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ABSTRACT

Recent debates on bilingual education/CLIL have insisted on the need to explore common aims across bilingual/multilingual education programmes (CLIL, CBI, immersion) instead of highlighting differences across them (e.g. Cenoz, Genesee & Gorter, 2014). One objective shared by all programmes, regardless of their specificities, is to find the ways in which content and language are best learnt and taught in integration. This involves going beyond the 'focus on form' perspective and looking at language as a meaning-making activity in relation to the genres and registers of specific classroom/academic disciplines. In this issue, Systemic Functional Linguistics (SFL), with its focus on the purposes of language use through texts and contexts, is applied, together with other models, such as Legitimation Code Theory (LCT) or Cognitive Discourse Functions (CDFs), to the understanding of how language and content integration is enacted and its implications for curriculum development, pedagogy and assessment. The studies represent a variety of educational levels, content areas, modes (spoken, written, classroom interaction) and bilingual/multilingual education contexts.

Content and Language Integrated Learning (CLIL) came to the fore in the mid 1990s with the main purpose of improving European citizens' competence in foreign/second/additional languages. CLIL soon started to be described as the European version of bilingual/multilingual education and many stakeholders compared the so-called 'CLIL programmes' with other similar ones around the world, such as immersion or Content Based Instruction (CBI), highlighting their specificity beyond the fact of being a European endeavour (e.g. Lasagabaster and Sierra 2009; Pérez-Cañado 2012). Some of these specificities included the language of instruction being a foreign language or the fact that teachers were mostly non-native speakers of that language. These claims were followed by an array of criticism from scholars who considered that the attempts to distinguish CLIL from other approaches created confusion and the differences highlighted were not always supported by research (Cenoz, Genesee, and Gorter 2014). In fact, recent studies comparing CLIL and immersion have shown more similarities between some 'so-called' CLIL and immersion programmes than between some immersion contexts themselves. For example, Llinares and Lyster's (2014) comparison of the use of corrective feedback in French and Japanese immersion contexts and Spanish CLIL found more similarities between Japanese immersion and Spanish CLIL than between the two immersion contexts under study. In addition, the growth of CLIL and its recent growing implementation in a wide range of contexts in Europe and beyond (e.g. Australia, Japan …), with different curricular expectations and needs, has meant that the variety of CLIL programmes has grown, and terms

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such as 'hard' and 'soft' CLIL (Bentley 2010) were introduced to be able to incorporate different types of bilingual/multilingual education programmes under the umbrella term 'CLIL'.

Another problematic issue related to the conceptualization of CLIL is that many (if not the majority) of the so-called CLIL programmes do not actually pay tribute to the term this acronym stands for, 'Content and Language *Integrated* Learning'. In 'hard' CLIL programmes, content is often taught in an additional language with no attention to language issues and, thus, with no actual content and language integrated teaching or learning. At the other end of the spectrum, language-oriented CLIL programmes ('soft') incorporate some content in language classrooms, but an integrated approach is often missing. In response to this complex scenario with multiple interpretations of what a so-called CLIL programme entails, recent voices have proposed the use of the term CLIL to refer to the actual teaching and learning of content and language *in integration* (e.g. Llinares 2015). This understanding of CLIL (as an approach rather than type of programme) guarantees its application to any programme (CBI, immersion, soft CLIL, hard CLIL …), regardless of its contextual specificities: geographical context, degree of exposure to the additional language, degree of linguistic competence of teachers and learners, etc. In this issue, thus, we distinguish between 'CLIL approach' (which can be applied to CLIL as well as CBI, immersion or other types of programmes) and 'CLIL programmes' (which may or may not follow a truly CLIL methodological approach). The overarching theme of this issue, then, is the understanding and pedagogical potential of the CLIL approach across a variety of contexts in Europe, Asia and America.

If we understand a 'CLIL approach' as content and language in integration, it is then necessary to use theoretically-informed models that go beyond a focus on language 'only' and understand content and language as two sides of the same coin, models which can be understood and applied by both content and language teachers.

Integration versus balancing: the SFL approach

The majority of research on CBI/immersion/CLIL has addressed the effects of these programmes on students' language outcomes mainly from product (e.g. Ruiz de Zarobe 2011; Tedick and Wesely 2015) but also from process-oriented perspectives (e.g. Lyster 2007). Although the key role of language in these types of programmes is widely accepted by the research community, the understanding of language is not always the same. While some SLA-oriented approaches have paid attention to language as separate from content and have advocated for 'balancing' content and language foci (Cammarata and Tedick 2012; Fortune and Tedick 2008; Lyster 2007), other scholars have focused on language as something which is not to be addressed separately from content but as part of it (e.g. Llinares, Morton, and Whittaker 2012; Dalton-Puffer 2013). This special issue addresses this second view of language, mainly following Systemic Functional Linguistics, and in combination with other perspectives on language and education.

Systemic Functional Linguistics (SFL) views language (and other modes of representation) as a semiotic system, and, thus

> is concerned with meaning makers and meaning making. It studies the media of dissemination and the modes of communication that people use and develop to represent their understanding of the world and to shape power relations with others (Bezemer and Jewitt 2009, 1)

From this perspective, language is 'the quintessential semiotic resource that enables its users to learn the knowledge practices, beliefs, and values of their culture' (Hall 2018). Language has this immense capacity because of its metafunctional nature, which SFL theorizes along three dimensions. That is, language serves to construct representations of the world, whether real or imagined (the ideational metafunction), and it serves to construct relations with others and provide opinions on propositions (the interpersonal metafunction); the third metafunction, the textual, serves to assemble the ideational and interpersonal into cohesive and ordered texts. SFL has developed a wide array of tools to make explicit the ways in which we use language to carry out these metafunctions, such as, for

the ideational, transitivity analysis (Dalton-Puffer & Evnitskaya; Lo, Lin & Liu, this issue), resources for constructing technicality and abstraction (such as power words; see Lo, Lin & Liu, this issue), clause logico-semantic relations (Nashaat-Sobhy & Llinares, this issue) or power grammar (Lo, Lin & Liu, this issue); for the interpersonal, tools such as the Appraisal framework (Achugar & Tardio; Whittaker & McCabe, this issue); and for the textual, tools such as generic staging (Achugar & Tardio; de Oliviera, Jones & Smith, this issue).

SFL has been used extensively by applied linguists and language educators to describe and develop students' literacies across different subject areas of the curriculum (e.g. Schleppegrell 2004; de Oliveira and Iddings 2014; Whittaker, O'Donnell, and McCabe 2006; Christie and Derewianka 2008). SFL provides an approach to language through linguistic analysis which links language use to its sociocultural contexts, sees language as a meaning-making system, provides tools for linguistic analysis of written and spoken texts, embodies a functional approach to grammar in context, and recognizes the effect of educational practices on language use and literacy development (Ortega and Byrnes 2008, 294). It is not surprising, then, that there has recently been a surge of interest in SFL-based approaches to investigate educational practices where content and L2 use/learning are combined. One model that has been particularly relevant and widely applied since it was introduced in Australia in the 1980s, initially for teaching especially disadvantaged students in L1 educational contexts, has been 'genre pedagogy' (Christie and Unsworth 2006; Martin 2006; Veel 2006; Martin and Rose 2008), which focuses on the types of texts that students need to master in relation to the purposes of specific disciplines, such as narratives, chronicles, reports and arguments. Genre pedagogy provides a metalanguage for making explicit the features of the specific genres, from the ways in which they are staged to the specific lexico-grammatical features of the stages. This meta-language, born out of the view of language as inextricably linked to meanings, functions and contexts, makes SFL a suitable framework for the understanding of content and language integration. In addition, the success of the pedagogical applications of genre pedagogy, which includes the teaching-learning cycle (de Oliveira, Jones & Smith, this issue), based on a visible interventionist pedagogy (Martin 2006), guarantees its applications in contexts where language is learnt and developed in parallel with the learning of a specific subject matter. Following Halliday (2007:, 91): 'if learning is seen as a semiotic process, a form of 'languaging', we can use our understanding of language to model the processes of learning; and in the course of learning, we can hope in turn to increase our still very partial understanding of language itself'.

These words of Halliday highlight the pedagogical bent of SFL, as it has been theorized from its conception with language learning or development in mind. Because of this bent, SFL has long had conversations with educationalists, from Halliday's early work with English-as-a-mother tongue teachers in the UK (Halliday and Hasan 2006) to more recent work with Legitimation Code Theory (Maton and Doran 2017; Martin and Maton 2013). In addition to abundant studies of the language of school disciplines provided through genre pedagogy, the SFL model has also been widely applied in language-oriented classes (McCabe 2017). There have been numerous studies related to the learning of English as a foreign/second/additional language (McCabe, Gledhill, and Liu 2015), and on other languages, such as the work in the US for the teaching of foreign languages in higher education, with the integration of the study of culture and literature with the teaching of foreign languages (e.g. Byrnes 2012). The goal of this special issue is to illuminate through the lens of linguistic theory with a focus-on-meaning approach the ways in which content and language can be truly integrated for pedagogical purposes.

This issue

This special issue responds to recent calls for research 'to examine effective ways to effectively integrate language and content instruction' (Cenoz, Genesee, and Gorter 2014, 257) by bringing together researchers from around the world who use Systemic Functional Linguistic (SFL) theory and related social-semiotic approaches to investigate content and language integration in educational contexts

where the learning/teaching of academic content is combined with the use and learning of an L2 as part of the curriculum. Regardless of the name or specific characteristics of these programmes, immersion, CLIL, CBI, or English-medium instruction (EMI), they all share the aim of finding the best pedagogical practices to teach and learn content and language in integration. For this purpose, prior to effective implementation and practice, it is necessary to understand how language and content integration is enacted and its implications for curriculum development, pedagogy and assessment. This issue includes studies representing different educational levels (primary, secondary and tertiary), different content areas (science, history, arts), different types of data (student written and spoken production, as well as classroom interaction) and a variety of bilingual/multilingual educational and geographical contexts (CLIL in Europe; CLIL/EMI in Asia, immersion/CBI in the US). They also represent a variety of approaches within and around SFL in combination with other emerging models for the analysis of content and language integrated learning, such as Legitimation Code Theory (LCT) or Cognitive Discourse Functions (CDFs).

Within the context of primary education in the US, Luciana de Oliveira, Loren Jones and Sharon Smith present a study from a first-grade classroom which included bilingual and emerging bilingual students. The authors worked with a classroom teacher on the design and application of the Teaching-Learning Cycle (TLC) (Rose and Martin 2012) and analysed the ways in which the teacher scaffolded linguistically and culturally diverse (LCD) students in the *detailed reading*, *deconstruction* and *joint construction* phases of the TLC. The authors highlight the relevance of this pedagogical approach to help LCD students learn content by understanding how language works in the texts they read and write, thus increasing their agency as communicators in the classroom.

Mariana Achugar and Therese Tardio's paper is also contextualized in the US but the teaching/learning context differs from de Oliveira et al.'s paper in three ways: the educational level (university/college); the language of instruction (Spanish); and the teaching approach, in this case the use of SFL to integrate (historical) content into the teaching of language. The authors argue that learning a foreign language provides the opportunity to learn content and develop a sensibility towards others' past experience. As they argue, the integration of historical content and second/foreign language learning requires specific functions, such as locating events in time and place and categorizing social actors. An added value of this paper is its longitudinal focus, as it investigates the students' development throughout time, comparing their writing in qualitative and quantitative ways.

Models such as Dalton-Puffer's notion of cognitive discourse functions (Dalton-Puffer 2013) have helped researchers using SFL to bridge the gap between different types of discourse units, for example those theorized by SFL – e.g. genre, stages, and phases – and those theorized by educationalists – for example the expression of cognitive functions. This bridging is particularly important in cases where the language of instruction is a language not used or spoken outside the classroom and language form needs to be addressed. Three of the papers included in this issue explore students' realization of cognitive discourse functions (CDFs) by combining Dalton-Puffer's (2013) model and SFL in the analysis of Spanish students' expression of content in English as a foreign language: Rachel Whittaker and Anne McCabe analyse the CDF 'evaluate', Nashwa Nashaat-Sobhy and Ana Llinares analyse 'define' and Natalia Evnitskaya and Christiane Dalton-Puffer focus on 'classify and compare'. In the first study, Whittaker and McCabe apply the Appraisal model of evaluative language, a development of the interpersonal metafunction (Martin and White 2005), to analyse how evaluation is created in a corpus of student written texts across disciplines (natural science, social science and the arts/art) and across primary and secondary years of schooling. As in the case of Achugar's article, it is a longitudinal study, as the same students' progress in the use of evaluative resources to express content was followed from grade 6 to grade 8. The findings provide specific ways in which teachers can explicitly focus students' attention on the language of evaluation across disciplines to aid development of cognitive discourse competence. In a similar vein, Nashaat-Sobhy and Llinares focus on the same primary and secondary school students comparing their performance in L2 English and L1 Spanish and illuminating the CDF 'define'. They analyse the definitions produced by the same students (in primary and two years later in secondary) of historical terms across languages and historical fields (periods and social groups). The

results show few differences across languages but differences across fields, again providing useful tools for classroom teachers to lead students to more discipline-appropriate ways of defining. The third paper that focuses on students' expression of academic content in the L2 is Evnitskaya and Dalton-Puffer's analysis of classifications and comparisons, key CDFs in the construction of specialist knowledge. In a similar vein to Nashaat and Llinares' article, but this time focusing on students' spoken performance, to operationalize this function, the authors draw on both Trimble's (1985) taxonomy of classifications and SFL tools to examine particular grammatical and lexical choices (lexis, circumstances, and markers of logical relations) which students employ to realize the CDFs of classification and comparison across subjects (history and science) and across languages.

Finally, moving to the Asian continent, Yuenli Lo, Angel Lin and Yiqi Liu also focus on spoken performance. They combine SFL and Legitimation Code Theory (LCT) to analyze classroom discourse data in Content and Language Integrated Learning (CLIL) classrooms, in which students are learning science through their foreign/second/additional language (L2). Applying the concept of 'semantic waves' (Maton 2013), their paper analyses how content and language are co-constructed in CLIL lessons in Hong Kong. Their findings regarding effective strategies for unpacking and repacking field-specific terms yield interesting insights into knowledge (both content and language) building in CLIL contexts.

To conclude, the articles in this issue all illustrate the link between linguistic analysis and specific pedagogic proposals in content and language integrated learning and teaching, some including active participation of the teachers involved. The issue, thus, contributes to bridge the gap between Applied Linguistics research and specific pedagogic implementations related to curriculum, classroom practices and assessment of students' language production for the expression of content in bilingual/multilingual settings.

Disclosure statement

Notes on contributors

Ana Llinares is Professor in the English department at the Madrid Universidad Autónoma de Madrid. Her research interests include applications of systemic functional linguistics, pragmatics and classroom discourse analysis to CLIL primary and secondary school contexts. She has published widely on this topic and coordinates the UAM-CLIL research group (http://www.uam-clil.com).

Anne McCabe holds a joint appointment in the Departments of English and Communication at Saint Louis University's Madrid Campus, where she teaches courses in rhetoric, academic writing, linguistics, public speaking, and ESL. She has published numerous articles and book chapters related to language teaching/learning using Systemic Functional Linguistics (SFL). She has also edited book collections, Language and Literacy: Functional Approaches and Advances in Language and Education (Bloomsbury, with Rachel Whittaker and Mick O'Donnell); she is currently completing a monograph titled A Functional Perspective on Developing Language (Routledge).

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