) Collect the data.

(iv) Analyse the written work for strengths and weaknesses according to criteria relevant to the language course. In particular, focus on areas of strength in the high-achieving learner's writing and consider what interventions might assist the lower-achieving learner to perform better in these particular areas.

12.2.5 LSP course design (2)

Research question: To what extent do the key lexical items found in a corpus of articles published in a professional trade magazine or journal correspond to a current syllabus used to teach the same disciplinary field?

Problem: Specialised vocabulary, including general words that hold specific meanings in particular disciplines, has long been recognised as an important area to address in LSP learning and teaching. It is also an area where LSP teachers with little knowledge of the subject matter need to get up to speed quickly. Professional journals offer an opportunity for LSP course designers to identify key lexical items that contribute to a discipline's jargon.

Procedure:

(i) Identify an important trade magazine or journal that is specific to a particular discipline (e.g. 'Accountancy', for accountants).
(ii) Looking at 12 issues of the magazine or journal, select two or three of the leading articles from each issue. Convert them into an electronic format (e.g. plain text file (.txt)) that can be processed by a concordance program (e.g. Wordsmith Tools).
(iii) Collect the data by running the concordance for frequency of lexical rather than functional (e.g. 'a', 'an', 'it', 'and', 'the', etc.) items.
(iv) Prepare a summary of key lexical items by frequency and compare this list with other materials that form part of the syllabus. Check to what extent they match; and which items from your investigation do not appear in the syllabus but should do so.

12.2.6 LSP course evaluation

Research question: Has an LSP course with which you are familiar been 'successful'?

Problem: Given the often differing expectations of the variety of stakeholders involved in any LSP program, judging its success can be a contentious issue. The tools used to evaluate a course need to be measuring what 'counts' to the various stakeholders involved.

Procedure:

(i) Identify the LSP's course's key stakeholders.
(ii) Prepare data collection instruments (e.g. interview questions) that provide accounts of before/after situations and perceptions of success/failure, and any triangulating instruments (e.g. language assessments) that can provide more objective accounts of the impact of the LSP course.
(iii) Collect the data.
(iv) Analyse the data for patterns and whether the balance of the results points to success or failure. Include interaction analysis to ensure that subtleties in meaning can be identified and contribute to the overall findings.

12.2.7 LSP learner assessment

Research question: To what extent can assessment for learning (AfL) practices improve LSP learners' task performance?

Problem: Language learning research shows that learners learn better when formative assessment practices are integrated in the teaching program, rather than 'added on' at the end of a period of instruction. There are few accounts of AfL studies in the LSP literature, where summative end-of-course assessments seem to dominate evaluations of learners' progress.

Procedure:

(i) Identify a teacher who understands the basic principles of AfL and who is able and willing to use them in an LSP course.
(ii) Prepare data collection instruments that focus on one or more tenet of AfL (e.g. a classroom observation protocol that can be used to categorise and record instances of learners asking questions in a lesson).
(iii) Collect the data.
(iv) Analyse the data, collate the results and interpret the findings.

12.2.8 Inter/multidisciplinary contexts in LSP

Research question: What interaction patterns do LSP learners use in simulated role plays that differ from those of professionals in their workplace context?

Problem: The actual contexts in which LSP are used bring into question the degree of specificity that can be predetermined for LSP users. A narrow view of, say, specific English supporting a particular discipline such as nursing, is confounded by the reality that nurses engage in a variety of tasks and encounters with a wide range of interlocutors. A wide view of language use embedded in layers of social structures pulls towards a holistic rather than specific view of language needs, with consequences for LSP course design and delivery.

Procedure:

(i) Identify a set of LSP learners who are taught by subject specialists.
(ii) Working with the subject specialist, devise a simulated role play task that involves authentic interaction (in the subject area) between a professional and a lay person. Prepare role play cards for the participants. Ensure that the role of 'lay person' is played by someone who is not familiar with the subject area. Ensure that the subject specialist also participates in a 'model' role play.
(iii) Video-record the subject specialist and learners in their simulated role plays.
(iv) Using genre theory, analyse the data of the subject specialist and (a) one or two of the better learner performances; and (b) one or two of the weaker learner performances. Compare and contrast (a) the subject specialist's performance with those of the better learner performances; and (b) the better and weaker learner performances. Consider the implications of your findings for teaching in this LSP domain.

12.2.9 Multi-modality in LSP

Research question: To what extent does imagery assist L2 users of tourist brochures to better understand the accompanying text?

Problem: Tourism is a huge industry worldwide, providing a livelihood for millions of people. English typically features as the lingua franca in encounters between tourists and tourism/hospitality employees, and tourist brochures in English are often in circulation as a means of communicating key information. However, it is not certain that the English or imagery contained in these brochures is actually understood as generally intended by their producers.

Procedure:

(i) In the tourism industry where you reside, collect a few tourist brochures.
(ii) Examine them carefully in terms of their generic features, that is layout and the interplay of text and image. Prepare interview questions for tourists with the aim of gaining insights into how they understand the information (including imagery) displayed on the brochure. What do they find easy to understand; what do they find difficult or confusing? And, why?
(iii) Collect the data by interviewing several tourists for each different brochure.
(iv) Analyse the data to clarify the issues and the extent to which the multi-modal brochures are helpful in conveying accurate meanings about their subject matter. Suggest recommendations for altering generic features to improve the brochures investigated in the study.

12.2.10 Team-teaching in LSP

Research question: What are the key factors that contribute to effective team-teaching involving a subject specialist and an LSP teacher?

Problem: Team-teaching provides the opportunity to optimise the learning context for LSP students by providing them with both subject and language support on a regular basis. However, success in this arrangement depends on many factors, and these have to be properly considered when planning and undertaking this sort of teacher collaboration.

Procedure:

(i) Identify an academic context in which subject specialists collaborate with LSP teachers.
(ii) Prepare interview questions for each teacher participant to gain an understanding of how they see their subject, their learners and the role of the other teacher. Prepare a questionnaire for the learners to provide feedback on their experience of being team-taught and what they consider to be the good and less good points about it.

(iii) Collect the data.
(iv) Analyse the data to clarify the factors involved in effective team-teaching, and interpret the findings in order to make recommendations to improve future collaborations in this particular context.

12.2.11 Professional development in LSP

Research question: What are the professional development needs of a novice EAP teacher?

Problem: English for Academic Purposes support at universities has increasingly become a 'growth' area of employment in many countries. However, the needs of new EAP teachers may differ substantially from those of more highly experienced EAP teachers. A proper professional development program should take account of the needs of both groups.

Procedure:

(i) Identify a recently appointed EAP teacher.
(ii) Prepare interview questions for this teacher, their more experienced colleagues, and the Head EAP teacher, in order to find out (a) what the perceived needs of novice EAP teachers are in terms of professional development; and (b) to what extent the professional development program of the current employer meets these needs.
(iii) Collect the data.
(iv) Analyse the data to clarify the needs of these different stakeholders, and interpret the findings in order to inform and improve future PD planning for both novice and experienced teachers.

12.2.12 Managing LSP classes (1)

Research question: What are the particular needs of older learners in mixed-aged LSP cohorts, and how can they be effectively addressed?

Problem: Many LSP classes are comprised of mixed-aged learners. This situation presents challenges and opportunities to LSP teachers if they are to ensure that their lessons run smoothly and effectively. Older learners may be less flexible in their attitudes to learning and in their willingness to participate in certain communicative activities.

Procedure:

(i) Identify an LSP classroom in which there is a range of student ages.
(ii) Prepare a questionnaire instrument to ask all students (a) how they feel about learning in a mixed-age class based in their experience to date; (b) which activities seem to work best in this situation; (c) what, if any, changes they would like their teacher to make. Prepare interview questions for each of the targeted older students, as well as the teacher to gain an understanding of how they see the issue of age and its impact on the teaching of the course.
(iii) Collect the data.
(iv) Analyse the data to clarify the issues and needs of the older learners, and what recommendations could be made about better accommodating these students in terms of their needs.

12.2.13 Managing LSP classes (2)

Research question: What are the particular needs of older learners in mixed-aged LSP cohorts, and how can they be effectively addressed?

Problem: Many LSP classes are comprised of mixed-aged learners. This situation presents challenges and opportunities to LSP teachers if they are to ensure that their lessons run smoothly and effectively. Older learners may be less flexible in their attitudes to learning and in their willingness to participate in certain communicative activities.

Procedure:

(i) Identify an LSP classroom in which there is a range of student ages.
(ii) Video and audio-record several tasks involving mixed-aged groups of learners participating in a lesson
(iii) Using an interactional analysis approach, analyse the data to clarify the issues and needs of the older learners based on their group interactions, and what recommendations could be made about better accommodating these students in terms of their needs.

12.2.14 Scaffolding case study in LSP

Research question: To what extent does scaffolding through using genre theory improve learner's L2 writing?

Problem: Writing is often seen as a crucial yet particularly difficult skill to master in a second language. By focusing on particular genres and their structural features and grammatical characteristics, learning might be accelerated.

Procedure:

(i) Identify a learner in your LSP class who seems highly motivated and has a need to quickly improve his/her writing.
(ii) Plan a series of genre-based lessons that focus on one particular genre and that initially have strong scaffolding that is subsequently reduced.
(iii) Collect the data (i.e. writing samples by the learner) at the end of each lesson.
(iv) Analyse the data in terms of generic structure, grammatical features and overall communicative effect. Ask a teaching colleague to comment on what differences, if any, they can ascertain between the earliest and most recent writing sample. Interpret all the results and reflect on the usefulness of the scaffolding technique and how it might be improved.

12.2.15 Using ethnographic techniques in LSP

Research question: What are the language learning practices of an LSP learner outside the classroom, and how effective are they?

Problem: Whilst an LSP teacher may plan and control the learning activities that take place in his/her classroom, much real learning is likely to take place after the lesson and outside the classroom. Having a better understanding of how learners use their between-lesson time to further their learning would aid the LSP teacher in planning future lessons.

Procedure:

(i) Identify three learners in an LSP class who represent a range of L2 ability from lower to middle to higher proficiency.
(ii) Set up learning diaries with key questions for each learner to respond to and complete on a daily basis for a period of two

weeks. Also prepare interview questions for the learners to be asked before and after the two-week period. Arrange with each learner to observe them performing one of their regular and typical L2 learning activities outside of class time. Make notes and/or audio record their performance in this activity.

(iii) Collect the various data.

(iv) Use interactional analysis to examine their out-of-class performance. Analyse all the data for each learner and interpret the results. Note in particular any differences between the three learners that may contribute to their relative progress (or lack of it) in advancing their L2 learning.

12.2.16 Action research in LSP

Research question: Does peer assessment improve critical self-assessment and learner engagement with LSP course content?

Problem: Much classroom work centres on interactional patterns between the teacher and the whole class or the teacher and an individual student. These patterns deprive the majority of learners from actively interacting in lessons at an individual level and in an engaging way.

Procedure:

(i) Design a set of writing tasks and a clear set of criteria for evaluation. Prepare a questionnaire for learners to share their views on giving/receiving oral/written feedback on writing.

(ii) Have students complete one of the tasks, collect the writing and analyse it for common mistakes. Modify one of the scripts to ensure it contains a representative sample of these mistakes. Present the modified script to the class at the next lesson, and introduce the criteria for evaluation. Model oral feedback to the 'imaginary' author of the writing using the evaluation criteria as a guide. Then give a new topic to students and have them write a response, exchange with a classmate and provide oral feedback based on the set criteria. Administer the brief questionnaire asking students about their experiences as writer and evaluator.

(iii) Repeat the cycle of writing and evaluation, but change the feedback from oral to written. Collect the written scripts with the written feedback.

(iv) Analyse the data for each learner and interpret the results. Repeat the process with a new writing task.

12.2.17 Quantitative study in LSP

Research question: Do students who have taken a subject-specific EAP preparation course subsequently perform better in their university program than those who have taken a general EAP preparation course?

Problem: There are many pathways for L2 international students to gain entry to English-medium university degree programs. While universities have traditionally offered general EAP courses, many now offer subject-specific EAP courses (such as for accounting; law; or engineering). The best way to measure whether one pathway leads to improved results over the other is to undertake a follow-up study that can match the pathway taken against students' subsequent performance.

Procedure:

(i) For a university context which offers both general and subject-specific EAP courses, design a questionnaire that can be completed by a high-volume of study participants. The questionnaire should ask for basic bio-data (i.e. age, gender, L2 learning history) as well as future study plans. Aim to collect (ideally) at least 100 completed questionnaires for each category of participant.
(ii) Administer the questionnaire to both groups to collect the data.
(iii) Follow-up with your study's participants at the end of their first academic year of studying their specific degree discipline, to obtain their Grade Point Average (GPA) for that year.
(iv) Using appropriate inferential statistical techniques, analyse the data for each student to see whether those who had followed the subject-specific EAP programs performed significantly better in their specific subjects, and what other factors, if any, might have influenced their subsequent performance.

12.2.18 Replication study in LSP

Research question: Is a previously published LSP study replicable in your own specific context?

Problem: The LSP research literature is a rich source of studies covering a wide variety of issues and contexts. However, there are very few studies which claim to be replications of earlier studies but applied to new or different contexts. It would be useful to know whether previous studies might be generalisable to other contexts.

Procedure:

(i) Investigate a particular LSP interest you might have and identify a published LSP study that you would like to replicate. Prepare the necessary data collection instruments to undertake the study.
(ii) Collect the data carefully following the protocols used in the original study.
(iii) Analyse the study following the same techniques as used in the original study.
(iv) Interpret the results of your study and how/why they are similar or different to those of the original study.

12.3 Getting LSP research published

12.3.1 Where to get published in LSP

There are many ways through which LSP research can be made available to the public. Oral presentations can range from in-house talks/seminars/professional development sessions to local, national and international conferences, including those of subject specialists. In terms of publication outlets the options also range from in-house newsletters to local, national and international conference proceedings, as well as to edited volumes and peer-reviewed journals and monographs. There are two typical progressions that novice researchers tend to follow, (1) starting with local and advancing towards international, both for presentations and conferences; (2) starting with mentor and colleague reviews, and advancing towards anonymous peer-reviews.

In Chapter 13 we provide details of many journals and other online resources that are relevant to the LSP field, and provide opportunities for publishing LSP research. Suffice to say here that all reputable journals maintain good websites, but some less reputable ones also maintain respectable looking websites. Better journals have impact factors and usually display them prominently. In the field of applied linguistics, these range from 'IFs' of approximately 1.5 (for the best) to 0.25 (still respectable). Better journals also list their editorial board members and these should be well-known scholars in the LSP field. Beware of publications that cite well-known scholars as an 'advisory board' but list little-known scholars as editors. These journals may have standards that are less than satisfactory, and publishing in them is unlikely to advance knowledge in the field, or one's reputation, in a positive way.

It is a good idea to be alert to any 'calls for papers' for edited volumes focusing on language teaching, learning or other relevant aspects of LSP. Likewise, journals sometimes announce a call for papers for special issues that could include some aspect of LSP that matches work you might have done. Books are another possibility for publication, and are especially suitable for completed master or doctoral research. Again we advise that you only deal with reputable publishers who conduct proper peer-review processes.

12.3.2 How to get published in LSP

Based on decades of experience in academic life in many parts of the world we offer a few tips below about getting research published. Though these ideas also apply to applied linguistics and language in education in general, they are certainly the case for getting LSP research published.

1. No matter what kind of research you undertake, consider the possibility of getting it published. Remember, research that is never disseminated will never have an impact beyond your immediate environment. When designing a study, consider what research topics and approaches are currently of interest to journals and conferences in your sub-field (see for example calls for further research in journal articles and reviews of recent publication trends such as Paltridge and Starfield (2011) and Gollin-Kies (2014)). However, it is not essential to jump on the latest bandwagon. A well-worn topic (for example, the research article introduction) or approach (Swales' CARS model) can still be of interest when investigated with a different population, level of proficiency, discipline or even a different language. Conversely, a novel topic (for example, using the online community *Second Life* to improve fluency) or approach (for example Mixed

Methods) can be used with a well-known population such as EAP learners.

2. Write your paper by following whatever guidelines are provided by the editor. For journal articles, it is far easier to write a paper specifically for a particular journal than to try to convert an already written paper for the journal. We recommend that you actually write the paper as it might appear in the journal and, only when you are satisfied that it is complete, should you convert it to the usual double-spaced format and submit to the journal.
3. Adhere to the word limits. This involves planning your paper in advance such that the various sections are proportionate to the total word count allowed. This means having sufficient space to engage in a reasonably full discussion of your paper's findings and any implications for LSP practice. Check from the start whether appendices are included in the word count targets given.
4. Follow-up on your paper's progression through the various stages of editorial review, but do not pester the editor or his/her assistants if the publication process gets drawn out. They are often not remunerated for their work and do it as a service to the professional community. It is in your best interests, however, to make sure the paper is progressing.
5. There are two timelines to bear in mind when submitting a paper for publication. The first is getting the paper formally accepted for publication. In our experience, this can range from taking as little as 48 hours to as long as two years. The second timeline spans from the official acceptance notice for publication to the date of actual online (and/or hardcopy) publication. For most contributors the former timeline is the critical one; but when the paper is eventually made available to the public, it is still a very satisfying milestone.
6. If your paper is accepted subject to reviewers' recommended changes, we strongly advise that you undertake the revisions since almost inevitably your paper will be improved as a consequence. Even if such revisions mean changing something that you might have invested a lot of time and thought in, the publication 'game' is unsentimental and what counts is what our peers make of our written-up research.

Part IV
Resources

13
Key Sources

The following sections cover a wide range of sources that we hope the reader will find useful in exploring the breadth and depth of LSP.

13.1 Books

The following books are, in our view, particularly important monographs in the field of LSP.

Basturkmen, H. (2010). *Developing courses in English for Specific Purposes*. Houndmills, Basingstoke, Hampshire, UK: Palgrave Macmillan.

Bhatia, V. K. (1993). *Analyzing genre: Language use in professional settings*. London: Longman.

Douglas, D. (2000) *Assessing Languages for Specific Purposes*. Cambridge: Cambridge University Press.

Dudley-Evans, T. & St. John, M.J. 1998. *Developments in English for Specific Purposes*. Cambridge: Cambridge University Press.

Huhta, M., Vogt, K., Johnson, E. & Tulkki, H. (2013). *Needs analysis for language course design: A holistic approach to ESP*. Cambridge: Cambridge University Press.

Hutchinson, T. & Waters, A. (1987). *English for Specific Purposes*. Cambridge: Cambridge University Press.

Hyland, K. (2006). *English for Academic Purposes: An advanced resource book*. London: Routledge.

Jordan, R. R. (1997). *English for Academic Purposes: A guide and resource book for teachers*. Cambridge: Cambridge University Press.

Robinson, P. (1991). *ESP today: A practitioner's guide*. Hemel Hempstead, UK: Prentice Hall.

Swales, J. M. (1988). *Episodes in ESP: A source and reference book on the development of English for Science and Technology*. New York: Prentice-Hall.

Swales, J. M. (1990). *Genre analysis: English in academic and research settings*. Cambridge and New York: Cambridge University Press.

13.2 Edited collections

Arnó, E. M., Cervera, A. S. & Ramos, C. R. (Eds). (2006). *Information Technology in Languages for Specific Purposes: Issues and prospects*. New York: Springer.

Belcher, D. (Ed.). (2009). *English for Specific Purposes in theory and practice*. Ann Arbor, MI: University of Michigan Press.

Belcher, D., Johns, A. M. & Paltridge, B. (Eds.). (2011). *New directions in English for Specific Purposes research*. Ann Arbor: University of Michigan Press.

Bowles, H. & Seedhouse, P. (Eds.). *Conversation analysis and Language for Specific Purposes*. Bern: Peter Lang.

Cortese, G. & Riley, P. (Eds). (2002). *Domain-specific English: Textual practices across communities and classrooms*. Bern: Peter Lang.

Flowerdew, J. (Ed.). (2002). *Academic discourse*. Harlow: Longman.

Flowerdew, J. and Peacock, M. (Eds). (2001). *Research perspectives on English for Academic Purposes*. Cambridge: Cambridge University Press.

Hidalgo, A., Hall, D. & Jacobs, G. M. (Eds). (1995). *Getting started: Materials writers on materials writing*. Singapore: SEAMEO Regional Language Centre.

Howard, R. and Brown, G. (Eds). (1997). *Teacher education for Languages for Specific Purposes*. Clevedon, UK: Multilingual Matters.

Khoo, R. (Ed.). (1994). *LSP: Problems and prospects*. Singapore: SEAMEO Regional Language Centre.

Krzanowski, M. (Ed.). (2009). *Current developments in English for Academic and Specific Purposes in developing, emerging and least-developed countries*. Reading: Garnet Education.

Orr, T. (Ed.). (2002). *English for Specific Purposes*. Alexandria, V.A.: TESOL.

Peterson, M. and Engberg, J. (eds). (2011). *Current trends in LSP research*. Bern: Peter Lang.

Ruiz-Garrido, M. F., Fortanet-Gómez, I. & Palmer-Silveira, J. C. (Eds.). (2010). *English for Professional and Academic Purposes*. Amsterdam: Rodopi.

Scott, W. & Mühlhaus, S. (Eds). (1994). *Languages for Specific Purposes*. Kingston, UK: CILT in Association with Kingston University School of Languages.

Wilkinson, R. (Ed). (2004). *Integrating content and language: Meeting the challenge of a multilingual higher education*. Maastricht, Netherlands: Maastricht University.

13.3 Handbooks

Paltridge, B. & Starfield, S. (2013). *The handbook of English for Specific Purposes*. Malden, MA: Wiley-Blackwell.

13.4 Journals

13.4.1 LSP journals

- *English for Specific Purposes*

http://elsevier.com/locate/esp

This is the pre-eminent journal in the field of English for Specific Purposes, dating back to 1980 (when it was published as *The ESP Journal*).

- *ESP World*

http://www.esp-world.info/

This on-line journal is published twice a year and has an impressive variety of authors working in many different countries and especially in contexts where English is not the local language. The contents page of the journal can be accessed at http://www.esp-world.info/contents.htm

- *ASp*, la revue du GERAS

http://asp.revues.org/?lang=en

This journal, for members of GERAS (see LSP associations below), publishes in French and English.

- *IATEFL ESP SIG Newsletter*

http://www.unav.es/espSig/espsig.html

This is the newsletter of the ESP SIG of the major ELT association in the UK.

- *IBERICA*

http://www.aelfe.org/?s=presentacio

This is the journal of AELFE, (see LSP associations below).

- *Journal of Applied Linguistics and Professional Practice*
http://www.equinoxpub.com/JALPP

This journal has the aim of advancing research and practice in applied linguistics as a principled and interdisciplinary endeavour involving not just the education profession but other professional domains such as law, healthcare, business and others.

- *Journal of English for Academic Purposes*
http://elsevier.com/locate/jeap

This journal publishes papers on a wide range of topics with relevance to English for Academic Purposes.

- *Taiwan International ESP Journal*
http://tespaj.tespa.org.tw/index.php/TESPJ/index

A peer-reviewed journal published by the Taiwan ESP Association (TESPA)

- *Chinese Journal of ESP*
http://www.espchina.com.cn/journal.asp

An ESP journal published in Chinese, but with English abstracts.

13.4.2 Related journals

- *Annual Review of Applied Linguistics*
http://journals.cambridge.org/action/displayJournal?jid=APL

- *Applied Linguistics*
http://applij.oxfordjournals.org/

- *Australian Review of Applied Linguistics*
http://www.alaa.org.au/page/aral_journal.html

- *Corpora*
http://www.euppublishing.com/journal/cor

- *International Journal of Business Communication*
http://businesscommunication.org/jbc

- *International Journal of Corpus Linguistics*
https://benjamins.com/#catalog/journals/ijcl/main

- *International Review of Applied Linguistics in Language Teaching*
http://www.degruyter.com/view/j/iral

- *Journal of Asian Pacific Communication*
https://benjamins.com/#catalog/journals/japc/main

- *Journal of Business Communication*
(See *International Journal of Business Communication*)

- *Journal of Pragmatics*
http://www.journals.elsevier.com/journal-of-pragmatics/

- *Journal of Second Language Writing*
http://www.journals.elsevier.com/journal-of-second-language-writing/

- *System*
http://www.journals.elsevier.com/system/

- *TESOL Quarterly*
http://www.tesol.org/read-and-publish/journals/tesol-quarterly

- *Text and Talk*
http://www.degruyter.com/view/j/text

- *The Modern Language Journal*
http://au.wiley.com/WileyCDA/WileyTitle/productCd-MODL.html

13.5 Principal LSP conferences and associations

Please note that this list is merely indicative of the wide range of associations and conferences with an LSP focus around the world. Listing of conferences and journals in this section does not mean that we guarantee the academic quality or the peer-review processes of a particular organisation or publisher.

- *AELFE (Asociación Europea de Lenguas para Fines Específicos)*
http://www.aelfe.org/?l=en&s=origen

AELFE (also known as the European Association of Languages for Specific Purposes) is an association of European University professors specialised in Languages for Specific Purposes. Founded in 1992, its objective is to foster and promote both the research into and teaching of modern languages as regards their applications to science and technology.

- *AILA* is the International Association of Applied Linguistics (http://www.aila.info/en/) and has a number of Research Networks (ReN) http://www.aila.info/en/research.html. They run discussion groups, and organise conferences and symposia, including a regular symposium at the triennial AILA Congress.
- *BALEAP* (British Association of Lecturers in English for Academic Purposes)
  http://www.baleap.org.uk/home/

BALEAP supports the professional development of those involved in learning, teaching, scholarship and research in EAP through its accreditation scheme, Professional Issues Meetings (PIMs) and biennial conference and through the work of its sub-committees and working parties. It has a useful link to other EAP-related websites at: http://www.baleap.org.uk/resources/eap-related-websites.

- *CERLIS* (Centro di Ricerca Linguaggi Specialistici) University of Bergamo, Italy
  http://dinamico.unibg.it/cerlis/page.aspx?p=3

This LSP Research Centre, based in Bergamo in northern Italy, was founded in 1999 to promote research and information exchange, create LSP pedagogical materials, and promote seminars, workshops and publications. The website has English and Italian versions.

- *GERAS (Groupe d'Étude et de Recherche en Anglais de Spécialité) University of Bordeaux, France*
  http://www.geras.fr/welcome/index.php

This group, based in France, is dedicated to special-purpose English in all sectors, though it is affiliated to the higher education group Société des Anglicistes de l'Enseignement Supérieur (SAES). It organises an annual conference, with papers in English and French, and publishes a Newsletter (*La lettre du GERAS*) and a journal (*ASp*).

13.5.1 SIGs (Special Interest Groups)

ARTESOL (Argentina Teachers of English to Speakers of Other Languages)
ARTESOL has an English for Specific Purposes Interest Section and a refereed journal in English (*ESP Ejournal*) http://artesol.org.ar/publications/esp-journal

IATEFL (International Association of Teachers of English as a Foreign Language)
English for Specific Purposes Special Interest Group http://www.unav.es/espSig/espsig.html
This group is devoted to English for occupational, professional, academic, vocational and other specific purposes. It publishes a newsletter and organises workshops and seminars, mostly in the UK but sometimes in other parts of Europe.

Japan Association of College English Teachers (JACET) has a special interest group on English for Specific Purposes. Information is available at http://www.iot.ac.jp/manu/atsuko/JACET-ESP.htm. Note that much of the information on the JACET site is in Japanese.

TESOL English for Specific Purposes SIG
http://www.tesol.org/connect/interest-sections/english-for-specific-purposes/esp-news
This SIG is part of TESOL International Association, the principal US-based association for ELT

TESOL Asia
This organisation hosts a yearly international conference and supports several special interest groups and peer-reviewed journals such as *The Asian ESP Journal* http://www.asian-esp-journal.com/; *The Maritime English Journal* http://maritime-english-journal.com/; and *The International Journal of Law, Language and Discourse* http://www.ijlld.com/

13.6 Other key internet sites

ELT Web provides an index of English Language Teaching resources including ESP www.eltweb.com/liason/

13.7 Other relevant resources

13.7.1 *Doing research*

Brewer, J. D. (2000). *Ethnography*. Buckingham, UK: Open University Press.
Creswell, J. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks, CA: SAGE.

Duff, P. A. (2008). *Case study research in applied linguistics*. New York: Lawrence Erlbaum Associates.

Denzin, N. K. & Lincoln, Y. S. (Eds.). (2005). *The SAGE handbook of qualitative research* (3rd edn.). Thousand Oaks, CA: SAGE.

Glaser, B. G. & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. New York: Aldine de Gruyter.

Heighham, J. & Croker, R. A. (Eds.). (2009). *Qualitative research in applied linguistics: a practical introduction*. New York: Palgrave Macmillan.

Hinkel, E. (Ed.). (2005). *Handbook of research in second language teaching and learning*. Mahwah, NJ: Lawrence Erlbaum Associates.

Koester, A. (2010). *Workplace discourse*. London: Bloomsbury Academic.

McEnery, T., Xiao, R. & Tono, Y. (2006). *Corpus-based language studies: An advanced resource book*. New York: Routledge.

McNiff, J. & Whitehead, J. (2006). *All you need to know about action research*. London: SAGE.

O'Keeffe, A., McCarthy, M., & Carter, R. (2007). *From corpus to classroom*. Cambridge, NY: Cambridge University Press.

Yin, R. K. (2009). *Case study research: design and methods* (4th edn.). Thousand Oaks, CA: SAGE.

13.7.2 *Software for data analysis*

13.7.2.1 Concordancing

Scott, M., 2012, WordSmith Tools version 6, Liverpool: Lexical Analysis http://www.lexically.net/wordsmith/index.html

13.7.2.2 Text parsing and annotation

O'Donnell, M. (2007). UAM Corpus Tool http://www.wagsoft.com/CorpusTool/

13.7.2.3 Qualitative data analysis software

QSR International. Nvivo10 http://www.qsrinternational.com/products_nvivo.aspx

13.7.2.4 Quantifiable data analysis software

IBM Business Analytics Software. SPSS http://www-01.ibm.com/software/au/analytics/spss/

13.7.3 Websites with links to resources for searching corpora

The British National Corpus (BNC) is a 100+ million word corpus of modern British English http://corpus.byu.edu/bnc/

COCA is a 450 million word corpus of Contemporary American English at: http://corpus.byu.edu/coca

Corpora4learning.net, housed at The University of Surrey, has links to a wide range of corpora in world Englishes: http://www.corpora4learning.net/

The Michigan Corpus of Academic Spoken English (MICASE) and The Michigan Corpus of Undergraduate Student Papers (MICUSP) http://www.lsa.umich.edu/eli/resources/micasemicusp

The Professional English Research Consortium (PERC) site (user pays) https://scn.jkn21.com/~percinfo/index.html

The University of Essex hosts an extensive list of corpora at: http://www.essex.ac.uk/linguistics/external/clmt/w3c/corpus_ling/content/corpora/list/index2.html

The University of Wollongong has a portal with links to corpora in many languages: http://www.uow.edu.au/~dlee/CBLLinks.htm

13.7.4 Getting published

Cheung, Y. L. (2010). First publications in refereed English journals: Difficulties, coping strategies, and recommendations for student training. *System*, *38*(1), 134–141.

Lillis, T. M. & Curry, M. J. (2010). *Academic writing in a global context: The politics and practices of publishing in English*. London: Routledge.

Thomson, P. & Kamler, B. (2012). *Writing for peer reviewed journals: Strategies for getting published*. Oxford: Routledge.

References

Abasi, A. R. & Graves, B. (2008). Academic literacy and plagiarism: Conversations with international graduate students and disciplinary professors. *Journal of English for Academic Purposes, 7*(4), 221–233.

Alderson, J. & Clapham, C. (Eds.). (1993). *Examining the ELTS test: An account of the first stage of the ELTS revision project – research report 2*. London: The British Council/University of Cambridge Local Examinations Syndicate.

Alexandrova, T. (1994). Juxtaposing strategies for teaching medical and juridical Latin. In W. Scott & S. Mühlhaus (Eds.), *Languages for Specific Purposes*, pp. 276–278. Kingston, UK: CILT in Association with Kingston University School of Languages.

Allen, J. & Widdowson, H. (Eds.). (1974 & following years). The *Focus series*. Oxford: Oxford University Press.

Allison, D. (1996). Pragmatist discourse and English for Academic Purposes. *English for Specific Purposes, 15*(2), 85–103.

Appel, C. & Gilabert Guerrero, R. (2006). Finding common ground in LSP: A computer-mediated communication project. In E. Arnó, A. Soler & C. Rueda (Eds.), *Information Technology in Languages for Specific Purposes,* pp. 75–90. New York: Springer.

Appleby, R. (2009). The spatial politics of gender in EAP classroom practice. *Journal of English for Academic Purposes, 8*(2), 100–110.

Arnó, E. (2012). The role of technology in teaching Languages for Specific Purposes courses. *The Modern Language Journal, 96*(Focus Issue), 89–104.

Arnó, E. & Mancho, G. (2015). The role of content and language in content and language integrated learning (CLIL) at university: Challenges and implications for ESP. *English for Specific Purposes, 37*(1), 63–73.

Arnó, E, Soler, A. & Mancho, G. (2006). Information Technology in LSP: Prospects on a brave new world. In E. Arnó, A. Soler & C. Rueda (Eds.), pp. 247–261, *Information Technology in Languages for Specific Purposes*. New York: Springer.

Arvay, A. & Tanko, G. (2004). A contrastive analysis of English and Hungarian theoretical research article introductions. *International Review of Applied Linguistics (IRAL), 42*(1), 71–100.

Atkinson, P. & Hammersley, M. (1994). Ethnography and participant observation. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research*, pp. 248–261. Thousand Oaks, CA: SAGE.

Austin, J. (1962). *How to do things with words.* Oxford: Clarendon Press.

Bakhtin, M. M. (1986). *Speech genres and other late essays* (V. W. McGee, Trans.). Austin, TX: University of Texas Press.

Bargiela-Chiappini, F. & Nickerson, C. (2002). Business discourse: Old concepts, new horizons. *International Review of Applied Linguistics in Language Teaching, 40*(4), 273–286.

Bargiela-Chiappini, F., Nickerson, C., & Planken, B. (2013). *Business discourse* (2nd ed.). Basingstoke, UK: Palgrave Macmillan.

Basturkmen, H. (2009). Commenting on results in published research articles and masters dissertations in language teaching. *Journal of English for Academic Purposes, 8*(4), 241–251.

Basturkmen, H. (2010). *Developing courses in English for Specific Purposes*. Basingstoke, UK: Palgrave Macmillan.

Basturkmen, H. & Shackleford, N. (2015). How content lecturers help students with language: An observational study of language-related episodes in interaction in first year accounting classrooms. *English for Specific Purposes*, *37*(1), 87–97.

Bates, M. (1978). Writing 'Nucleus'. In R. Mackay & A. Mountford (Eds.), *English for Specific Purposes*, pp. 78–96. London: Longman.

Bates, M. & Dudley-Evans, A. (Eds.). (1976 & following years). The *Nucleus* series. Harlow, UK: Longman.

Bazerman, C. (1988). *Shaping written knowledge: The genre and activity of the experimental article in science*. Madison, WI: University of Wisconsin Press.

Beaugrande, R. de (1989). Special purpose language as a complex system: The case of linguistics. In Laurén & Nordman (Eds.), *From office to school: Special language and internationalisation*, pp. 3–29. Clevedon, UK: Multilingual Matters.

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

Belcher, D. (2006). English for Specific Purposes: Teaching to perceived needs and imagined futures in worlds of work, study, and everyday life. *TESOL Quarterly*, *40*(1), 133–156.

Belcher, D. (2009) What ESP is and can be: An introduction. In D. Belcher (Ed.), *English for Specific Purposes in theory and practice,* pp. 1–20. Ann Arbor, MI: University of Michigan Press.

Belcher, D., Johns, A. M., & Paltridge, B. (2011). *New directions in English for Specific Purposes research*. Ann Arbor, MI: University of Michigan Press.

Benesch, S. (1999). Rights analysis: Studying power relations in an academic setting. *English for Specific Purposes, 18*, 313–327.

Benesch, S. (2001). *Critical English for Academic Purposes: Theory, politics, and practice*. Mahwah, NJ: Lawrence Erlbaum.

Bennett, T. (1979, 2003). *Formalism and marxism* (2nd ed.). London and New York: Routledge.

Benson, P. (2011). *Teaching and researching: Autonomy in language learning* (2nd ed.). Oxon: Routledge.

Benson, P., Chik, A., Gao, X., Huang, J., & Wang, W. (2009). Qualitative research in language teaching and learning journals, 1997–2006. *The Modern Language Journal, 93*(1), 79–90.

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

Bex, T. & Watts, R. (Eds.). (1999). *Standard English: The widening debate*. London: Routledge.

Bhatia, V. K. (1993). *Analyzing genre: Language use in professional settings*. London: Longman.

Bhatia, V. K. (2002). A generic view of academic discourse. In J. Flowerdew (Ed.), *Academic discourse,* pp. 21–39. Harlow, UK: Longman.

Bhatia, V. K. (2004). *Worlds of written discourse: A genre-based view*. London: Continuum.

Biber, D., Conrad, S.M., Reppen, R., Byrd, R.P., Helt, P., Clark, V., Cortes, V., Csomay, E., Urzua, A. (2004). *Representing language use in the university: Analysis of the TOEFL 2000 Spoken and Written Academic Language Corpus*. TOEFL Monograph Series. Princeton, NJ: Educational Testing Service.

Bilbow, G., T. (1997). Spoken discourse in the multicultural workplace in Hong Kong: applying a model of discourse as 'impression management'. In F. Bargiella-Chiappini & S. Harris (Eds.), *The languages of business,* pp. 21–48. Edinburgh: Edinburgh University Press.

Black, P., Harrison, C., Lee, C., Marshall, B., & Wilian, D. (2003). *Assessment for learning: Putting it into practice*. Maidenhead, UK: Open University Press.

Blake, R. J. (2011). Current trends on online language learning. *Annual Review of Applied Linguistics, 31*, 19–35.

Bloch, J. (2013). Technology and ESP. In B. Paltridge & S. Starfield (Eds.), *The handbook of English for Specific Purposes,* pp. 385–401. West Sussex: UK: Wiley-Blackwell.

Block, D. (2007). *Second language identities*. London: Continuum.

Blue, G. M. & Harun, M. (2002). Hospitality language as a professional skill: An ethnographic case study. *English for Specific Purposes, 21*(1), 73–91.

Bond, D. (2000). Negotiating a pedagogy of multiliteracies. In B. Cope & M. Kalantzis (Eds.), *Multiliteracies: Literacy learning and the design of social futures*, pp. 311–320. South Yarra, VIC: Macmillan.

Bourdieu, P. (1984). *Distinction: A social critique of the judgment of taste*. Boston, MA: Harvard University Press.

Bowen, J. A. (2012). *Teaching naked: How moving technology out of your college classroom will improve student learning*. San Francisco: Jossey-Bass.

Bowers, R. (1985). Commentator 2 on 'The use of computers in English teaching and research in China' by Yang Huizhong. In R. Quirk & H. Widdowson (Eds.), *English in the world: Teaching and learning the language and literatures: Papers of an international conference entitled 'Progress in English studies'*, pp. 103–104. Cambridge: Cambridge University Press.

Bowker, L. & Pearson, J. (2002). *Working with specialized language: A practical guide to using corpora*. London: Routledge.

Breen, M. P. (1985). Authenticity in the language classroom. *Applied Linguistics, 6*(1), 60–70.

Brewer, J. D. (2000). *Ethnography*. Buckingham, UK: Open University Press.

Brice Heath, S. (1983). *Ways with words: Life and work in communities and classrooms*. Cambridge, MA: Cambridge University Press.

Brindley, G. (1989). The role of needs analysis in adult ESL programme design. In R. K. Johnson (Ed.), *The second language curriculum*, pp.63–78. Cambridge: Cambridge University Press.

Brindley, G. (2001). Assessment. In Carter, R. & Nunan, D. (Eds.), *The Cambridge guide to Teaching English to Speakers of Other Languages*, pp. 137–143. Cambridge: Cambridge University Press.

Brumfit, C. & Johnson, K. (Eds.). (1979). *The communicative approach to language teaching*. Oxford: Oxford University Press.

Brutt-Griffler, J. & Samimy, K. K. (2001). Transcending the nativeness paradigm. *World Englishes, 20*(1), 99–106.

Burns, A. (2005). Action research. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning,* pp. 241–256. Mahwah, NJ: Lawrence Erlbaum Associates.

Burns, A. & Hood, S. (1995). *Teachers voices: Exploring course design in a changing curriculum*. Sydney: National Centre for English Language Teaching and Research.

Burns, A. & Moore, S. H. (2007). Conversation analysis and the accounting classroom: Exploring implications for LSP teaching. In H. Bowles & P. Seedhouse (Eds.), *Conversation Analysis and Language for Specific Purposes*, pp. 141–182. Bern, Switzerland: Peter Lang.

Burns, A. & Moore, S. H. (2008). Questioning in simulated accountant-client consultations: Exploring implications for ESP teaching. *English for Specific Purposes*, *27*, 322–337.

Butler Y. G. & Lee, J. (2010). The effects of self-assessment among young learners of English. *Language Testing*, *27*(1), 5–31.

Byrnes, H., Maxim, H. H., & Norris, J. M. (2010). Realizing advanced foreign language writing development in collegiate education: Curricular design, pedagogy, assessment. *Modern Language Journal, 94*(Focus Issue), 1–202.

Cacciaguidi-Fahy, S. (2003). Integrating theory and practice: Teaching legal French with the case study method. *Abstracts of papers for integrating content and language: Meeting the challenge of a multilingual higher education*. www.unimaas.nl/icl/abstracts_t2_Caccia.htm. Accessed 13 January 2014.

Cacciaguidi-Fahy, S. (2004). The case for cases in teaching legal French. In R. Wilkinson (Ed.), *Integrating Content and language: Meeting the challenge of a multilingual higher education*, pp. 354–368. Maastricht, Netherlands: Maastricht University, Netherlands.

Canagarajah, A. S. (2001). Addressing issues of power and difference in ESL academic writing. In J. Flowerdew & M. Peacock (Eds.), *Research perspectives on English for Academic Purposes,* pp. 117–131. Cambridge: Cambrdge University Press.

Canagarajah, A. S. (2002). Multilingual writers and the academic community: Towards a critical relationship. *Journal of English for Academic Purposes, 1*(1), 29–44.

Canagarajah, A. S. (2005). Critical pedagogy in L2 learning and teaching. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning,* pp. 931–949. Mahwah, NJ: Lawrence Erlbaum Associates.

Canagarajah, A. S. (2006). The place of World Englishes in composition: Pluralization continued. *College Composition and Communication (CCC), 57*(4), 586–619.

Candlin, C. N. (1997). General editor's preface. In B.-L. Gunnarsson, P. Linell & B. Nordberg (Eds.), *The construction of professional discourse*, pp. viii–xiv. London: Longman.

Candlin, C. N. (1999). General editor's preface. In G. Mawer (Ed.), *Language and literacy in workplace education: Learning at work,* pp. vii–xv. London: Longman.

Candlin, C. N., Bhatia, V. & Jensen, C. (2002a). Must the worlds collide? Professional and academic discourses in the study and practice of law. In G. Cortese & P. Riley (Eds.), *Domain-specific English: Textual practices across communities and classrooms*, pp. 101–114. Bern, Switzerland: Peter Lang.

Candlin, C. N., Bhatia, V., & Jensen, C. (2002b). Developing legal writing materials for English second language learners: problems and perspectives. *English for Specific Purposes, 21*, 299–320.

Candlin, C. N. & Breen, M. (1980/2001). The essentials of a communicative curriculum in language teaching. *Applied Linguistics, 1*(2), 89–112. Revised version in D. R. Hall & A. Hewings (Eds.), 2001. *Innovation in English Language Teaching,* pp. 10–26. London: Routledge.

Candlin, C. N. & Crichton, J. (2011a). Introduction. In C. N. Candlin, and J. Crichton (Eds.), *Discourses of deficit*, pp. 1–22. Basingstoke, UK: Palgrave Macmillan.

Candlin, C. N. & Crichton, J. (2011b). Emergent themes and research challenges: Reconceptualising LSP. In M. Peterson & J. Engberg (Eds.), *Current trends in LSP research*, pp. 277–316. Bern, Switzerland: Peter Lang.

Candlin, C. N. & Crichton, J. (2012). From ontology to methodology: Exploring the discursive landscape of trust. In C. N. Candlin & J. Crichton (Eds.), *Discourses of trust*, pp. 1–18. Basingstoke, UK: Palgrave Macmillan.

Candlin, C. N. & Crichton, J. (2013). Putting our trust in the learner. In J.Arnold & T. Murphey (Eds.), *Meaningful action: Earl Stevick's influence on language teaching,* pp. 79–94. Cambridge: Cambridge University Press.

Candlin, C. N., Gollin, S., Plum, G., Spinks, S., & Smith, V. (1998). *Researching academic literacies*. Sydney: Macquarie University.

Carter, R. (2001). Politics and knowledge about language. In D. R. Hall, & A. Hewings (Eds.), *Innovation in English Language Teaching*, pp. 87–98. London and New York: Routledge.

Chapelle, C. A. (2001). *Computer applications in second language acquisition: Foundations for teaching, testing and research*. Cambridge: Cambridge University Press.

Charles, M. & Marschan-Piekkari, R. (2002). Language training for enhanced horizontal communication: A challenge for MNCs. *Business Communication Quarterly*, *65*(2), 9–29.

Cheng, W. & Mok, E. (2008). Discourse processes and products: Land surveyors in Hong Kong. *English for Specific Purposes, 27*(1), 57–73.

Chomsky, N. (1957). *Syntactic structures*. The Hague: Mouton.

Chomsky, N. (1965). *Aspects of the theory of syntax*. Cambridge, MA: Massachusetts Institute of Technology.

Chomsky, N. (1986). *Knowledge of language: its nature, origin and use*. New York: Praeger.

Chun, C. W. (2009). Contesting neoliberal discourses in EAP: Critical praxis in an IEP classroom. *Journal of English for Academic Purposes, 8*(2), 111–120.

Clapham, C. (1996). The development of IELTS: A study of the effect of background knowledge on reading comprehension. *Studies in Language Testing 4*, Cambridge: Cambridge ESOL/Cambridge University Press.

Compton, L. K. (2009). Preparing language teachers to teach language online: A look at skills, roles, and responsibilities. *Computer Assisted Language Learning, 22*(1), 73–99.

Cope, B. & Kalantzis, M. (2000a). Introduction. Multiliteracies: The beginnings of an idea. In B. Cope & M. Kalantzis (Eds.), *Multiliteracies: Literacy learning and the design of social futures,* pp. 3–8. Australia: South Yarra, VIC: Macmillan.

Cope, B. & Kalantzis, M. (Eds.). (2000b). *Multiliteracies: Literacy learning and the design of social futures*. Australia: South Yarra, VIC: Macmillan.

Corder, S. P. (1967). The significance of learner errors. *International Review of Applied Linguistics*, *5*, 161–170.

Corder, S. P. (1981). Error analysis and interlanguage. Oxford: Oxford University Press.

Cowling, J. D. (2007). Needs analysis: Planning a syllabus for a series of intensive workplace courses at a leading Japanese company. *English for Specific Purposes, 26*(4), 426–442.

Coxhead, A. (2000). A new academic wordlist. *TESOL Quarterly, 34*(2), 213–238.
Creese, A. (2008). Linguistic ethnography. In K. A. King & N. H. Hornberger (Eds.), *Encyclopaedia of language and education* (2 ed.), pp. 229–241. New York: Springer Science + Business Media LLC.
Creswell, J. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: SAGE.
Creswell, J. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: SAGE.
Creswell, J. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks, CA: SAGE.
Crichton, J. (2003). *Issues of interdiscursivity in the commercialisation of professional practice: The case of English language teaching*. Unpublished doctoral dissertation. Macquarie University, Sydney, Australia.
Crichton, J. (2010). *The discourse of commercialization: A multi-perspectived analysis*. Basingstoke, UK: Palgrave Macmillan.
Criper, C. & Davies, A. (1988). *ELTS validation project report: Research report 1(i).* London: The British Council/University of Cambridge Local Examinations Syndicate.
Crystal, D. (1995). *Cambridge encyclopaedia of the English language*. Cambridge: Cambridge University Press.
Cunningham, C. (2009). Transforming schooling through technology: Twenty-first-century approaches to participatory learning. *Education and Culture, 25*(2), 46–61.
Daoud, M. (2000). LSP in North Africa: status, problems, and challenges. *Annual Review of Applied Linguistics, 20*, 77–96.
Davies, A. (1999). Standard English: Discordant voices. *World Englishes, 18*(2), 171–186.
Davies, D. (2005). *Varieties of Modern English: An introduction*. London: Routledge.
Denley, P. (1988). The Mediterranean in the age of renaissance. In G. Holmes (Ed.), *The Oxford illustrated history of medieval Europe*, pp. 235–296. London: Guild Publishing/Oxford University Press.
Denzin, N. K. & Lincoln, Y. S. (1994). Introduction: Entering the field of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 1–17). Thousand Oaks, CA: SAGE.
Denzin, N. K. & Lincoln, Y. S. (2005a). Introduction: The discipline and practice of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (3rd ed.), pp. 1–20. Thousand Oaks, CA: SAGE.
Denzin, N. K. & Lincoln, Y. S. (2005b). Preface. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (3rd ed.), pp. ix–xii. Thousand Oaks, CA: SAGE.
Denzin, N. K. & Lincoln, Y. S. (2008). Paradigms and perspectives in contention. In N. K. Denzin & Y. S. Lincoln (Eds.), *The landscape of qualitative research* (3rd ed.), pp. 245–253. Thousand Oaks, CA: SAGE.
Deterding, D. & Kirkpatrick, A. (2006). Emerging South-East Asian Englishes and intelligibility. *World Englishes, 25*(3/4), 391–409.
Douglas, D. (2000). *Assessing Languages for Specific Purposes*. Cambridge: Cambridge University Press.
Douglas, D. (2001). Three problems in testing Language for Specific Purposes: Authenticity, specificity and inseparability. In C. Elder, A. Brown, E. Grove, K. Hill, N. Iwashita, T. Lumley & K. O'Loughlin (Eds.), *Experimenting with*

uncertainty: Essays in honour of Alan Davies, pp. 45–52. Cambridge: Cambridge University Press.

Dovey, T. (2006). What purposes, specifically? Re-thinking purposes and specificity in the context of the 'new vocationalism'. *English for Specific Purposes, 25*(4), 387–402.

Dressen-Hammouda, D. (2008). From novice to disciplinary expert: Disciplinary identity and genre mastery. *English for Specific Purposes, 27*(2), 233–252.

Dudley-Evans, T. (1997). Five questions for LSP teacher-training. In R. Howard & G. Brown (Eds.), *Teacher education for Languages for Specific Purposes*, pp.58–67. Clevedon, UK: Multilingual Matters.

Dudley-Evans, T. (2001). Team-teaching in EAP: Changes and adaptations in the Birmingham approach. In J. Flowerdew & M. Peacock (Eds.), *Research perspectives on English for Academic Purposes*, pp.225–238. Cambridge: Cambridge University Press.

Dudley-Evans, T. & St John, M. J. (1998). *Developments in English for Specific Purposes: A multidisciplinary approach*. Cambridge: Cambridge University Press.

Dueñas, P. M. (2007). 'I/we focus on…': A cross-cultural analysis of self-mentions in business management research articles. *Journal of English for Academic Purposes, 6*(2), 143–162.

Duff, P. A. (2008). *Case study research in applied linguistics*. New York: Lawrence Erlbaum Associates.

Dulay, H. & Burt, M. (1974). Errors and strategies in child second language acquisition. *TESOL Quarterly*, *8*(2), 129–136.

Eggins, S. & Slade, D. (1997). *Analyzing casual conversation.* London: Cassell.

Eggins, S. & Slade, D. (2012). Clinical handover as an interactive event: Informational and interactional communication strategies in effective shift-change handovers. *Communication & Medicine, 9*(3), 215–227.

Ellis, N. & Larsen-Freeman, D. (2006). Language emergence: Implications for applied linguistics. *Applied Linguistics, 27*, 558–589.

Ennew, C. T. & Fujia, Y. (2009). Foreign universities in China: A case study. *European Journal of Education, 44*(1), 21–36.

Ewer, J. & Boys, O. (1981). The EST textbook situation: An enquiry. *The ESP Journal*. *1*(2), 87–105.

Ewer, J. & Latorre, G. (1969). *A course in basic scientific English.* London: Longman.

Fairclough, N., Graham, P., Lemke, J., & Wodak, R. (2004). Introduction. *Critical Discourse Studies, 1*(1), 1–7.

Fairclough, N. & Wodak, R. (1997). Critical discourse analysis. In T. Van Dijk, A. (Ed.), *Discourse as social interaction,* pp. 258–284. London: SAGE.

Fakhri, A. (2004). Rhetorical properties of Arabic research article introductions. *Journal of Pragmatics, 36*(6), 1119–1138.

Farris, C., Trofimovich, P., Segalowitz, N., & Gatbonton, E. (2008). Air traffic communication in a second language: Implications of cognitive factors for training and assessment. *TESOL Quarterly, 42*(3), 397–410.

Feez, S. (2002). Heritage and innovation in second language education. In A. M. Johns (Ed.), *Genre in the classroom: Multiple perspectives,* pp. 43–69. Mahwah, NJ: Lawrence Erlbaum.

Felber, H. (1981). The Vienna school of terminology: Fundamentals and theory. *Infoterm Series, 6*, 69–86.

Ferenczy, G. & Rudnai, M. (1994). Translation of medical texts: A task in the Hungarian state language examination. In W. Scott & S. Muhlhaus (Eds.), *Languages for Specific Purposes*, pp. 225–227. Kingston upon Thames, UK: CILT in Association with Kingston University School of Languages.

Ferris, D. & Tagg, T. (1996). Academic oral communication needs of EAP learners: What subject subject-matter instructors actually require. *TESOL Quarterly, 30*(1), 31–55.

Firth, A. (1996). The discursive accomplishment of normality: On 'lingua franca' English and conversation analysis. *Journal of Pragmatics*, *26*(2), 237–259.

Flowerdew, J. (1999). Problems in writing for scholarly publication in English: The case of Hong Kong. *Journal of Second Language Writing, 8*(3), 243–264.

Flowerdew, J. (2011). Reconciling contrasting approaches to genre analysis: The whole can equal more than the sum of the parts. In D. Belcher, A. M. Johns & B. Paltridge (Eds.), *New directions in English for Specific Purposes research,* pp. 119–144. Ann Arbor, MI: University of Michigan Press.

Flowerdew, L. (2005). An integration of corpus-based and genre-based approaches to text analysis in EAP/ESP: Countering criticisms against corpus-based methodologies. *English for Specific Purposes, 24*, 321–332.

Flowerdew, L. (2012). *Corpora and language education*. Basingstoke, UK: Palgrave Macmillan.

Fluck, H-R. & Yong L. (1989). Zur Situation der Fachsprachlichen Ausbildung (Deutsch als Fremdsprache) an der Tongji-Universität Schanghai (Volksrepublik China). In Laurén & Nordman (Eds.), 1989a. *From office to school: Special language and internationalisation*, pp. 92–104. Clevedon, UK: Multilingual Matters.

Forey, G. (2004). Workplace texts: Do they mean the same for teachers and business people? *English for Specific Purposes, 23*(4), 447–469.

Fortanet, I. (2008). Evaluative language in peer review referee reports. *Journal of English for Academic Purposes, 7*(1), 27–37.

Freedman, A. & Medway, P. (Eds.). (1994). *Genre and the new rhetoric*. London: Taylor and Francis.

Freeman, D. (2009). What makes research 'qualitative'? In J. Heighham & R. A. Croker (Eds.), *Qualitative research in applied linguistics: A practical introduction,* pp. 25–41. New York: Palgrave Macmillan.

Gao, Y., Li, L., & Lü, J. (2001). Trends in research methods in applied linguistics: China and the West. *English for Specific Purposes, 20*(1), 1–14.

Garcia, P. (2002). An ESP program for union members in 25 factories. In T. Orr (Ed.), *English for Specific Purposes*, pp. 161–174. Alexandria, V.A: TESOL.

Garrett, N. (2009). Computer-assisted language learning trends and issues revisited: Integrating innovation. *Modern Language Journal, 93*(Focus Issue), 719–740.

Gee, J. P. (1990). *Social linguistics and literacies: Ideology in discourses*. London: Falmer Press.

Gee, J. P. (1994). New alignments and old literacies: Critical literacy, postmodernism, and fast capitalism. In P. O'Connor (Ed.), *Thinking work. Vol. 1. Theoretical perspectives on workers' literacies*. Sydney: ALBSAC.

Gernet, J. (1972/2002). *Le monde Chinois*, translated by J.R. Foster & C. Hartman as *A history of Chinese civilisation*, (2nd ed.). Cambridge University Press 1992. Reprinted by The Folio Society (London) 2002.

Giddens, A. (1984). *The constitution of society: Outline of the theory of structuration*. Berkeley, CA: University of California Press.

Gimenez , J. (2008). Beyond the academic essay: Discipline-specific writing in nursing and midwifery. *Journal of English for Academic Purposes, 7*(3), 151–164.
Gimenez, J. (2014). Multi-communication and the business English class: Research meets pedagogy. *English for Specific Purposes*, *35*, 1–16.
Glaser, B. G. & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. New York: Aldine de Gruyter.
Gollin-Kies, S. (2014). Methodologies reported in ESP research articles: A comparative survey of two leading journals. *English for Specific Purposes, 36*, 27–34.
Gosden, H. (1992). Discourse functions of marked theme in scientific research articles. *English for Specific Purposes, 11*(3), 207–224.
Gotti, M. (2002). The development of English for specialized purposes. In G. Cortese & P. Riley, P. (Eds.), *Domain-specific English: Textual practices across communities and classrooms*, pp. 65–86. Bern, Switzerland: Peter Lang.
Graddol, D. (1997). *The future of English?* London: British Council.
Graddol, D. (2006). *English next*. London: The British Council
Green, J. & Bloome, D. (1997). Ethnography and ethnographers of and in education: A situated perspective. In J. Flood, S. Heath & D. Lapp (Eds.), *Handbook of research on teaching literacy through communicative and visual arts,* pp. 181–202. New York: Simon & Schuster Macmillan.
Grey, M. (2009). Ethnographers of difference in a critical EAP community-becoming. *Journal of English for Academic Purposes, 8*(2), 121–133.
Grice, P. (1975). Logic and conversation. In P. Cole and J. Morgan (Eds.), *Syntax and semantics. Volume 3: Speech acts*, pp. 41–58. New York: Academic Press.
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.
Gudykunst, W. B. (2002). Introduction. In W. B. Gudykunst & B. Mody (Eds.), *Handbook of international and intercultural communication,* pp. 19–24. Thousand Oaks, CA: SAGE.
Haddad, T. & Wahba, A. (1932). *Medical syllabus in the colloquial Arabic of Syria and Palestine*. Beirut: American Press.
Hagen, S. (Ed.). (1999). *Business communication across borders: A study of language use and practice in European companies*. London: Languages National Training Organisation in association with Centre for Information on Language Teaching and Research.
Hall, D. R. (1985). Attitudes to linguistic variation: The neglected variable. *Indian Journal of Applied Linguistics, XI* (I), 33–41.
Hall, D. R. (1994). The advantages for the LSP teacher of having different specialisations in the same class. In Khoo, R. (Ed.), *The practice of LSP: Perspectives, programmes and projects*, pp. 209–217. RELC Anthology Series 34. Singapore: SEAMEO-RELC.
Hall, D. R. (1995). Materials writing: Theory and practice. In A. Hidalgo, D. R. Hall, & G. M. Jacobs (Eds.), *Getting started: Materials writers on materials writing*, pp. 8–24. Singapore: SEAMEO-RELC.
Hall, D. R. (2001). Relinquishing teacher control: Learners as generators of course content. In Leki, I. (Ed.), *Academic writing programs*, pp. 147–157. Washington: TESOL: Case Studies in TESOL Practice.

Hall, D. R. (2013). Introduction. In Huhta, M., Vogt, K., Johnson, E. & Tulkki, H. *Needs analysis for ESP course design*, pp. 1–8. Cambridge: Cambridge University Press.

Hall, D. R. & Kenny, B. (1986). Testing student language performance at the Asian institute of technology. *Pasaa*, *16*(2), 60–68.

Halliday, M. A. K. (1985). *A short introduction to systemic functional grammar*. London: Edward Arnold.

Halliday, M. A. K. (1993). On the language of physical science. In M. A. K. Halliday, and J. Martin (Eds.), *Writing science*, pp. 54–68. London: Falmer Press.

Halliday, M. A. K. (1994). *An introduction to functional grammar* (2nd ed.). London: Edward Arnold.

Halliday, M. A. K. & Hasan, R. (1976). *Cohesion in English*. Harlow: Longman.

Halliday, M. A. K. & Hasan, R. (1985). *Language, context and text: Aspects of language in a social-semiotic perspective*. Geelong, VIC: Deakin University Press.

Halliday, M. A. K. & Martin, J. R. (1993). *Writing science: Literacy and discursive power*. London: The Falmer Press.

Halliday, M. A. K. & Matthiessen, C. (2004). *An introduction to functional grammar* (3rd ed.). London: Arnold.

Halliday, M. A. K., Mcintosh, A., & Strevens, P. (1964). *The linguistic sciences and language teaching*. Oxford: Oxford University Press.

Hanson-Smith, E. & Rilling, S. (Eds.). (2007). *Learning languages through technology*. Alexandria, VA: TESOL Inc.

Harklau, L., Losey, K. M., & Siegal, M. (Eds.). (1999). *Generation 1.5 meets college composition: Issues in the teaching of writing to US-educated learners of ESL*. Mahwah, NJ: Lawrence Erlbaum Associates.

Harris R. (1988). *Murray, Moore and the myth*. In Harris R. (Ed.), *Linguistic thought in England 1914–1945*, pp. 1–26. New York: Routledge.

Hasan, R. (1996). The nursery tale as a genre. In C. Cloran, D. Butt & W. G (Eds.), *Ways of saying: Ways of meaning – selected papers of Ruqaiya Hasan,* pp. 51–72. London: Cassell.

Healey, D. (2006). Networking for learning and teaching English for Specific Purposes. In E. Arnó-Macià, A. Soler Cervera & C. Rueda Ramos (Eds.), *Information Technology in Language for Specific Purposes: Issues and prospects,* pp. 139–153. New York: Springer.

Heighham, J. & Sakui, K. (2009). Ethnography. In J. Heighham & R. A. Croker (Eds.), *Qualitative research in applied linguistics: A practical introduction,* pp. 91–111. Basingstoke, UK: Palgrave Macmillan.

Heller, M. (2003). Globalization, the new economy, and the commodification of language and identity. *Journal of Sociolinguistics, 7*(4), 473–492.

Herbert, A. (1965). *The structure of technical English*. Harlow: Longman.

Hewings, M. (2002). A history of ESP through 'English for Specific Purposes' [Electronic Version]. *ESP World*, 3. http://www.esp-world.info/Articles_3/issue_3.html. Accessed 26 November 2014.

Hill, L. A. (1968). *Note-taking practice*. Oxford: Oxford University Press.

Hinds, J. (1987). Reader versus writer responsibility: A new typology. In U. Connor & R. Kaplan (Eds.), *Writing across languages: An analysis of L2 texts,* pp. 141–152. Reading, MA: Addison Wesley.

Hinkel, E. (2004). *Teaching academic ESL writing: Practical techniques in vocabulary and grammar*. New York: Routledge.
Hirano, E. (2009). Research article introductions in English for Specific Purposes: A comparison between Brazilian Portuguese and English. *English for Specific Purposes, 28*(4), 240–250.
Holec, H. (1981). *Autonomy in foreign language learning*. Oxford: Pergamon.
Holliday, A. (1994). *Appropriate methodologies and social context*. Cambridge: Cambridge University Press.
Holme, R. & Chalauisaeng, B. (2006). The learner as needs analyst: The use of participatory appraisal in the EAP reading classroom. *English for Specific Purposes, 25*(4), 403–419.
Holt, J. (1967). *How children learn*. New York: Pitman Publishing.
Hood, M. (2009). Case study. In J. Heighham & R. A. Croker (Eds.), *Qualitative research in applied linguistics: A practical introduction,* pp. 66–90. Basingstoke, UK: Palgrave Macmillan.
Hruby, G. G. (2001). Sociological, postmodern, and new realism perspectives on social constructionism: Implications for literacy research. *Reading Research Quarterly, 36*(1), 48–62.
Huckin, T. (2003). Specificity in LSP, *Ibérica, 5*, 3–17.
Hughes, A. (2003). *Testing for language teachers*. (2nd ed.). Cambridge: Cambridge University Press.
Huhta, M., Vogt, K., Johnson, E. & Tulkki, H. (2013). *Needs analysis for ESP course design*. Cambridge: Cambridge University Press.
Hunston, S. (2002). *Corpora in applied linguistics*. Cambridge, UK: Cambridge University Press.
Hunston, S. (2002). *Corpora in applied linguistics*. Cambridge: Cambridge University Press.
Hutchinson, T. & Waters, A. (1980). ESP at the crossroads. *English for Specific Purposes 36*, Oregon State University, reprinted in Swales, J. 1985. *Episodes in ESP*, pp. 177–185. Oxford: Pergamon Press.
Hutchinson, T. & Waters, A. (1987). *English for Specific Purposes*. Cambridge: Cambridge University Press.
Hyland, K. (2001). Humble servants of the discipline? Self-mention in research articles. *English for Specific Purposes, 20*(3), 207–226.
Hyland, K. (2002). Specificity revisited: How far should we go now? *English for Specific Purposes, 21*, 385–395.
Hyon, S. (1996). Genre in three traditions: Implications for ESL. *TESOL Quarterly, 30*(4), 693–722.
Hyon, S. (2008). Convention and inventiveness in an occluded academic genre: A case study of retention–promotion–tenure reports. *English for Specific Purposes, 27*(2), 175–192.
Ingleton, C. & Cadman, K. (2002). Silent issues for international postgraduate research students. *The Australian Educational Researcher, 29*(1), 93–114.
Itokawa, H. (2000). The mental state of an air-line pilot as a machine operator. *International Association of Traffic and Safety Sciences Review*, *26*(2), 48–56.
Ivanič, R. (1997). *Writing and identity: The discoursal construction of identity in academic writing*. Amsterdam and Philadelphia, PA: John Benjamins.
Ivankova, N. V. & Creswell, J. W. (2009). Mixed methods. In J. Heighham & R. A. Croker (Eds.), *Qualitative research in applied linguistics: A practical introduction,* pp. 135–161. Basingstoke, UK: Palgrave Macmillan.

Jackson, J. (2002). The China strategy: A tale of two case leaders. *English for Specific Purposes, 21*(3), 243–259.
Jackson, J. (2003). Case-based learning and reticence in a bilingual context: Perceptions of business students in Hong Kong, *System, 31*(4), 457–469.
Jackson, J. (2004). Case-based teaching in a bilingual context: Perceptions of business faculty in Hong Kong. *English for Specific Purposes, 23*, 213–232.
Jacoby, S. & McNamara, T. (1999). Locating competence. *English for Specific Purposes*, *18*(3), 213–241.
James, M. A. (2006). Transfer of learning from a university content-based EAP course. *TESOL Quarterly, 40*(4), 783–805.
James, M. A. (2014). Learning transfer in English-for-Academic-Purposes contexts: A systematic review of research. *Journal of English for Academic Purposes, 14*, 1–13.
Jamieson, J. (2005). Trends in computer-based second language assessment. *Annual Review of Applied Linguistics, 25*, 228–242.
Jaworski, A. & Coupland, N. (1999). Perspectives on discourse analysis. In A. Jaworski & N. Coupland (Eds.), *The discourse reader,* pp. 1–44. London: Routledge.
Jenkins, J. (2001). 'Euro-English' accents. *English Today, 68*(17), 16–19.
Jenkins, J. (2012). English as a Lingua Franca from the classroom to the classroom. *ELT Journal, 66*(4), 486–494.
Jensen, C. & Hansen, C. (1995). The effect of prior knowledge on EAP listening-test performance. *Language Testing, 12*(1), 99–119.
Johns, A. M. (1995). Teaching classroom and authentic genres: Initiating students into academic cultures and discourses. In D. Belcher & G. Braine (Eds.), *Academic writing in a second language,* pp. 277–292. Norwood, NJ: Ablex.
Johns, A. M. (1997). *Text, role, and context: Developing academic literacies*. Cambridge: Cambridge University Press.
Johns, A. M. (Ed.). (2002). *Genre in the classroom: Multiple perspectives*. Mahwah, NJ: Lawrence Erlbaum Associates.
Johns, A. M. (2006). Languages for Specific Purposes: Pedagogy. In K. Brown (Ed.), *Encyclopaedia of language and linguistics*, (2nd ed.), pp. 684–690. Amsterdam: Elsevier.
Johns, A. M. & Dudley-Evans, A. (1991). English for Specific Purposes: International in scope, specific in purpose. *TESOL Quarterly, 25*, 297–314.
Johnson, E., Garner, M., Hick, S., & Matthews, D. (1993). *Police speak: Police communications and language and the channel tunnel*. Cambridge: PoliceSpeak Publications.
Jordan, R. R. (1997). *English for Academic Purposes: A guide and resource book for teachers*. Cambridge and New York: Cambridge University Press.
Jurczak, B. (2004). A language audit in selected petrol stations located along the national borders of Poland. In C. Koster (Ed.), *A handbook on language auditing*, pp. 220–233. Amsterdam: Editions De Werelt.
Juzwik, M. M., Curcic, S., Wolbers, K., Moxley, K. D., Dimling, L. M., & Shankland, R. K. (2006). Writing into the 21st Century: An overview of research on writing, 1999 to 2004. *Written Communication, 23*(4), 451–476.
Kachru, B. B. (1985). Standards, codification and sociolinguistic realism: The English language in the outer circle. In R. Quirk & H. Widdowson (Eds.), *English in the World: Teaching and learning the languages and literatures: Papers of an international conference entitled 'Progress in English studies',* pp. 11–30. Cambridge: Cambridge University Press.

Kachru, B. B. (1986). The bilingual's creativity and contact literatures. In B. Kachru (Ed.), *The alchemy of English* (1990 reprinted edition), pp. 159–173. Oxford: Pergamon.
Kachru, B. B. (1997). World Englishes and English-using communities. *Annual Review of Applied Linguistics, 17*, 66–87.
Kaplan, R. (2001). Cultural thought patterns in intercultural education (1966). In T. J. Silva & P. K. Matsuda (Eds.), *Landmark essays on ESL writing,* pp. 11–26. Mahwah NJ: Lawrence Erlbaum.
Kemmis, S. & McTaggart, R. (1986). *The action research planner* (3rd ed.). Geelong, Australia: Deakin University Press.
Kemmis, S. & McTaggart, R. (2005). Participatory action research: Communicative action and the public sphere. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (3rd ed.), pp. 559–603. Thousand Oaks, CA: SAGE.
Kemmis S, McTaggart R, Nixon R. (2014). *The action research planner: Doing critical participatory action research*. Singapore: Springer
Knox, J. (2007). Foreign eyes on Thailand: An ESP project for EFL learners. In A. Burns & H. de Silva Joyce (Eds.), *Planning and teaching creatively within a required curriculum for adult learners*, pp. 119–142. Alexandria, VA: TESOL Inc.
Koester, H. (2006). *Investigating workplace discourse*. London: Routledge.
Koutsantoni, D. (2006). Rhetorical strategies in engineering research articles and research theses: Advanced academic literacy and relations of power. *Journal of English for Academic Purposes, 5*(1), 19–36.
Kramsch, C. (1993). *Context and culture in language teaching*. Oxford: Oxford University Press.
Kramsch, C. & Sullivan, P. (1996). Appropriate pedagogy. *ELT Journal, 50*(3), 199–212.
Kress, G., Ogborn, J., Jewitt, C., & Tsatsarelis, C. (2001). *Multimodal teaching and learning: The rhetorics of the science classroom*. London: Continuum.
Kress, G. & Van Leeuwen, T. (1996). *Reading images: The grammar of visual design*. London: Routledge.
Lackstrom, J., Selinker, L. & Trimble, L. (1973). Technical rhetorical principles and grammatical choice. *TESOL Quarterly, 7*, 127–136.
Lafford, B. (2012). Languages for Specific Purposes in the United States in a global context: Commentary on Grosse & Voght (1991) revisited. *Modern Language Journal, 96*(Focus Issue), 1–27.
Larsen-Freeman, D. (1997). Chaos/complexity science and second language acquisition. *Applied Linguistics*, *18*(2), 141–165.
Laurén, C. (2002). The conflict between national languages and English. In G. Cortese & P. Riley (Eds.), *Domain-specific English: Textual practices across communities and classrooms*, pp. 87–97. Bern, Switzerland: Peter Lang.
Lave, J. & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. New York: Cambridge University Press.
Layder, D. (1993). *New strategies in social research: An introduction and guide*. Cambridge: Polity Press.
Layder, D. (2006). *Understanding social theory* (2nd ed.). London: SAGE.
Lazaraton, A. (2000). Current trends in research methodology and statistics in applied linguistics. *TESOL Quarterly, 34*, 175–181.

Lazaraton, A. (2009). Discourse analysis. In J. Heighham & R. A. Croker (Eds.), *Qualitative research in applied linguistics: A practical introduction,* pp. 242–259. New York: Palgrave Macmillan.

Leahy, C. (2001). Bilingual negotiation via email: An international project. *Computer Assisted Language Learning, 14*(1), 15–42.

Leahy, C. (2004). Researching language learning processes in open CALL settings for advanced learners. *Computer Assisted Language Learning, 17*(3–4), 289–313.

Lear, D. (2012). Languages for Specific Purposes curriculum creation and implementation in service to the U.S. Community. *Modern Language Journal, 96*(Focus issue), 158–172.

Lee, D. & Swales, J. M. (2006). A corpus-based EAP course for NNS doctoral students: Moving from available specialized corpora to self-compiled corpora. *English for Specific Purposes*, *25*(1), 56–75.

Lee, G. (2009). Speaking up: Six Korean students' oral participation in class discussions in US graduate seminars. *English for Specific Purposes, 28*(3), 142–156.

Lee, H-K. & Anderson, C. (2007). Validity and topic generality of a writing performance test. *Language Testing, 24*(3), 307–330.

Leech, G. (1974). *Semantics*. London: Penguin.

Legutke, M. & Thomas, H. (1991). *Process and experience in the language classroom*. London: Longman.

Leki, I. (2005). Negotiating socioacademic relations: English learners' reception by and reaction to college faculty. *Journal of English for Academic Purposes, 5*(2), 136–152.

Levy, M. (2009). Technologies in use for second language learning. *The Modern Language Journal, 93*(Focus Issue), 769–782.

Lewin, K. (1946). Action research and minority problems. *Journal of Social Issues, 2*(4), 34–46.

Lillis, T. (2008). Ethnography as method, methodology, and 'deep theorizing': Closing the gap between text and context in academic writing. *Written communication, 25*(3), 353–388.

Lindemann, S. & Mauranen, A. (2001). 'It's just real messy': The occurrence and function of *just* in a corpus of academic speech. *English for Specific Purposes, 20*, 459–475.

Lorés, R. (2004). On RA abstracts: From rhetorical structure to thematic organisation. *English for Specific Purposes, 23*(3), 280–302.

Louhiala-Salminen, L. (2002). The fly's perspective: Discourse in the daily routine of a business manager. *English for Specific Purposes, 21*, 211–231.

Louhiala-Salminen, L., Charles, M., & Kankaanranta, A. (2005). English as a Lingua Franca in Nordic corporate mergers: Two case companies. *English for Specific Purposes, 24*, 401–421.

Luzón, M. J. & González, M. I. (2006). Using the internet to promote autonomous learning in ESP. In E. Arnó, A. S. Cervera & C. R. Ramos (Eds.), *Information Technology in Language for Specific Purposes*. New York: Springer Science + Business Media Inc.

Lyons, J. (1968). *Introduction to theoretical linguistics*. Cambridge: Cambridge University Press.

Lyons, J. (1977). *Semantics*, Volume 1 and 2. Cambridge: Cambridge University Press.

Macdonald, M., Badger, R., & White, G. (2000). The real thing?: Authenticity and academic listening. *English for Specific Purposes, 19*, 253–267.

Mackay, R. & Mountford, A. (Eds.). (1978). *English for Specific Purposes*. Harlow, UK: Longman.

Martin, J. R. (1990, December). *Macro-genres: The ecology of the page (plenary paper).* Paper presented at the Language in Education Conference, University of Wollongong.

Martin, J. R. (1992). *English text*. Philadelphia: John Benjamins.

Martin, J. R. & Rose, D. (2007). *Working with discourse: Meaning beyond the clause* (2nd ed.). London: Continuum.

Martínez, I. A. (2003). Aspects of theme in the method and discussion sections of biology journal articles in English. *Journal of English for Academic Purposes, 2*(2), 103–123.

Martínez, I. A., Beck, S. C., & Panza, C. B. (2009). Academic vocabulary in agriculture research articles: A corpus-based study. *English for Specific Purposes, 28*, 183–198.

Master, P. (2005). Research in English for Specific Purposes. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning,* pp. 99–116. Mahwah, NJ: Lawrence Erlbaum Associates.

Mawer, G. (1990). *Communication skills: Audit, metal and engineering industry workers*. Sydney: English in the workplace, AMES.

Mawer, G. (1991). *Language audits and industry restructuring.* Sydney: National Centre for English Language Teaching and Research.

Mazdayasna, G. & Tahririan, M. H. (2008). Developing a profile of the ESP needs of Iranian students: The case of students of nursing and midwifery. *Journal of English for Academic Purposes, 7*(4), 277–289.

McGregor, S. L. T. & Murnane, J. A. (2010). Paradigm, methodology and method: Intellectual integrity in consumer scholarship. *International Journal of Consumer Studies, 34*, 419–427.

McNamara, T. (1990) Item response theory and the validation of an ESP test for health professionals. *Language Testing, 7*(1), 52–75.

McNamara, T. (1996). *Measuring second language performance*. London/New York: Addison Wesley Longman.

McNamara, T. (2014, August). Closing comments at AILA 2014 in the symposium. *How authentic can we get? Reconstructing a specific-purpose test to reflect health professional values*, Brisbane, Australia.

McNamara, T. & Elder, C. (2014, August). The hunt for ‘indigenous criteria’ in workplace communication assessment: The case of health professionals. Paper presented at AILA 2014 in the symposium. *How authentic can we get? Reconstructing a specific-purpose test to reflect health professional values*, Brisbane, Australia.

McNamara, T. & Roever, C. (2006). *Language testing: The social dimension*. Malden, MA and Oxford, UK: Blackwell Publishing.

McNiff, J. & Whitehead, J. (2006). *All you need to know about action research.* London: SAGE.

Mead, R. (1982). Review of Munby: Communicative syllabus design. *Applied Linguistics 3*(1), 70–78.

Meierkord, C. (2006a). Introduction. *International Journal of the Sociology of Language*, (177), 1–8.

Meierkord, C. (2006b). Lingua Franca communication past and present. *International Journal of the Sociology of Language*, (177), 9–30.
Merriam, S. (1998). *Qualitative research and case study applications in education* (2nd ed.). San Francisco, CA: Jossey-Bass.
Merriam, S. (2002). Introduction to qualitative research. In S. Merriam (Ed.), *Qualitative research in practice: Examples for discussion and analysis,* pp. 3–17. San Francisco, CA: Jossey-Bass.
Messick, S. (1989). Validity. In R. L. Linn (Ed.), *Educational assessment* (3rd ed., pp. 13–103). New York: Macmillan.
Messick, S. (1996). Validity and washback in language testing. *Language Testing 13*(3), 241–256.
Millard, E. (2006). Transformative pedagogy: Teachers creating a literacy of fusion. In K. Pahl & J. Rowsell (Eds.), *Travel notes from the New Literacy studies: instances of practice*, pp. 234–253. Clevedon, UK/ Tonawanda, NY/ North York, Ontario: Multilingual Matters.
Miller, C. R. (1984). Genre as social action. *Quarterly Journal of Speech, 70*, 151–167.
Minsky, M. (1975). A framework for representing knowledge. In P. Winston (Ed.), *The Psychology of Computer Vision*, pp. 211–280. New York: McGraw-Hill.
Mirchandani, K. (2004). Practices of global capital: Gaps, cracks and ironies in transnational call centres in India. *Global Networks, 4*(4), 355–373.
Molle, D. & Prior, P. (2008). Multimodal genre systems in EAP writing pedagogy: Reflecting on a needs analysis. *TESOL Quarterly, 42*(4), 541–566.
Moore, G. E. (1965). Cramming more components onto integrated circuits. *Electronics Magazine, 38*(8), 114–117.
Moore, S. H. (1997). Accounting for business English. *English Australia (EA) Journal, 15*(1), 63–71.
Moore, S. H. (2013). *Investigating the discourse of financial planners in their consultations with clients*. Sydney: Linguistics Department, Macquarie University.
Moore, S. H., Stroupe, R. & Mahony, P. (2012). Perceptions of IELTS in Cambodia: A case study of a test impact in a small developing country. In J. Osbourne (Ed.), *IELTS Research Reports Volume 13,* pp. 293–401. Melbourne/Manchester: IDP: IELTS Australia and British Council.
Moore, S. H. & Xu, H. L. (2014). Where the academy meets the workplace: communication needs of tertiary-level accounting students. In Stracke, E. (Ed.), *Intersections: Applied linguistics as a meeting place*, pp. 112–128. Newcastle-upon-Tyne, UK: Cambridge Scholars Publishing.
Munby, J. (1978). *Communicative syllabus design*. Cambridge: Cambridge University Press.
Murray, G. (2009). Narrative inquiry. In J. Heighham & R. A. Croker (Eds.), *Qualitative research in applied linguistics: A practical introduction,* pp. 45–65. Basingstoke, UK: Palgrave Macmillan.
Nesi, H. (2000). A corpus-based analysis of academic lectures across disciplines. In J. Cotterill & A. Ife (Eds.), *Language across boundaries,* pp. 201–218. London and New York: Continuum.
Norton, B. (2000). *Identity and language learning: Gender, ethnicity, and educational change*. Harlow, UK: Longman/Pearson.
Ockey, G. J. (2009). Developments and challenges in the use of computer-based testing for assessing second language ability. *The Modern Language Journal, 93*(Focus Issue), 836–847.

Orr, T. (Ed.). (2002). *English for Specific Purposes*. Alexandria, VA: TESOL.
Orsi, L. & Orsi, P. (2002). An ESP program for brewers. In T. Orr (Ed.), *English for Specific Purposes,* pp. 175–188. Alexandria, VA: TESOL.
Pakir, A. (1999). Connecting with English in the context of internationalism. *TESOL Quarterly, 33*(1), 103–113.
Paltridge, B. (2004). The exegesis as genre: An ethnographic examination. In L. Ravelli, J. & R. Ellis (Eds.), *Analyzing academic writing: Contextualized frameworks,* pp. 84–103. London: Continuum.
Paltridge, B. & Starfield, S. (2011). Research in English for Specific Purposes. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning,* Vol. 2, pp. 106–121. New York: Routledge.
Pecorari, D. (2003). Good and original: Plagiarism and patchwriting in academic second-language writing. *Journal of Second Language Writing, 12*(4), 317–345.
Pennycook, A. (1994). Critical pedagogical approaches to research. In A. Cumming (Ed.), Alternatives in TESOL research: Descriptive, interpretive, and ideological orientations. *TESOL Quarterly*, *28*(4), 690–693.
Pennycook, A. (1997). Vulgar pragmatism, critical pragmatism and E.A.P. *English for Specific Purposes, 16*, 253–269.
Pennycook, A. (1998). *English and the discourses of colonialism*. London: Routledge.
Peretz, A. S. & Shoham, M. (1990). Testing reading comprehension in LSP: Does topic familiarity affect assessed difficulty and actual performance? *Reading in a Foreign Language, 7*(1), 447–455.
Phan, L. H. (2009). Strategic, passionate, but academic: Am I allowed in my writing? *Journal of English for Academic Purposes, 8*(2), 134–146.
Phillipson, R. (1992). *Linguistic imperialism*. Oxford: Oxford University Press.
Phillipson, R. (2013). Colonialism and language policy and planning. In C. Chapelle (Ed.), *The encyclopaedia of applied linguistics*, pp. 730–735. Chichester, UK: Wiley-Blackwell.
Pickering, L. (2006). Current research on intelligibility in English as a Lingua Franca. *Annual Review of Applied Linguistics, 26*, 219–233.
Pill, J. & McNamara, T. (2014, August). How much is enough? Involving occupational experts in setting standards on a specific-purpose English language test for health professionals. Paper presented at AILA 2014 in the symposium *How authentic can we get? Reconstructing a specific-purpose test to reflect health professional values*, Brisbane, Australia.
Poncini, G. (2002). Investigating discourse at business meetings with multicultural participation. *International Review of Applied Linguistics in Language Teaching, 40*(4), 345–373.
Ponterotto, J. G. (2005). Qualitative research in counseling psychology: A primer on research paradigms and philosophy of science. *Journal of Counselling Psychology, 52*(2), 126–136.
Porter, D. (1994). ESP testing: luxury or necessity? In R. Khoo (Ed.), *LSP: Problems and prospects*, pp. 194–201. Anthology Series 33. Singapore: SEAMEO Regional Language Centre.
Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon, 9*(5), 1–6.
Pryor, E. & Woodward-Kron, R. (2014). International medical graduate doctor to doctor telephone communication: A genre perspective. *English for Specific Purposes, 35*, 41–53.

Purnell, P. (2012). New trends in tracking research output, collaboration and performance. Available at https://www.accesowok.fecyt.es/wp content/uploads/2012/06/Roadshow-Madrid-TOTAL1.pdf

Ravelli, L. J. & Ellis, R. A. (Eds.). (2004). *Analysing academic writing: Contextualized frameworks*. London: Continuum.

Riazi, A. M. & Candlin, C. N. (2014). Mixed-method research in language teaching and learning: Opportunities, issues, and challenges. *Language Learning, 47*(2), 135–173.

Richards, J. (Ed.) (1974). *Error analysis: perspectives on second language acquisition*. London: Longman.

Richards, J. (Ed.). (1976). *Teaching English for Science and Technology.* Singapore: SEAMEO Regional Language Centre.

Riley, P. (1989). Keeping secrets: ESP/LSP and the sociology of knowledge. *European Journal of Teacher Education, 12*(2), 69–80.

Rist, R. (1980). Blitzkrieg ethnography: On the transformation of a method into a movement. *Educational Researcher, 9*(2), 8–10.

RLN (2005). *Heathrow talking to the world: A languages audit.* London: Regional Language Network London.

Roberts, C. (2005). English in the workplace. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning,* pp. 117–136. Mahwah, NJ: Lawrence Erlbaum Associates.

Roberts, C., Davies, E., & Jupp, T. (1992). *Language and discrimination: A study of communication in multi-ethnic workplaces*. London: Longman.

Robertson, F. & Johnson, E. (1988). *Airspeak: Radiotelephony communication for pilots*. Harlow, UK: Prentice-Hall.

Robertson, R. (1995). Glocalization. Time-space and homogeneity-heterogeneity. In M. Featherstone, S. Lash & R. Robertson (Eds.), *Global Modernities,* pp. 25–44. Thousand Oaks, CA: SAGE.

Robinson, P. (1991). *ESP today: A practitioner's guide*: Hemel Hempstead, UK: Prentice Hall.

Rogers, E. M. (1983). *Diffusion of innovations* (3rd ed.). New York: The Free Press.

Rogers, R. (2003). *A critical discourse analysis of family literacy practices: Power in and out of print.* Mahwah, NJ: Lawrence Erlbaum Associates.

Rogerson-Revell, P. (2007). Using English for international business: A European case study. *English for Specific Purposes, 26*(1), 103–120.

Rose, D., Rose, M., Farrington, S., & Page, S. (2008). Scaffolding academic literacy with indigenous health sciences students: An evaluative study. *Journal of English for Academic Purposes, 7*(3), 165–179.

Rosenhouse, J. (1989). Arabic for medical purposes in Israel. In C. Laurén & M. Nordman (Eds.), 1989a. *From office to school: Special language and internationalisation*, pp. 113–120. Clevedon, UK: Multilingual Matters.

Ross, S. (1998). Self-assessment in second language testing: A meta-analysis and analysis of experiential factors. *Language Testing, 15*(1), 1–20.

Rowley-Jolivet, E. (2002). Visual discourse in scientific conference papers: A genre-based study. *English for Specific Purposes*, *21*, 19–40.

Royall, F. (1994). Languages and specialisms: Bridging the gap. In G. Parker & C. Reuben (Eds.), *Languages for the international scientist*, pp. 131–142. London: Association for French Language Studies in association with the Centre for Information on Language Teaching and Research.

Rumbaut, R. G. & Irma, K. (1988). *The adaptation of South East Asian refugee youth: A comparative study. Final report to the office of resettlement. (ERIC ED 299 372).* San Diego, CA: San Diego State University.
Russell, D. R. (1997). Rethinking genre in school and society: An activity theory analysis. *Written Communication, 14*, 504–554.
Sacks, H. (1992). *Lectures on conversation, Volumes I and II*. G. Jefferson (Ed.), with Introduction by E. Schegloff. Oxford: Blackwell.
Sager, J. (1990). *A practical course in terminology processing*. Amsterdam: John Benjamins.
Salaberry, M. R. (1996). A theoretical foundation for the development of pedagogical tasks in computer mediated communication. *CALICO Journal, 14*(1), 5–34.
Santos, I. (2001). La qualité linguistique de la langue spécialisée du droit: le cas des langues moins répandues. In F. Meyer (Ed.), *Language for special purposes: Perspectives for the new millennium. Vol. 2: LSP in academic discourse and in the fields of law, business and medicine*, pp. 728–734. Tübingen, Germany: Gunter Narr Verlag.
Santos, T. (1992). Ideology in composition: L1 and ESL. *Journal of Second Language Writing, 1*(1), 1–15.
Sarangi (2005, September). The conditions and consequences of professional discourse studies. *Journal of Applied Linguistics, 2*(3), 371–394.
Sarangi, S. (2005, September). *The conditions and consequences of professional discourse studies*. Paper presented as the Pit Corder Lecture at the BAAL Annual Conference, Bristol, UK.
Sarangi, S. (2006). Genetic counselling communication: A discourse analytic approach. In D. Cooper (Ed.), *Encyclopaedia of life sciences*, pp. 1–6. Oxford: John Wiley.
Sarangi, S. (2007). Other-orientation in patient-centered healthcare communication: Unveiled ideology or discoursal ecology? In G. Garzone & S. Sarangi (Eds.), *Discourse, ideology and ethics in specialised communication*, pp. 39–71. Bern, Switzerland: Peter Lang.
Sarangi, S. & Candlin, C. N. (2001). Motivational relevancies: Some methodological reflections on sociolinguistic practice. In N. Coupland, S. Sarangi & C. N. Candlin (Eds.), *Sociolinguistics and social theory*, pp. 350–388. London: Pearson.
Sarangi, S. & Candlin, C. N. (2003). Trading between reflexivity and relevance: New challenges for applied linguistics. *Applied Linguistics, 24*(3), 271–285.
Savage, W. & Storer, G. (1992). An emergent language program framework: Actively involving learners in needs analysis. *System, 20*(2), 187–199.
Savignon, S. J. (2007). Beyond communicative language teaching: What's ahead? *Journal of Pragmatics, 39*, 207–220.
Schiffrin, D. (1994). *Approaches to discourse*. Malden, MA: Blackwell.
Scott, M. (1996–2004). Wordsmith Tools (Versions 1–4). Oxford: Oxford University Press.
Scott, M. (2012). Wordsmith Tools Version 6. Liverpool: Lexical Analysis Software.
Searle, J. (1969). *Speech acts*. Cambridge: Cambridge University Press.
Seidlhofer, B. (1999). Double standards: Teacher education in the expanding circle. *World Englishes, 18*(2), 233–245.
Seidlhofer, B. (2000). *Mind the gap: English as a mother tongue vs. English as a Lingua Franca*. Unpublished manuscript, Vienna.

Seidlhofer, B. (2001). Towards making 'Euro English' a linguistic reality. *English Today, 68*(17), 14–16.
Selinker, L. (1972). Interlanguage. *International Review of Applied Linguistics*, *10*(3), 209–231.
Seloni, L. (2012). Academic literacy socialization of first year doctoral students in US: A micro-ethnographic perspective. *English for Specific Purposes, 31*(1), 47–59.
Seuren, P. (1972). Autonomous versus semantic syntax. *Foundations of Language*, *8*(2), 237–265.
Seuren, P. (Ed.). (1974). *Semantic syntax*. Oxford: Oxford University Press.
Shamsudin, S. & Nesi, H. (2006). Computer-mediated communication in English for Specific Purposes: A case study with computer science students at Universiti Teknologi Malaysia. *Computer Assisted Language Learning, 19*(4/5), 317–339.
Shaw, G. (1907). *Dramatic opinions and essays*, Vol. 2. London: Constable.
Shaw, S. & Falvey, P. (2008). *The IELTS writing assessment revision project: Towards a revised rating scale*. University of Cambridge ESOL Examinations Research Reports. Issue 01, January 2008. Available at http://www.cambridgeesol.org/assets/pdf/research_reports_01.pdf.
Shepherd, M. & Watters, C. R. (1998). *The evolution of cybergenres*. Paper presented at the Proceedings of the Thirty-First Annual Hawaii International Conference on System Sciences (HICSS '98), Hawaii.
Silva, T. J. & Matsuda, P. K. (Eds.). (2001). *Landmark essays on ESL writing*. Mahwah, NJ: Lawrence Erlbaum.
Simpson, R. C., Briggs, S. L., Ovens, J. & Swales, J. M. (2002). *The Michigan Corpus of Academic Spoken English* (MICASE). Ann Arbor, MI: The Regents of the University of Michigan. Available at: http://www.lsa.umich.edu/eli/resources/micasemicusp
Simpson, R. & Mendis, D. (2003). A corpus-based study of idioms in academic speech. *TESOL Quarterly, 37*(3), 419–441.
Sinclair, J. & Coulthard, M. (1975). Towards an analysis of discourse. Oxford: Oxford University Press.
Sitachitta, K. & Sagarik, P. (1976). Problems and attempts at solutions in the teaching of ESP at the tertiary level in Thailand. In J. C. Richards (Ed.), *Teaching English for Science and Technology*, pp. 198–212. Singapore: SEAMEO Regional Language Centre.
Skehan, P. (1984). Issues in the testing of English for Specific Purposes. *Language Testing*, *1*(2), 202–220.
Smith, L. & Nelson, C. (1985). International intelligibility of English: Directions and resources. *World Englishes, 4*, 333–342.
Song, B. (2006). Content-based ESL instruction: Long-term effects and outcomes. *English for Specific Purposes, 25*(4), 420–437.
Spencer-Oatey, H. & Franklin, P. (2009). *Intercultural interaction: A multidisciplinary approach to intercultural communication*. Basingstoke, UK: Palgrave Macmillan.
Spring, M. (2014). Languages for Specific Purposes curriculum in the context of Chinese language flagship programs. *Modern Language Journal, 96*(Focus Issue), 140–157.
St. John, M. J. (1996). Business is booming: Business English in the 1990s. *English for Specific Purposes, 15*(1), 3–18.
Stake, R. E. (2005). Qualitative case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research,* pp. 443–466. Thousand Oaks: SAGE.

Stewart, T. & Perry, W. (2005). Interdisciplinary team teaching as a model for teacher development. *TESL-EJ*, *9*(2), 1–17.
Stotesbury, H. (2002). A study of interpretation in critical writing. In G. Cortese, P. Riley & P. Bern (Eds.), *Domain-specific English*, pp. 325–344. Bern, Switzerland: Peter Lang.
Strecker, B. (1985). Rules and the dynamics of language. In T. Ballmer (Ed.), *Linguistic dynamics*, pp. 238–250. Berlin and New York: de Gruyter.
Strevens, P. (1984). Seaspeak reference manual. Oxford: Pergamon Press.
Stubbs, M. (1983). *Discourse analysis*. Chicago: University of Chicago Press.
Sullivan, P. & Girginer, H. (2002). The use of discourse analysis to enhance ESP teacher knowledge: An example using aviation English. *English for Specific Purposes, 21*(4), 397–404.
Swales, J. M. (1971). *Writing scientific English: A textbook of English as a Foreign Language for students of physical and engineering sciences*. London: Nelson.
Swales, J. M. (1980). ESP: The textbook problem. *The ESP Journal, 1*(1), 11–23.
Swales, J. M. (1981a). *Aspects of article introductions*. Birmingham, UK: University of Aston, Language Studies Unit.
Swales, J. M. (1981b). *Episodes in ESP: A reader designed to illustrate the development of ESP during the period 1962–81*. Birmingham, UK: Aston University.
Swales, J. M. (1985). *Episodes in ESP: A source and reference book on the development of English for Science and Technology* (1st ed.). Oxford: Pergamon Institute of English.
Swales, J. M. (1990). *Genre analysis: English in academic and research settings*. Cambridge, NY: Cambridge University Press.
Swales, J. M. (1996). Occluded genres in the academy. In E. Ventola & A. Mauranen (Eds.), *Academic writing*, pp. 45–58. Amsterdam: John Benjamins.
Swales, J. M. (1997). English as Tyrannosaurus Rex. *World Englishes, 16*(3), 373–382.
Swales, J. M. (1998). *Other floors, other voices: A textography of a small university building*. Mahwah, NJ: Laurence Erlbaum.
Swales, J. M. (2000). Languages for Specific Purposes. *Annual Review of Applied Linguistics, 20*, 59–76.
Swales, J. M. (2004). Then and now: A reconsideration of the first corpus of scientific English. *Iberica, 8*, 5–21.
Swales, J. M., Barks, D., Ostermann, A. C., & Simpson, R. C. (2001). Between critique and accommodation: Reflections on an EAP course for Masters of Architecture students. *English for Specific Purposes, 20*(Supplement 1), 439–458.
Szirmai, M. (2002). Corpus linguisitcs in Japan: Its status and role in language education. In P. Lewis (Ed.), *The changing face of CALL: A Japanese perspective,* pp. 92–107. Lisse, Netherlands: Swets & Zeitlinger.
Tajima, A. (2004). Fatal miscommunication: English in aviation safety. *World Englishes, 23*(3), 451–470.
Tardy, C. (2004). The role of English in scientific communication: *Lingua Franca* or *Tyrannosaurus Rex*? *Journal of English for Academic Purposes, 3*(3), 247–269.
Tawfiq, A. (1984). Designing a communicative EST reading skills course for students of the Faculty of Medicine in Iraq: A case study. In J. Swales & H. Mustafa (Eds.), *English for Specific Purposes in the Arab World*, pp. 85–98. Birmingham, UK: The Language Studies Unit, University of Aston in Birmingham.

Taylor, L. & Wigglesworth, G. (2009). Are two heads better than one? Pair work in L2 assessment contexts. *Language Testing, 26*(3), 325–339.
Teemant, A., Varga, Z. & Heltai, P. (1993). *Hungary's nationwide needs analysis of vocationally-oriented foreign language learning: Student, teacher, and business community perspectives*. Budapest: Hungarian Ministry of Culture and Education, Hungarian Ministry of Labour, United States Information Agency, Council of Europe Modern Languages Project Group.
Temmerman, R. (2000). *Towards new ways of terminology description: The sociocognitive approach*. Amsterdam and Philadelphia: John Benjamins.
Than, S. M. & Bidmeshki, L. (2010). Investigating the perceptions of UKM undergraduates towards an English for Science and Technology online course. *Computer Assisted Language Learning, 23*(1), 1–20.
Thily, H. (2001). Trade with Latin America: Multilingual, multipurpose webpages – design & development. In F. Meyer (Ed.), *Language for Special Purposes: Perspectives for the new millennium. Vol. 1: Linguistics and cognitive aspects, knowledge representation and computational linguistics, terminology, lexicography and didactics*, pp. 154–163. Tübingen, Germany: Gunter Narr Verlag.
Thorne, S. L., Black, R. W., & Sykes, J. M. (2009). Second language use, socialization and learning in Internet interest communities and online gaming. *The Modern Language Journal, 93*(Focus Issue), 802–821.
Thornley, H. (1964). *Scientific English practice*. Harlow, UK: Longman.
Thornton, P. & Houser, C. (2002). M-learning: Learning in transit. In P. Lewis (Ed.), *The changing face of CALL: A Japanese perspective*, pp. 229–243. Lisse, Netherlands: Swets & Zeitlinger.
Thurstun, J. & Candlin, C. N. (1997). *Exploring academic English: A workbook for student essay writing*. Sydney: National Centre for English Language Teaching and Research, Macquarie University.
Tollefson, J. (Ed.). (1995). *Power and inequality in language education*. Cambridge: Cambridge University Press.
Tollefson, J. (2011). Ideology in second language education. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning, Vol. II*, pp. 801–816. New York: Routledge.
Tratnik, A. (2008). Key issues in testing English for Specific Purposes. *Scripta Manent 4*(1), 3–13.
Trimble, M. T., Trimble, L., & Drobnic, K. (1978). *English for Specific Purposes: Science and technology*. Corvallis: English Language Institute Oregon State University.
Tripathi, P. D. (1998). Redefining Kachru's 'outer circle' of English. *English Today, 14*(4), 55–58.
UNESCO (1968 [1953]). The use of vernacular languages in education. In J. A. Fishman (Ed.), *Readings in the sociology of language*, pp. 688–716. The Hague: Mouton.
van der Bly, M. (2005). Globalization: A triumph of ambiguity. *Current Sociology, 53*(6), 875–893.
van Ek, J. (1976). *The threshold level for modern language learning in schools*. London: Longman.
van Leeuwen, T. N., Moed, H. F., Tijssen, R. J. W., Visser, M. S., & van Raan, A. F. J. (2001). Language biases in the coverage of the Science Citation Index and its consequences for international comparisons of national research performance. *Scientometrics, 51*(1), 335–346.

van Lier, L. (1996). *Interaction in the language curriculum: Awareness, autonomy and authenticity*. London: Longman.

van Lier, L. (2005). Case study. In E. Hinkel (Ed.), *Handbook of research in second language teaching and learning,* pp. 195–208. Mahwah, NJ: Lawrence Erlbaum Associates.

Varantola, K. (1986). Special language and general language: Linguistic and didactic aspects. *UNESCO ALSED-LSP Newsletter*, *9*(2), 10–20.

Vie, S. (2008). Digital divide 2.0. *Computers and Composition, 25*, 9–23.

Voloshinov, V. (1973). *Marxism and the philosophy of language*. Boston, MA: Harvard University Press.

Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Warschauer, M. (2000). The changing global economy and the future of English teaching. *TESOL Quarterly, 34*(3), 511–535.

Warschauer, M. (2002). Networking into academic discourse. *Journal of English for Academic Purposes, 1*(1), 45–58.

Wason, P. (1980). The verification task and beyond. In D. Olson (Ed.), *The social foundations of language and thought*, pp. 28–46. London and New York: W. W. Norton and Company.

Watson-Gegeo, K. A. (1988). Ethnography in ESL: Defining the essentials. *TESOL Quarterly, 22*(4), 575–592.

Weir, C. (2004). *Language testing and validation*. London and New York: Palgrave-Macmillan.

West, M. (1953). *A general service list of English words*. London: Longman, Green and Co.

West, R. (1994). Needs analysis – state of the art. In W. Scott, & S. Mühlhaus (Eds.), *Languages for Specific Purposes*, pp. 77–83. Kingston, UK: CILT in Association with Kingston University School of Languages.

Wharton, S. (2007). Social identity and parallel text dynamics in the reporting of educational action research. *English for Specific Purposes, 26*(4), 485–501.

Widdowson, H. G. (1979). *Explorations in applied linguistics*. Oxford: Oxford University Press.

Widdowson, H. G. (1990). *Aspects of language teaching*. Oxford: Oxford University Press.

Widdowson, H. G. (1994). The ownership of English. *TESOL Quarterly, 28*(2), 377–389.

Widdowson, H. G. (2000). The limitations of linguistics applied. *Applied Linguistics, 21*(1), 3–25.

Wilkins, D. A. (1976). *Notional syllabuses: A taxonomy and its relevance to foreign language curriculum development*. London: Oxford University Press.

Woodward-Kron, R. (2008). More than just jargon – the nature and role of specialist language in learning disciplinary knowledge. *Journal of English for Academic Purposes, 7*(4), 234–249.

Wu, H. D. & Badger, R. G. (2009). In a strange and uncharted land: ESP teachers' strategies for dealing with unpredicted problems in subject knowledge during class. *English for Specific Purposes, 28*(1), 19–32.

Wu, S. M. (2007). The use of engagement resources in high- and low-rated undergraduate geography essays. *Journal of English for Academic Purposes, 6*(3), 254–271.

Yates, J. A. & Orlikowski, W. J. (1992). Genres of organizational communication: A structurational approach. *Academy of management review, 17*, 299–326.

Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA.: SAGE.

Zuber-Skerritt, O. (1992). *Action research in higher education: Examples and reflections*. London: Kogan Page.

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