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Chapter 1

The Evolving Architecture of Content-Based Instruction

Donna M. Brinton & Marguerite Ann Snow

Introduction

In 1989, together with our colleague Marjorie Wesche from the University of Ottawa, we published a volume on content-based instruction (CBI)—then an emerging trend on the second/foreign language (SFL) scene (Brinton, Snow, & Wesche, 1989). At the time, it was impossible to envision the scope of CBI's influence today. The volume provided a rationale for CBI and its historical antecedents. We also proposed three "prototype" models of CBI at the university level, noting that a benefit of viewing them as prototypes was that it would allow "consideration of other content-based variations which combine features of the three prototype models" (p. 23). Eight years later, we co-edited *The Content-Based Classroom* (Snow & Brinton, 1997), which dealt with CBI in a more comprehensive fashion, expanding our focus from the post-secondary level to include CBI programs for younger learners and treating such topics as syllabus, materials, and course design; teacher preparation; assessment; research; and alternative models such as peer tutors and the training of discipline faculty. We also discussed practical issues such as language and content teacher collaboration and the challenges of administering CBI programs. Finally, we sought experts to make connections between CBI and related areas such as task-based instruction, English for Specific Purposes (ESP), and English for Academic Purposes (EAP).

Over the past three-and-a-half decades since the original publication of *Content-Based Second Language Instruction* (Brinton, Snow, & Wesche, 1989), CBI has emerged as one of the primary approaches used in teaching SFLs. Geographically, it has spread to virtually all parts of the world; it has also been implemented at all educational levels, from elementary school instruction to adult continuing education and from college preparatory courses to post-graduate educational contexts. As we indicate in our chapter title, CBI is a continually evolving model, with multiple alternative or "hybrid" models that have branched off from the original three prototype models we focused on in our original publication. In this chapter, we will provide a definition and underlying rationale for CBI, describe the original prototype models and some more recent modifications of the model, and examine some of the most frequently encountered issues in implementation.

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A Definition and Rationale

At the heart of CBI is the integration of language and content. As defined by Snow (2014), CBI:

> . . . is an umbrella term for a multifaceted approach to SFL teaching that differs in terms of factors such as educational setting, program objectives, and target population but shares a common point of departure—the integration of language teaching aims with content instruction. (p. 439)

This definition echoes that of Davison and Williams (2001), who describe integrated language and content teaching as ". . . a heuristic label for a diverse group of curriculum approaches which share a concern for facilitating language learning broadly defined, through varied but systematic linking of subject matter and language in the context of learning activities" (p. 57).

We can trace the impetus for CBI to the advent of communicative language teaching (CLT) in the 1970s, which was profoundly influenced by Hymes (1971) and others who proposed a more socially oriented approach to linguistics. The notion of "communicative competence" proposed by Hymes and his colleagues refers to the ability to use language effectively and appropriately in a variety of contexts. CLT formed a suitable backdrop to approaches such as immersion education in Canada (Genesee, 1987; Tedick, Christian, & Fortune, 2011); other curricular approaches compatible with CLT such as CBI, ESP, EAP, and task-based language teaching (Duff, 2014); and the language across the curriculum movement in the U.K. and U.S. (A Language for Life, 1975; Parker, 1985)—all of which advocate, to some extent, for the integration of language and content teaching aims.

A Brief History of CBI

CBI first appeared on the scene in North America in the early 1960s with French immersion programs in Canada being the earliest precursor of other types of CBI (Lambert & Tucker, 1972). At the post-secondary level, centers of activity included the University of California, Los Angeles, and the Monterey Institute of International Studies in California along with the University of British Columbia and the University of Ottawa in Canada. The first published volume on CBI appeared in 1986, with Bernard Mohan's aptly named volume *Language and Content*. In the introduction to the volume, Mohan exposed the following paradox when he noted, "In subject learning we overlook the role of language as a medium of instruction. In language learning we overlook the fact that content is being communicated" (p. 1). CBI seeks to eliminate this compartmentalization through its emphasis on the need to integrate the teaching of language *and* content. Further, Mohan laid the ground work for CBI pedagogy:

> Recent research on language and learning in the content class suggests that we need more than a laissez-faire approach to help students with the language demands of the content class. A central concern of research conducted on second language acquisition is the extent to which second language learners are able to learn the second language in the content classroom, and this research contradicts the older laissez-faire arguments. (p. 7)

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As we shall see in this chapter and elsewhere throughout this volume, this quote remains as timely today as it was when his book was first published.

By the late 1980s, the modern language teaching community in the U.S. also began to apply CBI principles to "disciplined-based" approaches. Foreign languages across the curriculum programs sprang up at such places as St. Olaf College (Minnesota), the University of Minnesota, Eastern Michigan University, Earlham College (Indiana), and the University of Rhode Island (Krueger & Ryan, 1993).

Since these beginnings, CBI has spread literally throughout the world, with the movement taking hold in both the ESL and EFL contexts. Increasingly today, it is being used in contexts where English functions as an international language of communication, or *lingua franca*. (See also the respective chapters by Dalton-Puffer, Kling, and Stillwell, this volume.)

Genesee and Lindholm-Leary (2013) offer the following rationales for CBI:

1. It allows L2 learners to develop their language skills in tandem with social and cognitive skills.
2. Its focus on providing meaningful and relevant academic content and building opportunities for purposeful communication motivates L2 learning.
3. Exposure to content enables learners to map new language onto meaning and thought.
4. It provides exposure to structural and functional variation in different contexts of use, thus enabling L2 learners to acquire forms that are authentic and useful.
5. It facilitates opportunities for learners to link what is new to already known ideas and skills, thus providing opportunities for deeper learning.

Some additional benefits include the fact that CBI provides a meaningful context for the language items being presented and serves as an organizing principle for decisions about the selection and sequencing of language items. It also provides rich opportunities for L2 acquisition to occur by providing the input that learners need, creating opportunities for negotiation of meaning about meaningful content, and pushing students to develop appropriate and accurate output. Finally, it exposes students to high-level academic content and encompasses work on academic skills that can transfer to other academic disciplines. See Crandall (2012) and Fitzsimmons-Doolan, Grabe, and Stoller (this volume) for an extended discussion of research support for CBI.

The Three Prototype Models of CBI ||

As noted, in *Content-Based Second Language Instruction* (Brinton, Snow, & Wesche, 1989) we attempted to capture the three primary models of CBI that existed at the time: (1) theme-based instruction, (2) sheltered instruction, and (3) adjunct instruction. Recognizing that the approach needed to remain flexible, we identified these as "prototype" models, leaving room for practitioners to adapt the models to their own instructional contexts. Though today many additional models of CBI exist, these three models (see Figure 1.1) remain central to the approach and are thus deserving of further examination here.

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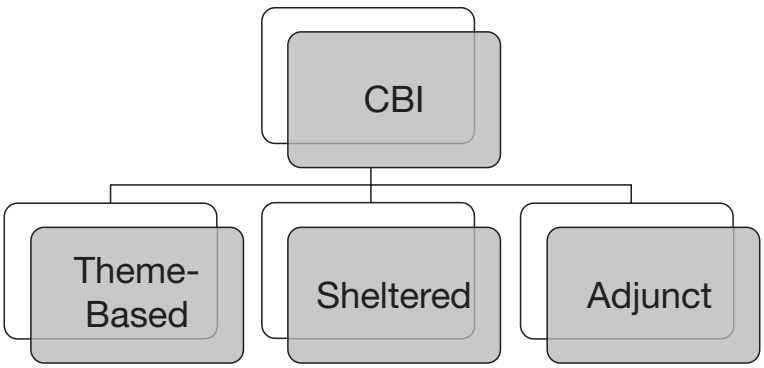
Figure 1.1: The Three Prototype Models of CBI



Theme-Based Instruction

Theme-based instruction refers to instruction that focuses on specific themes of interest and relevance to the learners. The themes (e.g., Heroes, Save the Environment, or Online Romance) create the organizing principle for the course and provide the point of departure for skill- and language-based instruction. Themes can vary from a four-page treatment in the students' textbooks to extended or sustained treatment of content over several weeks or even an entire term (Murphy & Stoller, 2001). The thematic texts and associated interactive tasks provide the language rich environment that allows learners to acquire the L2 through sustained content language teaching (SCLT).

Theme-based instruction is possible at virtually any level of instruction (from beginning to advanced), though probably most suitable for students at intermediate and above levels of language proficiency. To locate an example of theme-based instruction, one has only to look at the many multi-skills textbooks on the market today that have adopted this approach as their organizing principle. Listed in the textbooks' table of contents are chapter titles such as Extreme Sports, Voluntourism, Endangered Species, Smart Cars, and the like. The course designer's challenge is to find suitable themes for the students in question and level-appropriate texts to provide input. An additional challenge is to determine the language and skill foci that are appropriate to cover in each thematic module and how to best integrate and sequence these items in the overall course.

Hauschild, Poltavtchenko, and Stoller (2012) describe a theme-based unit that merged a focus on environmental education with a focus on academic language preparation. Entitled "Going Green," the unit was designed for students enrolled in an academic preparation program, although it could be adapted to a variety of levels and teaching contexts. The focus on environmental education taught students how to contribute to a more sustainable environment and heightened students' interest in contemporary issues. Targeted tasks and authentic materials helped to promote language acquisition and prepared students for meaningful communication. The four skills of listening, speaking, reading, and writing and an emphasis on critical thinking and autonomous learning were integrated throughout the unit.

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Another option for theme-based instruction is the use of theme-based writing modules. This approach is most often found in EAP courses. One such example is an advanced ESL writing module centered on the theme of homelessness in the U.S. and designed for students in a program for matriculated ESL students at UCLA (C. Holten, personal communication). In this five-week module that stressed critical-thinking skills, Holten exposed students to numerous authentic source materials such as essays from university-level sociology texts, documentary videos, newspaper and journal articles, and excerpts from academic texts as well as a short story to acquaint students with the issue of homelessness. They also received targeted instruction in writing for academic purposes and produced a multi-draft essay in which they critically evaluated competing theories of homelessness.

Sheltered Instruction

The second model, *sheltered instruction,* refers to instructional models in which students who are still developing their L2 are separated from native speakers for the purpose of content instruction, which is delivered in the students' L2. The original sheltered content courses were developed at the bilingual University of Ottawa where Introduction to Psychology was offered to non-native speakers of English and taught by a native English–speaking psychology professor; a separate section of *Introduction á la Psychologie* was offered to non-native speakers of French and taught by a French-speaking professor (Brinton, Snow, & Wesche, 1989). As an incentive for taking the course, students received unit credit for the Psychology course and satisfied their foreign language requirement. The professors in their respective courses were assisted by an English or French language instructor who spent about 15–20 minutes before each class reviewing the readings and preparing students for upcoming topics. Evaluation of the sheltered courses revealed that the sheltered L2 students made significant gains in both English and French, respectively, that were equal to or greater than the gains of students in well-taught ESL and French as a Second Language classes at comparable proficiency levels (Edwards, Wesche, Krashen, Clément, & Kruidenier, 1984; Hauptmann, Wesche, & Ready, 1988). The original sheltered courses "convincingly demonstrated that subject matter teaching can be language teaching as well" (Brinton, Snow, & Wesche, 2003, p. 54).

Over the years since the original sheltered model was designed at the University of Ottawa, the model has seen widespread implementation at the elementary and secondary levels in the U.S. and in some EFL settings. The instructor is typically a content specialist, for example, a secondary school science teacher, who has specialized training in "sheltering" techniques, also referred to as Specially Designed Academic Instruction in English (Reynolds, 2015), for making the content comprehensible (e.g., via the use of visuals, pre-reading tasks, lexical accommodation, strategy instruction, and frequent comprehension checks). In this manner, instructors assist students with their language skill development and help them to access academically challenging content material. Exposure to rich academic language and complex concepts coupled with sensitive instructional delivery provide the necessary conditions for L2 acquisition to occur.

An example of sheltered instruction at the primary level involved a sheltered science class where elementary school students in a bilingual program were engaged in a unit about

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the rainforest (U.S. Department of State, Office of English Language Programs, 2007). In the video accompanying the unit, we can see that one corner of the classroom was transformed into a rainforest, complete with improvised hanging vines and a rainforest canopy affixed to the ceiling. We can also see the teacher conducting a warm-up activity where students sang the "water cycle" song (to the tune of "Oh My Darling, Clementine"); the teacher then reviewed and reinforced key vocabulary (adjectives, nouns, verbs, and adverbs), and guided the students to produce creative sentences about the creatures who live in the rainforest (e.g., "Big yellow jaguars fight madly on the ground" "Small poisonous monkeys scratch quickly in the canopy"). The class ended with students writing three sentences about rainforest creatures in their journals.

At the secondary level, Bright (2010) describes a ninth grade sheltered mathematics class at a large suburban high school in Virginia, just outside of Washington, DC. More than 20 percent of the school population was qualified for English to Speakers of Other Languages (ESOL) services. Education at this school was standards-based; the teacher of the sheltered math class was also certified in ESOL and built active production and receptive understanding into the lesson. In her account, Bright describes ways in which the mathematics teacher created a supportive learning environment for her L2 learners and encouraged risk taking. By systematically foregrounding language issues in the mathematics curriculum, she helped students to acquire key vocabulary and to develop their academic register.

The best-known sheltered model is the Sheltered Instruction Observation Protocol (SIOP) (Echevarría, Vogt, & Short, 2017). SIOP is a comprehensive, field-tested model of sheltered instruction that specifies the features of high-quality sheltered lessons for teaching content to L2 students. The protocol has eight components including: lesson preparation (e.g., designing content and language objectives); building students' background knowledge; comprehensible input; instructional strategies; interactional grouping configurations; practice/application; lesson delivery; and review and assessment. SIOP offers an extensively researched tool for observing and quantifying teachers' implementation of sheltered instruction. In a recent study of the academic literacy of secondary English learners (ELs) whose teachers had participated in professional development using SIOP, ELs made significant gains in reading, writing, and oral proficiency compared to similar students whose teachers had not received SIOP training (Short, Fidelman, & Louguit, 2012).

Adjunct Instruction

Finally, *adjunct instruction* refers to instructional models in which two courses (a content course and a language course are paired, with the content and language instructors collaborating to merge or dovetail their instructional objectives. Often, L2 students are separated for the purpose of language instruction but combined with mainstream students in the content course. The content course typically provides the point of departure for decisions about what to teach in the language class; language objectives are identified with respect to students' linguistic needs in the content class. L2 acquisition occurs through exposure to high-level, challenging language in the content course and through the systematic academic language instruction provided in the language course (Brinton, Snow, & Wesche, 2003). This

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model offers students "two for one"—that is, increased language proficiency as well as in-depth mastery of the content material.

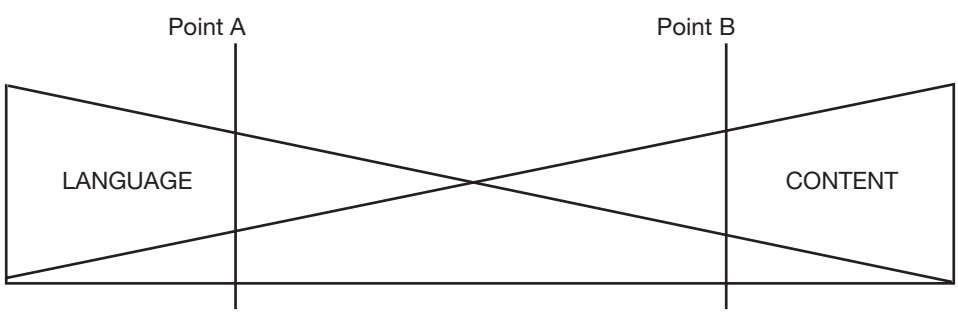
Perhaps the most frequently cited example of adjunct instruction is UCLA's Freshman Summer Program (FSP), which we described in *Content-Based Second Language Instruction* (Brinton, Snow, & Wesche, 2003). In this summer bridge program, first-year L2 students who had been identified by university admissions as "high risk" took an EAP course paired with a content-area course that fulfilled one of the students' general education requirements (e.g., Introduction to Psychology). In collaboration with the Psychology professor and teaching assistants, the EAP instructors identified language objectives that would assist students in their reading and writing assignments for the content course. They also stressed academic preparation skills with a view toward preparing students for the general demands of academia. Former FSP students ranked the academic skills they had learned (e.g., taking lecture notes, preparing reading guides, using in-class essay/exam strategies) highly; however, above all "adjusting to UCLA" was the highest rated benefit of the adjunct experience (Snow & Brinton, 1988).

A second example of adjunct instruction involves an English/Philosophy adjunct course offered at an English-medium private university in Turkey (Spring, 2010). In this instance, the adjunct course was part of a larger initiative at the university to enrich sophomore-level EAP classes. Students in their sophomore year attended linked English and Philosophy courses, with the language component organized around the Philosophy topics and texts, which provided the point of departure for the language syllabus. The ultimate goal was to broaden students' intellectual background knowledge and cognitive skills and expose them to unabridged primary source texts.

As may already be clear, the three prototype models of CBI place differential amounts of emphasis on language and content. Met (1999) used the labels *content-driven* and *language-driven* to capture the degree of emphasis on language and content which underlies different CBI models. This difference is excellently captured by van Lier (2005) in his sliding scale of language and content (see Figure 1.2).

According to van Lier, "The chart… is a simple reminder that CBI is a continuum, not an either-or choice" (p. 15). Falling on the left-hand side of the scale (e.g., at Point A) are

Figure 1.2: van Lier's Scale of Language and Content



From van Lier, L. (2005). The bellman's map: Avoiding the "perfect and absolute blank" in language learning. In R. M. Jourdenais & S. E. Springer (Eds.), *Content, tasks and projects in the language classroom: 2004 conference proceedings* (p. 15). Monterey, CA: Monterey Institute of International Studies. Used with permission.

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courses where "language takes precedence over content" (p. 16). The clearest example of this type of course would be *theme-based instruction*, where content (in the form of a theme) is a carrier topic for the language being presented and practiced. On the right-hand side of the scale (e.g., at Point B) are courses where "content takes precedence over language" (p. 16). An example of such courses would be *sheltered instruction*, where mastery of content is primary and L2 development occurs through exposure to contextualized language and subject matter. Finally, at the midpoint on the scale, we could place *adjunct instruction*, where the two courses combined provide a balanced emphasis on both language and content.[1]

The Emergence of Newer Hybrid Models of CBI

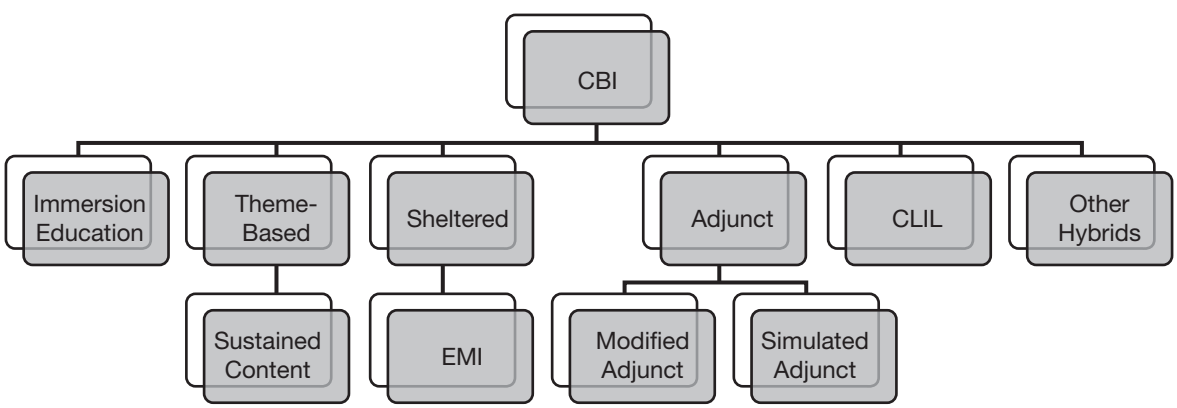
Surveying the landscape of CBI today, some 30-plus years after the appearance of Mohan's (1986) *Language and Content*, we cannot help but be struck by the variety of new and/or hybrid models of CBI. As we have indicated in the title of this chapter, the "architecture" of CBI continues to "flex" or evolve as new contexts emerge where the application of CBI is relevant. This lack of a prescribed form, in fact, can be considered one of CBI's most obvious strengths as well as one of the primary reasons for the enduring nature of the model. Figure 1.3 provides an updated visual representation or "map" of the most documented variants of CBI on the language teaching scene today.

As we can see, the three prototype models of theme-based, sheltered, and adjunct instruction are still very much present on the scene. However, for all three prototypes we see offshoots of the original models indicating ways in which CBI has evolved to accommodate specific student populations, teaching settings, and local resources/logistics.

Sustained Content Language Teaching

The first of these accommodations, SCLT, was briefly mentioned. Sustained content courses, taught by a language instructor, are a form of theme-based instruction. According to Murphy and Stoller (2001), the two major components of SCLT include a focus on the explora-

Figure 1.3: An Updated Map of CBI



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tion of a single content area or carrier topic over the course of a unit along with a complementary focus on L2 learning and teaching. The authors document these advantages of SCLT over more traditional theme-based instruction:

1. Topics are "stretched" over a whole term or an entire school year—thus avoiding the pitfalls of the theme-based "potpourri" approach (Jacobs, 1989) where content is presented in bits and pieces with no obvious connections in terms of content or language selection.
2. The use of sustained content simulates the conditions and demands of the subject matter classroom.
3. Learners engage with the content more deeply, in the process acquiring advanced academic vocabulary and language skills.
4. There is a dual focus on content (including critical-thinking, cognitive and metacognitive strategies, and study skills) and language development (including the four skills, grammar, vocabulary, and pronunciation).

Brinton (2001) provides an example of an elective literature course taught to advanced L2 students at the tertiary level. This example of SCLT, Focus on the City of Angels, revolved around the single extended theme of the city of Los Angeles. Opting to depart from the traditional format for literature courses in which students read excerpts from great works of literature, Brinton instead organized the course around works dealing with life and urban issues in Los Angeles. Students read essays, autobiographies, poems, short stories, and a novel; in all of these, the city took on a central role and exerted its unique influence on character and plot. Integral to the course were activities that acquainted students with literary devices (e.g., plot, setting, character development); however, equally important were activities (e.g., guided discussions, response journals, stylistic analysis of word choice) that used the content to enhance students' language and critical-thinking skills.

Content and Language Integrated Learning (CLIL)

The turn of the century saw the emergence and exponential growth of CLIL, particularly in Europe. According to Marsh (2003), CLIL:

> . . . refers to any dual-focused educational context in which an additional language, thus not usually the first language of the learners involved, is used as a medium in the teaching and learning of non-language content. It is dual-focused because whereas attention may be predominantly on either subject-specific content or language, both are always accommodated. (Introduction, para. 1)

CLIL, then, is a dual language model that involves the delivery of certain subject matter courses in the students' L2 or additional language and that represents a response to the multilingual needs and goals of global economies. With its goal of creating global citizens, CLIL lends itself to settings (e.g., the European Union) where a language other than the

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students' home language serves as a lingua franca or language of wider communication (Coyle, Hood, & Marsh, 2010). Since its beginnings, CLIL has spread rapidly throughout Europe and elsewhere worldwide.

CLIL shares key features with other forms of CBI, especially (partial) immersion and sheltered instruction. In both of these approaches, students study subject matter delivered in a language other than that of their L1; SLA occurs as a "by-product" of the rich exposure to meaningful language in the subject matter classroom. Additionally, in both approaches, language and content aims are integrated and the instructor's task is to both make content comprehensible to the L2 student population and to support language acquisition. So-called "hard" CLIL is a form of subject teaching in the L2 that emphasizes academic achievement in the subject matter and treats language development as a kind of "bonus." "Soft" CLIL, on the other hand, may be offered for a shorter period (half a year) and places emphasis on both subject matter achievement and language development (Ball, Kelly, & Clegg, 2015).

However, there are important differences as well. From our North American perspective, CLIL (at least "hard" CLIL) seems most closely related to sheltered instruction, but constructive discussions in the course of preparing this book have led us to give it a distinct classification as a separate model of CBI. Cenoz, Genesee, and Gorter (2013), however, point out that "definitions of CLIL and the varied interpretations of this approach within Europe indicate that it is understood in different ways by its advocates" (p. 244).[2] For one, CLIL is largely driven by a language policy that embraces the development of multilingual/multicultural individuals who can function in today's global society. Students' exposure to L2 subject matter instruction is systematically "phased in" over time, with the number of hours of L2 content instruction increasing with grade level. Sheltered instruction, on the other hand, is typically driven by pressing educational needs in settings such as the U.S. where large numbers of school-age children speak home languages other than the language of school and may enter the school system at any time during the academic year. Its end goal is to transition students from the sheltered to the mainstream classroom. Most ELs in U.S.-sheltered programs have very different sociolinguistic profiles than CLIL students; they typically come from immigrant families and are adjusting to life in their new country. CLIL, in contrast, is often seen as an elite programmatic option with "high social value for parents" (Ball et al., 2015, p. 11). See Dalton-Puffer, this volume, for a more thorough discussion of CLIL.

English-Medium Instruction (EMI)

Often referred to as the tertiary education variant of CLIL, EMI refers to content instruction delivered in the students' L2.[3] Central to the appeal of EMI are the dual aims of creating multilingual citizens and internationalizing tertiary institutions—that is, to appeal to international students for whom EMI courses are an enrollment incentive and thus a financial boon to the institution (Doiz, Lasagabaster, & Sierra, 2013). EMI course offerings have multiplied exponentially in recent years, not only in Europe but also in many other parts of the globe, with more than 60 percent of all post-graduate courses in Europe currently being offered through EMI (Macaro, 2015).

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That being said, the implementation of EMI differs widely from country to country, as well as from institution to institution. In particular, this variation pertains to the degree to which language support or an intentional focus on language skills is present. In what might be termed the "weak" version of EMI, L2 students are exposed to content delivered in English with little or no attention paid to language skills, as described by Dueñas (2003):

> In [EMI], language aims are not contemplated as part of the curricular formulations of the given courses; in fact classes of this kind normally proceed without specific instructional emphasis on language analysis and practice, and without making adjustments to adequate the discourse to the level of proficiency of students. The context, however, provides valuable opportunities for language learning as it involves intensive exposure to highly contextualized language of particular relevance to the academic interest of students. These [students] therefore manage to advance their language competence by developing receptive and productive skills though in an unplanned, unsystematic way. (Section 4, Second Language Medium Courses)

On the other end of the spectrum, Brinton (2007) describes language-enhanced (also known as language-sensitive) English-medium courses in which the content and language goals are intentionally aligned and where there is an explicit focus on developing language skills as well as increasing content knowledge.

Whatever approach is selected, those who implement EMI are bound to encounter many of the same challenges that surface in other forms of integrated language and content learning, for example, the requisite threshold level of L2 proficiency needed for both students and faculty to participate successfully in and benefit from EMI; effective means of assessing this proficiency; faculty familiarity with and buy-in to the EMI model; and training of faculty to assist them in delivering content effectively to L2 students. (For more details, see Issues in Implementation. See also the chapters by Kling and Stillwell, this volume.)

Modified and Simulated Adjunct Models

In the prototype model of adjunct instruction, the instructors of two separate classes (a content and a language class) coordinate their instructional aims, with the content class driving curricular decisions and the language class narrowing in on the linguistic skills that students need to function in the content course. Numerous modifications have been made to this model to make it more responsive to setting variables. Iancu (2002), for example, describes an adaptation of the adjunct model to the Intensive English Program (IEP) setting; in this case, an introductory-level university content course was adjuncted to four separate skill-based IEP courses (listening and note-taking, reading, academic writing, and speech). This modification allowed the model to be used with students at a lower level of English language proficiency and was therefore well suited to the IEP setting. Snow and Kamhi-Stein (2002) describe another modification at the university level in which general education content courses were paired instead with a study group, co-taught by a language specialist and a peer study group leader (i.e., an undergraduate student who had previously success-

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fully completed the content course). In this modification of the adjunct model, extensive faculty development took place with faculty of the targeted general education courses redesigning their courses to make the content more accessible to language minority students and to teach the language skills needed to meet the demands of the content assignments (Snow, 1997; Srole, 1997).

Finally, Brinton and Jensen (2002) describe a "simulated adjunct model" (p. 125) in which video excerpts of university content lectures and the accompanying course readings formed the core of sustained content units in the university's EAP program. Selected from a cross-curricular sampling of general education courses (such as Introduction to Sociology, Communication Studies, and Atmospheric Sciences), the units also contained language and academic skills development materials along with other theme-related enrichment activities (e.g., political cartoons, newspaper articles, short story excerpts) that complemented the content of each unit.

Other Hybrid Models

One difficulty of describing other hybrid models is that many variants or "twists" of the CBI model that have arisen to respond to local contexts and student needs are neither widely reported nor captured in print. One notable exception, however, are writing intensive (WI) courses. Such courses, which are offered in various discipline areas across the curriculum, typically have the following characteristics (Townsend, 2001): The student to instructor ratio is small, ensuring more attention to student writing; courses are taught by senior content-area faculty who have attended writing across the curriculum workshops; a specified number of writing assignments are required for the course to qualify as WI; and writing assignments require multiple drafts, span a variety of genres, and constitute a specified percentage of students' final grade in the content course. Jensen reports on one such WI course, An Introduction to Language Learning and Language Teaching, designed for multilingual writers and offered through the Department of Applied Linguistics at the University of California, Los Angeles (L. Jensen, personal communication, 2010). In the course, students completed four multi-draft written assignments: a personal reflection on their L2 learning experiences; an analysis of observations conducted in second language classrooms; a review of a recent ESL or EFL language textbook, written to publication specifications; and a research paper examining a popular conception of language learning that drew on a minimum of three sources. In addition to these formal writing assignments, the students also posted and responded to weekly reading reaction journals on the course management site.

Issues in Implementation

As Brinton, Snow, and Wesche (2003) note, there are numerous issues that impact the successful implementation of CBI. These include but are not limited to: administrative issues (e.g., where the impetus for implementing CBI comes from and who carries responsibility for the program's implementation); program design issues (e.g., whether the primary

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objective is to teach language or to teach content and how far-reaching the planned changes are); student issues (e.g., students' L2 proficiency level, their prior educational background, and their needs and interests); staffing issues (e.g., whether instructors have the necessary linguistic proficiency and background in CBI and whether they are willing to take on new roles in their teaching); and, finally, program evaluation issues (e.g., student achievement and the quality of the curriculum and materials). According to research studies in CBI, however, there appear to be three primary issues that are mentioned repeatedly as impacting the implementation of CBI. These include: (1) the lack of attention to form in CBI; (2) the balance of attention to language and attention to content; and (3) the power imbalance between language and content instructors.

With respect to the first of these issues, Eskey (1997) notes that CBI tends to "come down hard" on the side of fluency, thus often paying inadequate attention to form. This is echoed in research conducted by Brinton and Holten (2001), who note that language instructors often spend more classroom time reviewing content than focusing on language. They term this phenomenon "content envy." Lyster (2007), in his research in language and content integrated classrooms, documents similar findings—that is, that the focus on language is often incidental. And finally, Valeo (2013), in a controlled study, notes that a focus on form approach resulted in significant gains in language as well as in content mastery. (See also Lyster, this volume.)

Next, as pertains to achieving a balance of language and content in the integrated classroom, research yields the following findings: Davison (2005), in a study of "subject English" as a content course, notes that the definition of what is language and what is content can shift according to the disciplinary community—that is, that the very notions of language and content are subject to interpretation. Creese (2005), in her study of collaborating teachers in U.K. secondary school classrooms, concludes that language work in the content classroom is typically given low status. Tan (2011), in her study of math, science, and language teachers in the Malaysian context, documents that teachers' beliefs about their role as "only a language/content teacher" limited the effectiveness of CBI. And Cammarata and Tedick (2012), examining the practices of three immersion teachers, conclude that the teachers should engage in "pedagogical awakening" as they struggle to balance language and content. (See also Baecher, Ediger, & Farnsworth, this volume.)

A final area that impacts the successful implementation of CBI models is the perennial issue in CBI of power relations between content and language teachers. A classic in its own right, Goldstein, Campbell, and Clark Cummings' (1997) research highlighted the subservient position that many language instructors take to content instructors in adjunct contexts. Accordingly, the authors dubbed the phenomenon they observed "the flight attendant syndrome." (See Goldstein, this volume, for an updated discussion.) Arkoudis' (2005) research applied insights from appraisal and positioning theory to examine teacher power relationships in planning sessions. These relationships were shown to negatively impact teachers' efforts to balance language and content in their courses. Similarly, Tan (2011) found that overall, the mathematics and science instructors in her study tended to dismiss the importance of language instruction for the conceptual learning of their students. Lastly, Pawan and Ortloff (2011) in their research noted tensions between language and content faculty.

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They conclude with a call to faculty from both disciplines for interprofessionality. (See also Pawan & Greene, this volume).

Conclusions

At this point, it is appropriate to ponder the future of CBI, which is still a vibrant force in the field of SFL teaching. Snow (2014) ventures the following thoughts on the issue:

> The teaching of language through content is not so much a method as a reorientation to what is meant by *content* in language teaching. The literature offers strong theoretical support for content-based approaches and abundant examples of successful programs in SFL settings… As [it] enters its fifth decade, we share Wesche's (2010) positive outlook that [content-based language teaching] "…is likely to continue to flourish, particularly in contexts where learners' main opportunity for developing advanced L2 proficiency is a school or post-secondary context and where they need to develop academic L2 ability." (p. 452)

As we have touched on in this chapter (and as will be discussed in greater length elsewhere in the volume), there remain a number of challenges that are pervasive in CBI. These include the collaboration of content and language faculty, the willingness and ability of content faculty to assume responsibility for language instruction, effective means of sheltering content delivery for L2 learners, the threshold level of proficiency needed for learners to function in the various models of CBI, and appropriate means of assessing both language and content in an integrated approach. These challenges notwithstanding, we contend that CBI is a highly flexible approach that provides a powerful means of structuring the syllabus for both general purpose and EAP courses. In this chapter, we have also attempted the perhaps foolhardy task of classifying the various approaches to CBI that have evolved. Classification is tricky business, especially given that we readily admit that the models are constantly evolving. We are, however, less interested in hard and fast boundaries than offering a helpful schema that delineates similar and contrasting features as a way of demonstrating the rich array of CBI possibilities.

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APPLYING WHAT YOU LEARNED

Questions and Tasks

1. CBI first appeared on the scene in the early to mid-1980s.
   a. To what do you attribute the enduring nature of the approach?
   b. Do you believe, as do the authors, that CBI will continue to be a viable approach to L2 teaching and learning in the future? Why or why not?
2. Review the updated map of CBI in Figure 1.3. The authors have characterized CBI as an umbrella term for a variety of different models and created the classification based on key similarities and differences in the various models discussed.
   a. Summarize the major similarities that justify their overall classification as models of CBI.
   b. Summarize the major differences that set them apart.
   c. Can you think of any other similarities or differences that are not mentioned in the chapter?
   d. Do you know of any other programs that integrate language and content to some degree that are not included in Figure 1.3? What are they? Where would you place them?
3. The authors mention three often-cited issues that threaten the successful implementation of CBI.
   a. Summarize the three issues.
   b. Which of the three do you believe poses the greatest challenge? Why?
   c. Can you think of other issues that pose additional threats to successful implementation?
   d. Can you suggest any ways in which these challenges could be mitigated or eliminated?

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4. Adamson (1993) describes a ninth grade English literature class. The class, which adheres to the mainstream syllabus, contained non-native English–speaking students from 13 different countries. Students read well-known short stories and an abridged version of Dickens' *Great Expectations*. The instructor, who had received special training in working with nonnative speakers, included additional vocabulary exercises and provided students with extra study questions. Finally, she frequently had students work in groups.
   a. Which of the three CBI prototype models does this scenario illustrate?
   b. Describe the distinct characteristics of the model as depicted in the scenario.
   c. What specific challenges would you expect the students to experience? The instructor?
   d. What do you consider to be the strengths of this program? The potential weaknesses?

ENDNOTES

1. van Lier (2005) reminds readers that courses at the far ends of the scale are not conceivable since "language is … always about something, and content is (at least partly) expressed in language" (p. 16).
2. Note that Dalton-Puffer, Llinares, Lorenzo, and Nikula (2014), in fact, do not even classify CLIL as a type of CBI because CLIL "is timetabled as content lessons" and is "taught by content-trained teachers who also assess it 'as content'" (p. 215). They do, however, encourage researchers to be less concerned about labels and more concerned about promoting all forms of additive bilingual programs.
3. Increasingly, the term Integrating Content and Language in Higher Education (ICLHE) is being used, either synonymously with EMI or to refer to a form of EMI that is more language-enhanced/language-sensitive.

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