

Chapter 1

Introduction

Chapter Overview

In this chapter, the background, aims and objectives of the book are introduced. Different research traditions in Language Across the Curriculum (LAC) and related areas are outlined, and their terminologies are explained. The organization of the book and how the book can be used are also explained.

1.1 Introduction

Language Across the Curriculum (LAC) and Content and Language Integrated Learning (CLIL) constitute rapidly growing areas of both research and practice in many parts of the world, especially in Asia, Australia and Europe. In recent years, LAC and CLIL are gaining intense attention particularly in contexts where English is learnt as a foreign language or as an additional language (EAL). The global spread of English has arisen from a whole host of historical, political and socio-economic factors. Many Asian societies, with their respective socio-economic contexts, are often infused with a desire for development, modernity and human resource capital for successful participation in the new global economic order. Such capital often includes English with respect to information communication technology, international business and commercial know-how, and science and technology, and very often English comes in a package with all these desirable ‘goodies’, or is (mis-)recognized (see discussion in Chap. 8) as an indispensable medium for bringing in and acquiring these ‘good things’. How to enable students to cross the English divide—how to make English linguistic capital accessible to most of the school population and how to spread English capital more evenly across different social sectors in society—has become important issues in research on

language-in-education policy and practice. These concerns very often occupy priority places in national development agendas. For instance, in many Southeast Asian societies today, serious government attention is given to the option of using English medium education to promote the use and learning of English.

As a cluster of concepts and research studies first developed in Britain and Europe, respectively, LAC and CLIL have been expanded both in their theoretical conceptualizations and in their practice-oriented research to encompass the multifarious ways and contexts in which LAC and CLIL are being re/interpreted, adapted and extended in different contexts in recent years. This is particularly so in English as an additional language (EAL) contexts, where English is not the most familiar language (e.g. it is a second, third or foreign language) of the students and yet it is used as the medium of instruction in content lessons for these students. So far, however, there is no clear road map available and accessible to teachers, students, teacher educators and researchers who are often confronted with and confused by an array of related but slightly different concepts and terminologies arising from different research traditions. An initial road map can be found in Davidson and Williams (2001)'s article, which was written over ten years ago, and many new developments have taken place since. An updated road map which not only provides a summary of the recent developments in this area but also critically reviews and integrates theory and practice emerging in related areas is urgently needed given the rising trend to teach and learn content in an additional language at all levels (e.g. kindergarten, and primary, secondary and postsecondary levels), especially in EAL contexts in many parts of the world.

This road map, moreover, must be grounded in a comprehensive and in-depth review of the field and at the same time presented in a language that is accessible to teachers, school administrators, teacher educators, researchers and advanced undergraduate and postgraduate students including both language specialists and content specialists. Daunting as the task seems to be, a modest beginning was made when my colleagues and myself first started the master of education in Language Across the Curriculum (MEd-LAC) Programme at the University of Hong Kong in 2012. Having taught the MEd-LAC Programme for four years and having been confronted with the needs of students from diverse backgrounds: English teachers, science teachers, mathematics teachers, social studies teachers, as well colleagues who are non-language specialists but are teacher educators in the disciplines of science, mathematics and social studies, I feel that it is high time a book was written that critically reviews and integrates existing theories and research findings in this field (which encompasses both LAC and CLIL studies) and charts out a road map that points the way forward for future research and practice in various EAL contexts in the world.

The present book has thus arisen from an immediate and real need, which is expressed by my students, colleagues (who include both language and content teacher educators) and most of all from the communities that my colleagues and I have been serving. In interacting with teachers, school administrators, researchers and teacher educators, I was frequently given questions and requests for a comprehensive road map or 'book' where teachers, school administrators, government

language policy makers and teacher educators can refer to for a critical review of the field, some fresh insights into future directions of research and some practical tips on school-based LAC and CLIL practice. This book has thus aimed at contributing to the growing field that addresses the increasing interest in LAC and CLIL in EAL contexts such as Hong Kong, mainland China, Thailand, the Philippines, Taiwan, Malaysia, Japan, and Korea. In many of these places, my colleagues and I have been presenting papers, seminars and workshops, and exchanging research ideas with teachers, teacher educators and researchers working in these areas. Researchers and teachers working in EAL contexts in Europe, South America and Africa might also find the work relevant to them.

1.2 Aims and Organization

It is the aim of the book to offer a road map for the interested student and researcher in what appears to be a ‘swampland’ (borrowing a metaphor from Christiane Dalton-Puffer) in the fast burgeoning literature of diverse yet overlapping areas of research that can all bear on the work of teachers having to support students’ learning content in a second, foreign or additional language, and very often in EAL. This book, in particular, aims at making two key contributions to the field. First, with its grounding in research in the past three decades in bilingual education, genre and register analysis, sociolinguistics, functional linguistics and sociocultural theories of language and literacy development, it seeks to critically review and integrate a diverse range of theories and disciplines to generate an accessible set of theoretical insights and principles that can inform teachers, students, parents, policy makers, researchers and teacher educators who are engaged in some form of work related to learning and teaching content in L2 or EAL. Second, the book is grounded in the concrete needs expressed by practitioners in front-line classrooms, school administrators, government policy makers, parents and students who need to tackle the day-to-day challenges and issues confronting them. These issues include how to facilitate the collaboration between content teachers and language teachers or between the content subject panels and the language panels, how to provide language support using a cross-curricular approach to students’ learning content in an L2, how to design materials that offer that support, how to design classroom scaffolding strategies that address both the content and language learning needs of students, how to raise the language awareness of content teachers, how to raise the content awareness of language teachers, how to design appropriate ways of providing extra support in different school contexts (e.g. through adjunct language classes or through content and language integrated classes; through content-rich language classes or through language-rich content classes), how much of the academic language support should be made through explicit or implicit instruction, or through inductive, discovery or deductive explanatory approaches, how can assessment be designed to give due weight to both the language and content learning outcomes, what is the role of school leadership in facilitating a

whole-school approach in the provision of cross-curricular language support and how can parents be involved in this process.

There are no easy answers to these challenges, and the book does not promise to provide solutions to all of these urgent questions faced by the school communities and researchers. It is, however, the aim of this book to provide a systematic and critical review of the resources available in the diverse research literatures and to organize and present these resources in accessible language to researchers, practitioners, policy makers and school administrators to address their pressing needs.

This book thus aims to engage a wide readership regardless of whether they have a background in sociolinguistics, functional linguistics or genre theories. In fact, the book aims to forge an accessible ‘*metalanguage*’ (i.e. a *language* to talk/think about language) that will be workable and usable for teachers and researchers from both language and content areas to facilitate collaboration across content and language subject panels. Chapters 2 and 3 aim to lay the theoretical foundation for this common metalanguage by critically reviewing and systematically presenting and integrating the most important theoretical resources that can inform teachers and researchers in this field. Chapters 4–7 focus on issues in pedagogy and assessment and in school-based approaches to LAC and CLIL and draw on both research studies and the experiences of front-line teachers and school administrators. Chapter 8 provides a critical reflexive angle on the field by posing difficult questions regarding how LAC and CLIL are often situated in contexts where there is inequality of access to the linguistic and cultural capitals, where the L1/local languages of the students are usually neglected or viewed unfavourably in relation to the L2 in mainstream society and where students and teachers are usually positioned as recipients of knowledge rather than makers of knowledge. Chapter 9 reviews the status quo with regard to research in the field and proposes directions for future inquiry.

1.3 A Note on Terminologies: Different Research Traditions

In the past four decades, many different terms have arisen in different research traditions and educational contexts where teachers and researchers are interested in exploring and researching ways of helping learners to *learn both language and content* at the same time. These terms include content-based instruction (CBI), immersion, sheltered instruction, LAC, Writing Across the Curriculum (WAC) and CLIL. Diverse as they might seem, they share a common interest in developing and researching programme models and pedagogical approaches involving (varying degrees of) integration of language learning and content learning. In what follows a synoptic description of a few important terms that are recurrently used in the literature is provided to equip the general reader with some initial tools to navigate the field without being bogged down by a theory-heavy introduction. The intention of this introduction is not to give final definitions to these terms as this will prove quite impossible given the nature of the humanities and social sciences disciplines

(to which education belongs), where different communities of practice in different research contexts tend to attach different meanings to the same terms, or use different terms to refer to a similar set of pedagogical approaches. As the reader gains more familiarity with the theories and concepts introduced in subsequent chapters, the reader can go beyond these sometimes confusing matrixes of terminologies and develop their own conceptual framework for analysing programme models and practices which are of interest to them in their own sociocultural and education contexts (see Chap. 7). However, some initial description of the historical contexts in which these different key terms have arisen will be useful. These include CBI, immersion, sheltered instruction, LAC, WAC and CLIL.

Content-Based Instruction

CBI is an umbrella term encompassing a wide range of ‘instructional approaches that make a dual, though not necessarily equal, commitment to language and content-learning objectives’ (Stoller 2008, p. 59). Describing the development of CBI in the USA, Stoller (2004) traces it back to the 1980s, when many applied linguists showed converging interest in ‘integrated instruction’, with five substantial books published on pedagogical approaches designed to achieve both language and content learning objectives (Brinton et al. 1989; Cantoni-Harvey 1987; Crandall 1987; Enright and McCloskey 1988; Mohan 1986). Lyster (2007) has also used the term CBI in a broad sense to refer to ‘classrooms where subject matter is used at least some of the time as a means for providing second language learners with enriched opportunities for processing and negotiating the target language through content’ (p. 1). Although CBI has gradually come to be more associated with second or additional language (L2) contexts, CBI as a broad curricular framework includes work done in first language (L1) contexts as well, as Stoller (2004, p. 271) points out:

One curricular framework rarely referred to in second and foreign language discussions of content-based instruction is Concept-Oriented Reading Instruction (CORI), an approach to content learning and reading development used (and extensively researched) in first language settings (e.g. Guthrie et al. 1998, 2000; Guthrie and Ozgungor 2002; Guthrie, Wigfield, & Von Seker 2000). CORI ... [is] organized around four stages: (1) immersion into a main theme through students’ personal engagement with the topic, (2) wide reading and information gathering on the theme across multiple information sources, (3) reading strategy instruction to assist with comprehension, and (4) project work leading to a product that demonstrates what students have learned.

In principle, a CBI approach originally developed in L1 contexts (such as CORI) can have important implications for CBI in L2 contexts and vice versa. CBI has been implemented with diverse programme models and pedagogical practices in K-12 and postsecondary (tertiary) settings as well as in different sociolinguistic and sociopolitical contexts. Under the broad category of CBI are different approaches such as immersion, sheltered instruction, LAC, WAC and CLIL. While they all share some (but not necessarily equal) commitment to the integration of content and language learning, they differ in their historical contexts in which they have developed and thus their pedagogical and curricular emphases too.

Immersion is usually classified as a type of CBI (Met 1998, 1999; Genesee and Lindholm-Leary 2013; Tedick and Wesley 2015) and is meant to be a programme model contributing to *additive bilingualism* (Cummins 1979). In immersion classes, students coming from the same language background who speak the society's mainstream language as their first language (L1) are taught (some of) their content subjects in a language other than their first language (i.e. in an L2 or L3). The prototypical example of immersion is Canadian French immersion where English-speaking children are taught (some of the) content subjects in French (their L2). There are many different kinds of immersion programmes in the world, and the target languages usually include socio-economically important (trade) languages, e.g. Japanese and Chinese immersion programmes in Australia and English immersion programmes in China.

In contrast to immersion are sheltered instruction programmes in which linguistic minority children (who speak a home or community language that is different from the dominant language in society) are pulled out from mainstream classes and given “sheltered” content instruction, characterized by the use of comprehensible language, the contextualization of subject matter, visual aids, modified texts and assignments, and explicit attention to students' linguistic needs' (Stoller 2008, p. 60). The Center for Applied Linguistics (CAL) in the USA has further developed an empirically validated Sheltered Instruction Observation Protocol (SIOP) to provide teachers and school administrators with an instrument for observing and quantifying teachers' implementation of quality sheltered instruction (Echevarria et al. 2004).

LAC, on the other hand, emerged in the 1970s in Britain as a whole-school approach to address the language and literacy needs of students studying in different subject areas. Unlike other CBI approaches originating from North America, LAC originally targeted all students (i.e. including students who study content subjects in their first language), not only linguistic minority students. The rationale behind LAC is that language aspects should be given due attention by teachers across different subject areas. A key document in the movement, the Bullock Report, stated, ‘Each school should have an organized policy for LAC, establishing every teacher's involvement in language and reading development throughout the years of schooling’ (Bullock 1975). LAC spread to the USA in the form of the WAC movement in the 1980s mainly in the context of helping English as a Second Language (ESL) students in content areas to learn both content and the language that carries that content (Hirsch 1988). LAC has also spread to Europe as a way towards plurilingualism, and LAC has been defined as both a concept and a policy ‘linking different forms and aspects of language education within the school, particularly emphasising the role of language in all subject-matter learning’ (Vollmer 2007, p. 177).

It can be seen that while immersion and sheltered instruction are terms that are more about programme models, LAC and WAC are terms that concern more about curricular and pedagogical approaches. So, in principle, LAC and WAC approaches can be implemented with different programme models. For example, in immersion programmes implemented with LAC/WAC approaches, content teachers are given

training in raising their language awareness and techniques and skills in integrating language support and language instruction in their content lessons.

In Europe, however, ‘CLIL’ is a term much more frequently used. Is CLIL different from immersion (and CBI programmes in general) or is it a European rebranding of North American programme models? Researchers (e.g. Cenoz et al. 2013) have argued that the lack of precision in the internal definitions of CLIL makes it difficult, if not impossible, to identify features that are uniquely characteristic of CLIL in contrast to immersion or other CBI programmes. Cenoz’s (2015) analysis of examples from Basque education (where academic content is often taught through the medium of Basque and English to students with Spanish as a first language) shows that CBI and CLIL programmes share the same essential properties and are not pedagogically different from each other. The use of both CBI and CLIL to refer to programmes where academic content is taught through a second or additional language and the preference for one term over the other thus seems to be more an outcome of historical, contextual factors rather than distinctly different programme design principles.

In response to these discussions, Dalton-Puffer et al. (2014) proposed that different terminologies have their own histories and they called for researchers from diverse research traditions to develop ‘a common non-hierarchical matrix, for the identification of features of bilingual/multilingual education programmes all over the world, to help researchers carry out comparative studies across contexts’ (p. 217). Resonating with this, in Chap. 7, I shall build on and extend the existing literature to develop a programme planning analytical framework that will be useful for researchers, teachers and curriculum planners to classify, design and explore different possible programme options and approaches based on diverse needs and constraints in their own specific contexts.

In this book, CBI will be used as an umbrella term to cover various kinds of programme models and curricular approaches that have an interest in integrating content learning with language learning. Immersion and CLIL are treated as types of CBI with overlapping features. LAC is used as a general term to refer to a broad set of cross-curricular and pedagogical principles which can be incorporated into different kinds of CBI programmes. And LAC theories and concepts are seen as useful not only for L2/additional language learning contexts but also for L1 contexts, although many of the examples included in this book have come from EAL contexts.

1.4 How to Use the Book

Each content chapter starts with a *Chapter Overview*, which provides a succinct introduction to the key topics to be covered in the chapter. This serves as an ‘advance organizer’ for the reader to anticipate the key content and to activate their background knowledge and interest. Then, the content is organized into a few key sections. ‘Application Scenarios’ are built into the sections to engage the reader to actively examine the issues and topics being discussed and to draw upon their existing knowledge. This book can thus be easily adapted for use in teacher

preparation courses, workshops or research seminars on LAC, CLIL or related areas. Each chapter ends with a table of *Chapter Summary Points* to give a quick recap of key points discussed in the chapter. *End-of-Chapter Discussion Questions* are then provided to consolidate the reader's critical understanding of the concepts through applying them in culturally responsive ways in different contexts. This can be assigned as take-home activities or conducted at the end of the lecture, workshop or seminar. The book also includes three appendixes. Glossary provides a glossary of terms that can assist the student or reader new to the field to gain quick access to key concepts in the field. Students' attention can be drawn to this useful resource right from the beginning. Appendix A provides a sample science unit that my colleague Dr. Tracy Cheung and I have developed for a junior secondary class in Hong Kong (see Chap. 5). It is not intended as an example of 'best practice'; rather, it is a document showing our efforts in applying LAC and CLIL principles in designing a unit of work in a particular context. Appendix B provides some hands-on research tools and online resources for the student or reader who wants to conduct research in LAC, WAC, CLIL, academic literacies or related areas.

Chapter Summary Points

- LAC as a rising trend in different parts of the world, especially in EAL contexts.
- CBI as an umbrella term covering different approaches to integrating content learning with language learning: e.g. immersion, sheltered instruction, LAC, WAC and CLIL.

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