Integration of Content and Language Learning

Gene Thompson and Jim McKinley

The integration of content and language learning in English as an international language (EIL) is addressed by discussing approaches to content-centered learning in a second language. These approaches include bilingual education, immersion, content-based instruction (CBI), content-based language teaching (CBLT), content and language integrated learning (CLIL), and English medium instruction (EMI). The multiplicity of terms can cause confusion, and indeed debate continues as to what the distinctions are between them. While all of these approaches encompass a shared endeavor of fostering additive bilingualism through a dual focus on both content and language learning, they also raise a number of questions regarding the implications of EIL for content-integrated approaches. Each approach is presented in turn, taking into consideration the perspective of EIL, in addition to English as a lingua franca (ELF). Current research indicates it is important to be critical of integrating content and language learning, particularly in EMI programs.

Intellectual and Social Context

The history of teaching content through an international language dates back to the 8th century BC. In ancient Rome, daily educational activities included lectures, expressive reading, and analysis of poetry. The curriculum was thoroughly bilingual, as students were expected to both read and speak in Greek as well as in Latin. Modern approaches for the integration of content and language learning can be traced back to the immersion programs implemented in Canada in the 1960s, which aimed to develop the French proficiency of majority-language English-speakers. The immersion experiments constituted a proactive strategy to develop additive bilinguals as French became an official language (Genesee, 1994), and provided a strong basis for centering language learning within and around content instruction.

Approaches for Integrating Content in Language Teaching

The immersion programs have had a continuing influence on language teaching and second language acquisition research. As teaching moved toward a focus on communicative competence during the 1970s and 1980s, it was recognized that “language is learned most effectively for communication in meaningful, purposeful social and academic contexts” (Snow, Met, & Genesee, 1989, p. 202). Immersion contexts aligned with natural approaches to language acquisition and findings suggested that language learning was more effective when it was integrated with content (Genesee, 1994). As more “communicative”-focused language teaching required choices about the context and content used to introduce and practice language, the role of content as a part of instruction began to be considered part of the teaching approach. Furthermore, individual learners’ reasons for language study were becoming more instrumental. It was recognized that language learners had specific purposes for studying, with needs that required them to be able to interact
with specialized language and usage tasks. Accordingly, a number of approaches toward foreign language instruction were developed that integrated and combined content, such as content-based instruction (CBI), content-based language teaching (CBLT) and content and language integrated learning (CLIL). With continued globalization, English has become an international lingua franca (ELF) for education and business. Thus, the past decade has seen extensive growth in the use of English-medium instruction (EMI) at institutions where English is used as an international language—raising questions about the varieties of English used, the treatment of culture, and the goals of learning via vehicular language. Thus, the intersection between content and language learning remains a crucial area of research and practice.

**Major Dimensions**

The multiplicity of terms used to refer to instructional approaches for the integration of content and language learning (immersion, CBI, CBLT, CLIL) can be a source of confusion (Cenoz, Genesee, & Gorter, 2014), although they all commonly share the purpose of additive bilingualism via a dual focus on content and language learning (Dalton-Puffer, Linares, Lorenzo, & Nikula, 2014). Debate continues about the extent to which immersion, CBLT, CBI, and CLIL are different, similar, or the same. Some argue that CLIL represents an appropriate umbrella term that can be used to house various approaches toward content integration (e.g., immersion is a type of CLIL), where terms can be used interchangeably (e.g., CLIL and CBI are the same concept with a different name) (Cenoz et al., 2014). However, others argue that CLIL and CBI represent very different concepts, where CLIL represents the intersection between content and language from the content perspective (i.e., CLIL happens in content classes), while CBI is an attempt at responding to the content needs of learners in language classes (Dalton-Puffer et al., 2014).

The similarities (and variability) between approaches lead to circular arguments about whether the key features of one approach are also shared by others (e.g., immersion and CLIL), and therefore they are indistinguishable. In some ways, this is an inevitable result of terms being used outside of academia, by educators applying ideas from one context to another (Dalton-Puffer et al., 2014), and the lines of demarcation become more unclear as approaches are transported to different countries and contextualized to meet different learning situations.

Different terms have been associated with different regions, such as CLIL which is associated with Europe, and was “purposefully coined” by European educators and researchers attempting to influence language policy and ideology (Dalton-Puffer et al., 2014, p. 214). CLIL represented a deliberate attempt to develop a *European* model for additive bilingual education (Cenoz et al., 2014). However, policy makers, educators, and researchers from international contexts have started to apply and develop CLIL approaches in distinctly non-European situations (e.g., Taiwan, see Yang, 2015), and the term is now widely used within the wider international foreign language learning community.

**Continuum of Additive Bilingual Education Approaches**

Overall, the integration of content and language learning can best be considered as a continuum (see Figure 1) with content on one side and language learning on the other. Each of the approaches can be considered as an “additive bilingual program” (Dalton-Puffer et al., 2014, p. 214), where there is significant overlap between the key features of each. Immersion and CLIL may be considered primarily content oriented in their approach (i.e., language learning is integrated within content
classes) where immersion is associated with greater time learning via the second language (L2).

On the other hand, CBI represents a more language-oriented approach, where content is integrated into language teaching and considered across programs as a support for content teaching. Each approach has influenced the teaching of English as an international language via research findings (e.g., immersion) and conceptual frameworks (e.g., CLIL, CBI).

**Figure 1** Continuum of additive bilingual programs that integrate content and language.

**Immersion**

In immersion programs, students receive a significant amount of subject instruction in a sheltered classroom environment via a language they are learning as a second, foreign, heritage, or indigenous language. In other words, the immersion language is “the vehicle for teaching the subject matter content that comprises the school curriculum of the local district” (Cammarata & Tedick, 2012, p. 251), with some assumptions that language will be acquired via exposure to comprehensible input. Immersion primarily developed in North America, with much of the research focusing on one-way immersion programs (i.e., French for English language majority speakers) in Canada, and two-way immersion programs (i.e., Spanish for English language and English for Spanish language speakers) in the United States. Beyond North America, there are a number of international programs in countries such as Spain, New Zealand, and Wales, where immersion programs have complementary goals of encouraging additive bilingualism for one group of speakers (e.g., Welsh L2 proficiency for English language majority students) while also acting as a language maintenance program for first language speakers (e.g. L1 Welsh speakers) of the minority language (see Cenoz et al., 2014; Genesee, 1994).

Extensive research of immersion contexts has been carried out since the 1960s and results have suggested that there are cross-linguistic cognitive and academic proficiencies underlying performance, supporting theories of bilingual development. In general, some benefits of immersion noted in the literature are that content achievement by immersion learners is comparable to nonimmersion students; that learning via a vehicular language has no negative impact on first language development; and that students studying via immersion may develop better problem-solving skills (for a review, see Cammarata & Tedick, 2012; Genesee, 1994).

Immersion programs have been shown to present challenges to students and teachers. First, although participants in immersion programs have been shown to develop native-like receptive skills, they have also been shown to have weaker productive capability in terms of vocabulary specificity, grammatical accuracy, and appropriateness of use (see Cammarata & Tedick, 2012; Genesee, 1994). Second, as the focus of immersion programs is heavily content-oriented, attending to the required content and development of student language knowledge and awareness is an ongoing challenge for teachers (Cammarata & Tedick, 2012; Walker & Tedick, 2000). Studies have noted teacher concerns about student ability to deal with L2 content, a lack of time to cover the required content while attending to language development, and the need to address formal aspects of student language
knowledge. For example, in a study of six teachers from Spanish-immersion programs at the elementary level in the United States, the teachers were found to struggle to address the conceptual demands of content instruction in the immersion language, perceiving student ability to be insufficient (Walker & Teddick, 2000). Overall, a key lesson from immersion programs has been that form-focused instruction (i.e., specific attention to student language knowledge and awareness) is also needed when attempting to develop additive bilinguals via content instruction.

CBLT and CBI

Content-based language teaching (CBLT) and content-based instruction (CBI) are terms that also derive from North American contexts. Both CBLT and CBI have been suggested as appropriate umbrella terms for all approaches towards the integration of content in language learning; however they are discussed in this entry as approaches toward language instruction that incorporate content as they primarily approach instruction from the language-teaching perspective. As language teaching moved toward a focus on communicative competence during the 1980s, with a particular focus on the negotiation of meaning, major arguments for the integration of content in language teaching for L2 learners were that it aligned with naturalistic language learning and second language acquisition theories that emphasized comprehensible input. Furthermore, a key idea underlying CBI and CBLT was that the integration of content would instrumentally enhance L2 learner motivation by linking it with language learning (Snow et al., 1989).

Early conceptual frameworks recognized findings from immersion contexts that revealed form-focused instruction was a necessary part of instruction (Genesee, 1994), and approached the integration of content from a needs analysis perspective for “limited English proficient (LEP) students” (Snow et al., 1989, p. 203), focusing on the specific needs of students learning via an L2. CBI identified a number of strategies for use in language classes, and emphasized the derivation of learning materials from subject content, the use of authentic materials as much as possible, the use of the L2 to learn new information, and the appropriateness of materials to the proficiency and needs of learners.

Overall, CBI approached the integration of content from a needs based perspective that informed language-learning classrooms. For example, language instruction and content instruction were often considered as occurring in different classes with different teachers; therefore a primary goal was to avoid treating language learning and content teaching as “independent processes” (Snow et al., 1989, p. 202). Accordingly, collaboration between teachers and across programs could ensure that students developed “content-obligatory language” (i.e., essential structural and functional language required for content tasks and activities) and “content-compatible language” (i.e., knowledge and functions that are appropriate for the content being learned) in their language classes that would be useful in their content classes.

Later frameworks also focused on the needs of L2 learners operating in content classrooms. For example, the “Language-Content-Task” (LCT) framework (Short, 2002) highlighted the need for task-knowledge, suggesting that content integrated instruction in language instruction should not only consider the linguistic demands (i.e., structural, lexical) of the content to be addressed, but also the task demands of the domain of use.

CBI presented a number of implications for pedagogy that represented significant challenges for language and content teachers (beyond the challenge of collaboration mentioned above). The identification, choice, and development of materials appropriate for the learners’ level has been noted as a key challenge. Another implication concerned sequencing—the timing and order of language instruction may change to match the content needs of students. In other words, the
structures and knowledge introduced in language classes would not be ordered by perceived difficulty or a predetermined syllabus, but rather by the needs of students for use in their content classes. Furthermore, a key challenge for programs implementing CBI was staff development, particularly building language teachers’ knowledge about content, and content teachers’ awareness of language.

CLIL

As mentioned earlier, CLIL and CBI refer to the same concept in different regions, where the European term CLIL corresponds with the North American term CBI. Although there is significant variability in CLIL implementations, one similarity is that CLIL settings are usually characterized by having both content and language classes, where the content class is primarily carried out in the L2. On the other hand, others have suggested that CBI and CLIL represent different approaches to additive bilingual education, as CLIL is treated as content lessons, taught and assessed by content-trained instructors, which means CLIL should not be classified as a type of CBI. Indeed, “[s]ubject educators would rightly find that paradoxical” (Dalton-Puffer et al., 2014, p. 215).

In other words, while CLIL has similarities with CBI, as collaboration between language and content teachers may be needed, and that content and language teachers face similar challenges, it also has a stronger focus on language instruction (or attendance to language issues) within content lessons as opposed to within language classrooms (Dalton-Puffer et al., 2014). Accordingly, this brings it closer towards immersion programs, which also have a dual-focus on content and language inside content lessons.

Significant debate continues about the relationship between content teaching as part of or as a complement to general foreign language teaching and how this influences definitions of CLIL. Furthermore, CLIL is also considered and discussed as a foreign language teaching approach and the most recent development in “communicative language teaching” (CLT). CLIL combines the main task-based language teaching and CLT principles by providing authentic learning situations that support meaningful engagement with the foreign language. Such a view of CLIL has taken hold within the wider language-learning community, with language-learning textbook manufacturers dubbing content-integrated course books as “CLIL materials”—despite some objections from CLIL researchers (Dalton-Puffer et al., 2014).

Such a view of CLIL has taken hold within the wider language-learning community, with language-learning textbook manufacturers dubbing content-integrated course books as “CLIL materials”—despite some objections from CLIL researchers (Dalton-Puffer et al., 2014).

One reason for the rise of CLIL as a language-teaching approach is the development of CLIL conceptual frameworks from earlier CBI models. These make the view of the vehicular language clearer and attempt to show how the integration of content and language relate to cognition and culture (Coyle, Hood, & Marsh, 2010). Language for the construction of knowledge is viewed from three perspectives—language of, for, and through learning. L2 content learning includes the use of linguistic knowledge (i.e., product); the need for language for operating in the L2 environment (i.e., process); and the emergence of new language and knowledge from interacting with content, other learners, and teachers (i.e., development during learning). Assuming that learners commit to the program voluntarily, another argument is that CLIL programs provide additional instrumental motivation for L2 learners, as they have an authentic and immediate reason for attending to language learning in order to complete content classes taught via the L2. Such frameworks and features have value for practitioners designing L2 programs, and have contributed to the use of CLIL as an organizing principle informing instruction in the
wider L2 community.

EMI

“English-medium instruction” refers to the use of English as the language of instruction in content classes for students who use it as an addition language. Accordingly, it is a broader term that may refer to the instructional language used in all types of additive bilingual programs. The term “content and English integrated instruction” (CEIL) has been coined to show that the growth of CLIL as an approach for L2 content-integration is strongly related to the growth of English-mediated instruction, as English is used an international lingua franca for education and business. Much of the work in EMI has focused on the use of English at universities in countries where English is not used as a local language, where tertiary institutions have implemented EMI as part of regional approaches toward internationalization (e.g., the “Bologna” process in Europe) or in response to national policies (e.g., Korea, Japan). The increase in the use of EMI also reflects the globalization of education, as universities use English-medium instruction as one means of encouraging greater numbers of exchange students.

Recent studies from EMI contexts show that familiar challenges remain for programs attempting to use English for content lessons with L2 users, such as collaboration between teachers across programs, and the balance of language and content development within classes (Aguilar, 2015). For example, in a study of the perceptions and pedagogic orientations toward CLIL and EMI of 41 engineering lecturers at a university in Spain, it was found that all respondents rejected a CLIL approach “mostly because they refuse to teach English” (Aguilar, 2015, p. 11). Teachers perceived their English proficiency to be insufficient for attending to student language development, with content goals taking priority due to a lack of time for covering materials. Other studies have noted the difficulty of curriculum design and collaboration between content and language teaching staff, as well as the challenge of providing appropriate language training outside the content classes as part of English-mediated programs.

Changes over time in the Treatment of Integrating Content and Language Learning

Overall, the different approaches used toward integrating content and language teaching share challenges related to content coverage, student and teacher L2 proficiency, and the need for greater collaboration. However, English has now become a global language, where the majority of users are L2 speakers, and it is now commonly used as a lingua franca for communication between users who are speaking it as an L2. English is used within countries where English is not a local language to carry out business, social activities, and education. The development of English as an international language and changing views toward English have implications for the treatment of content and instruction.

Teaching and assessing content and English as an international language

First, the movement towards CLIL and EMI presents a number of questions from a Teaching English as an international language (TEIL) perspective, such as the varieties of English accepted and used within such programs, the role of culture as part of instruction, and the underlying goals of instruction. Previous approaches toward the integration of content and language learning discussed in this entry have been based on monolithic models of language, where goals and outcomes were often discussed in terms of L1 capability with implicit assumptions about L2 varieties.
This may be appropriate in contexts such as Canada, where the L2 (French) of the immersion programs is spoken as an L1 by a sizeable proportion of the country. However, in the case of settings where English is used as an international language in expanding circle countries, national and institution policies toward certain varieties of English entail political decisions with social impact.

One key question concerns whose English is used for teaching and assessment in EMI and CLIL programs. A common problem to additive bilingual programs is the challenge of teacher and student L2 competency. Attempts to address this challenge may result in implicit (or explicit) preference towards varieties of English that may be different to the ways in which the language is used locally. For example, in most cases, students wishing to study at institutions using EMI are required to meet test score requirements for standardized tests of English, such as TOEFL or IELTS. Entry requirements often implicitly emphasize Anglo-American English above other varieties. For example, students with educational backgrounds from certain Anglo/American contexts (United Kingdom, United States, Ireland, Australia, New Zealand, certain parts of Canada) are exempt from entry requirements while students from countries where English is also an official language (such as South Africa) are not. In other words, the regulatory impact and gatekeeping role of such tests emphasizes Anglo/American varieties of English, even when such varieties may not conform to the way the language is used locally. To illustrate this point, a study of the impact of IELTS in Cambodia suggested that the use of the test led to local test takers modifying their language away from the local variety of Cambodian English for the purposes of the test (Moore, Stroupe, & Mahony, 2012). Some universities have addressed this concern by developing their own tests. In an attempt to respond to perceived problems with the linguistic capability of teachers carrying out EMI, a number of European universities (e.g., University of Copenhagen) have implemented certification programs for instructors who teach in English, including language proficiency tests developed specifically for use in the European context. Overall, a difficulty for countries and institutions implementing EMI and other content-integrated programs concerns the potential for inequality toward different English as an international language (EIL) users, and requires that these actors consider the impact of such decisions on students and teachers.

Other questions concern the goals of language development in EIL contexts and the role of teachers. From an English as an international language perspective, the concept of L2 learners attempting to develop “native-speaker” capabilities is unattainable (Brown, 2011), where goals should focus on the success of bilingual and multilingual use of English for communication and the negotiation of meaning, rather than rather than proficiency achievements. A common suggestion from studies of EMI programs is that greater attention be directed towards students’ English development (e.g., Yang, 2015); however, to what extent are teachers in a position to assume that role in EIL classrooms, where they are also L2 users of the language?

A longitudinal study of classroom discourse from an EMI university program involving ELF users suggests that the teaching of content in EIL contexts entails an effort by all members of the group for negotiating meaning and understanding key content (Smit, 2010). First, the study found that repairs and clarifications in classroom discussions and explanations could be divided into two categories: (1) those that dealt with specialized vocabulary and explanation of terms within the expertise of the teacher; and (2) more negotiations concerned with establishing shared understanding of more general vocabulary that were unknown, but needed, by some participants. While teachers were more likely to take responsibility for areas within their subject expertise, other class members contributed for more general matters as interaction became more facilitative between L2 users. Overall, classes became communities of practice with a principle of “joint forces,” where each member could draw upon the expertise of each other as explanations were offered by whoever could do so. Thus, each individual in the class could bring into the
exchange whatever was necessary for successful interaction and communication. Accordingly, teachers maintain an important sociocultural role as the experts in the field, but as the means of communication is a shared L2, the study also suggests that language learning in EIL situations will involve shared responsibility for this learning by each participant. Thus, while both content-integrated and EIL value bilingual teachers (Brown, 2011), TEIL contexts may involve teachers using the language as an L2 with a more facilitative purpose. However, even L1 speakers who are teaching in EIL contexts have been shown to change the way they use language, as a response to working with local students and noticing effective ways for communication of ideas (i.e., negotiation of meaning) that did not necessarily conform to L1 usage (Baker & Hüttner, 2016).

The study (Smit, 2010) also provides insights into the processes and change involved in successful interaction and intelligibility in ELF contexts. Greater interaction led to more successful intelligibility over time, indicating that exchanges change over time as participants become more used to interacting with each other. In other words, ELF contexts are dynamic and the role of teachers and students may develop over the course of study as individuals also begin to recognize “expertise” as a relative concept, where each player in the classroom could contribute via their English communicative capability and their subject expertise. The findings provide a means of considering the different roles of ELF and English for specific purposes (ESP) in EIL contexts for both teachers and students. Generally speaking the teacher has greater expertise when the discourse is focused on content, but less when the discourse is focused on the negotiation of meaning.

While the key features of approaches toward the integration of content and language teaching, such as CLIL, align with many of the principles underlying the teaching of English as an international language, the treatment of certain aspects may need to be reassessed in EIL contexts. For example, CLIL and other content-integrated approaches view language as a tool for communication, emphasize the use of authentic materials, recognize language diversity and multiple varieties of language, and involve the negotiation of meaning with a genuine communicative orientation by learners (Coyle et al., 2010); all principles which align with values underlying TEIL (see Brown, 2011). Furthermore, TEIL places a de-emphasis on the importance of L1 cultures teaching. On the role of cultural content in TEIL, there are two aspects to consider: teaching materials, and the use of EIL in specific discourse communities. For teaching materials, it is understood that the cultural information taught in EIL classrooms is not focused on English L1 cultures, and the sharing of learners’ cultures and ideas is encouraged. Regarding specific discourse communities, the use of EIL is observed through the sociocultural practices within these communities, and the influence the practices have on the development and use of texts. TEIL acknowledges the importance of understanding culture as difference, due to the common occurrence of cross-cultural encounters. This intercultural understanding (a CLIL principle) aligns with the view of culture in EIL (i.e., to develop both global and local appropriate use) (Brown, 2011). From a TEIL perspective, local cultures are important and should inform curricula and teaching decisions. In many ways, this aligns with theories toward the underlying cultural values emphasized in immersion contexts, where the culture of the classroom matches the local community and English is used as a tool for communication.

Current emphases in research and theory on Integrating Content and Language Learning

Recent studies are showing how EMI and content-integrated approaches can provide affordances for the development of learner awareness of English as a lingua franca. One reason for the growth of EMI is that it stimulates student exchange and allows for a more multinational, diverse student body. This in turn provides resources that
can be used to develop student awareness of ELF—or highlight to instructors that attitudes towards English may have changed faster for learners than teachers. For example, in a business management program in Japan that implements content-integrated ESP classes with content lectures using EIL users as classroom assistants, a study examined student and teacher attitudes toward the use of English as a lingua franca (Galloway & Rose, 2013). Findings suggested a gap between teachers’ perceptions of student attitudes and actual learner cognitions towards the use of EIL classroom assistants and toward ELF. Overall, students had more ELF-oriented views of language learning focused on future usage situations while teachers preferred more controlled and “standard” English. The study highlighted that in some cases, instructors and institutions may be “playing catch-up to students” who have a more global English focus (p. 249).

### Language and Translanguaging

*Language* and *translanguaging* are terms introduced to address the developments in understanding of how, with increased understanding of second language education and practices, L2 users negotiate meaning-making in language production. While the term “language” dates back several decades, the understanding of it in an EIL context focuses on the flexibility of language production in communication. It is this kind of understanding and acceptance of flexibility in L2 production that led to the more recent concept of “translanguaging,” which is a process where multilinguals draw upon and integrate two or more languages in communication. The term was first used in the 1990s and has developed alongside research in ELF. Both languaging and translanguaging are concepts that attempt to deal with the reality that EIL has grown exponentially, and the majority of the use is in multilingual settings—a phenomenon that second language research is only in its early stages of addressing.

### Future Directions in Research, Theory, and Methodology

The study of content via an L2 has a long history, and developments over the past 50 years have suggested that there are benefits for L2 learners in terms of language development—indeed, this is the primary rationale for CLIL and other content-integrated approaches. For example, recent studies in Asian (Yang, 2015) and European (Dallinger, Jonkmann, Hollm, & Fiege, 2016) contexts have found that students studying via CLIL improve their receptive skills. However, the field still has a need for more empirical research across contexts, particularly longitudinal studies (Cenoz et al., 2014), and greater attention is needed for the teaching of content in EIL situations.

Some key foundations continue to be questioned—do L2 students equally develop both their language and content knowledge? Findings from previous studies suggest that the influence of foreign language study on content learning may not always be positive, and may be subject dependent. In a recent experimental study of German secondary students in two groups learning via their L2 or their L1, it was found that learners completing content classes in an L2 improved their listening skills, but did not improve their general English ability. Furthermore, the L2 group took longer to reach similar levels of content knowledge as the monolingual group (Dallinger et al., 2016). This study helps to highlight the value of exploring more focused components of language acquisition in the learning of content in an L2.

The future of enquiry in the integration of content and language learning in EIL seems to be wide open. As we continue on the relatively uncharted path of
globalization and its impact on English language education, we are observing a wide spectrum of responses from total resistance to full acceptance of flexible approaches to new visions of English as an international language. As increasing numbers of students are learning content through EIL, the integration of content and language learning has become imperative, and even expedient. The development of societies participating in the global market depends greatly on those societies’ ability to foster citizens who can succeed in that market. Where the early days of bilingual education, dating back to ancient Rome, targeted elite members of society, the development of bilingual education in the past 60 years was instigated by the realization of the need to equip all members of a society with the linguistic skills to be active and productive in that society. This move resulted in the development of CBI, which led to CLIL and EMI. While there is no clean delineation between these different approaches today, they are all significant in informing our understanding of the future direction of EIL.

SEE ALSO:
Content and Language Integrated Learning; Content-Area Assessment; Content-Based Instruction; Immersion

References


**Suggested Readings**
