

The Future Is Now: Preparing a New Generation of CBI Teachers

Content-based instruction (CBI) is not a new term for foreign language teachers. By some accounts, CBI has been employed since the ancient Akkadians adopted Sumerian as the medium of instruction to educate their young in science and religion (Mehisto, Frigols, and Marsh 2008, 9). In the modern era, content-based approaches to language instruction have been employed in various forms since at least the 1960s, when Canadian language educators began teaching academic content in French to English mother-tongue children (Stoller 2008). Yet a large proportion of today's teachers of English as a Foreign Language (EFL) have never had the opportunity to try out CBI in their own classrooms—and many of these teachers may lack key professional knowledge and skills that are critical to successful CBI teaching. At the same time, CBI approaches are playing an increasingly prominent role in institutional, national, and regional foreign language curricula, as for example in various Content and Language Integrating Learning (CLIL) projects

that are being implemented in Europe (Fernandez Fontecha 2009; Lorenzo, Casal, and Moore 2009; Navés 2009; Seikkula-Leino 2007; Serra 2007).

The purpose of this article is to consider ways that language-teacher education programs can better prepare future CBI teachers. After providing a brief rationale for why CBI approaches are particularly relevant in the 21st century, I will consider the competencies and skills that the language teachers of tomorrow will need to effectively integrate content and language instruction in their courses.

Why CBI is more relevant today than ever before

In recent years, teachers and course designers have focused on addressing learners' real-world language-learning needs and objectives. In the past, many general English courses focused on providing students *basic interpersonal communication skills* (BICS) (Cummins 1981, 1984) that would allow them to interact with other English speakers in informal settings for simple informational or phatic purposes.

For students learning English in a foreign language context (as opposed to a second language context such as the United States or Canada), these BICS exchanges would presumably occur when they travelled to another country or when tourists visited the EFL students' own countries. For many learners—especially those from lower socio-economic backgrounds or locations rarely visited by foreign tourists—this presumption is obviously problematic. In practice, students in such settings have very few opportunities to use English outside the classroom. As a result, these students see little reason why they should learn "general" English and, as a result, often fail to do so.

With the increasing globalization of education, however, learning English has acquired new relevance for many students. This process of globalization is especially true at the undergraduate and graduate levels, but has also become relevant to learners at other points in their educational careers. Even for learners who may never actually study at an English-medium school or university, the prevalence of learning materials and scholarly information published in English means that the language is relevant for anyone who wishes to pursue an advanced level of education (Hyland 2006, 2009; Snow and Uccelli 2009; Tardy 2004). In response to this situation, EFL teachers have begun to recognize that the main reason many learners study English is to access academic content through English. For such learners, a general EFL approach is no longer seen as sufficiently related to their learning needs and objectives. Instead, greater emphasis is placed on the acquisition of what Cummins (1981, 1984) termed *cognitive academic language proficiency* (CALP) in English for Academic Purposes (EAP) courses.

As many teachers have discovered over the past 50 years, a CBI approach lends itself especially well to helping students develop academic language skills (Eurydice 2006; Gonzalez and St. Louis 2002; Owens 2002; Rodgers 2006). A base of empirical evidence has existed for some time to support the idea that CBI approaches provide increased contextualization for language learning in comparison to traditional grammar-based or communicative language teaching approaches, leading to comparatively greater gains in student language proficiency (Brinton, Snow,

and Wesche 1989; Grabe and Stoller 1997). In addition, evidence now exists to refute claims that students who learn content in a second language will automatically fail to gain as much knowledge as peers who learn content in their native language, provided that sufficient learning support is made available to them (Janzen 2008; Lorenzo, Casal, and Moore 2009; Serra 2007). Such research is also of clear relevance to educators in multilingual settings where the main language of instruction is a national language, but not necessarily the students' first language.

What future language teachers need to know to successfully implement CBI

In many countries where English is taught as a foreign language, the preparation of pre-service English teachers currently takes place in one of four academic areas: linguistics, language pedagogy, literary studies, or translation/interpretation. In some countries, pre-service EFL teachers are required to take courses in several of these areas. In other countries, prospective EFL teachers may focus their studies on one area, with limited exposure to other areas. In the remainder of this article, I will argue that the preparation of future CBI teachers must be at the same time both more focused (in terms of the specialized professional knowledge and skills they will need) and broader (in terms of the general academic skills they should possess). I will do so by considering four attributes that future EFL teachers will have to possess to successfully implement CBI: language proficiency, academic skills, pedagogical knowledge, and content-language interface skills.

Language proficiency

It generally goes without saying that foreign language teachers should be proficient users of the target language. This is often an area of concern among teacher educators and educational administrators, however, as well as a source of self-doubt for many practicing EFL teachers. One way to better prepare future CBI teachers would be to more clearly specify the types and levels of language proficiency that will be required of them. This clarification, in turn, would allow teacher educators to better determine how language proficiency should be addressed in the cur-

riculum for pre-service CBI teachers and to devote sufficient instructional time for students to attain the necessary language skills.

Some pre-service teacher education programs already address the *level* of English proficiency expected of prospective EFL teachers by referencing, for example, an external standard such as a given level on the Common European Framework of Reference or a target score on the Test of English as a Foreign Language (TOEFL). However, fewer programs specify the *types* of language that teacher candidates should be proficient in. Referencing the TOEFL iBT might indicate that the given program places a priority on general academic English. This type of language—Cummins' CALP—may be viewed as a necessary basis for becoming an adequately skilled CBI teacher. But tests such as the TOEFL iBT are designed to assess a learner's ability to use English to *study* academic content; these tests do not assess prospective teachers' ability to use English to *teach* academic content.

To truly succeed at merging content and language instruction, especially at higher levels of education, the prospective teacher will need to develop advanced language skills that will enable him or her to meet the demands of a range of classroom language-use tasks. These tasks include typical classroom management practices that many teachers already perform in English, such as setting instructions for student assignments, organizing students into groups, and directing students to turn their attention to the board or a certain page in their books. Other classroom language-use tasks may be specific to CBI contexts. For example, CBI teachers will need to be able to make both language and subject-area content information accessible to students. To do so, they will need to be able to comprehend, explain, and model academic discourse patterns and vocabulary usage.

Many of the communicative exchanges future students engage in will be between speakers of multiple native languages, as opposed to exchanges with native speakers of English, so it is important that pre-service CBI teachers adopt an understanding of *lingua franca* uses of English and how these uses will impact the teaching and learning of English. To be ready to take part in an interconnected globalized world, learners will need

to develop skills to comprehend a range of different world Englishes, rather than just one British or American standard. Yet many current teachers continue to insist that they were taught to speak one variety, so their learners will learn to use that variety, too. The pedagogical norms that future CBI teachers adopt should be those that best insure cross-cultural intelligibility (Jenkins 2006; McKay 2002).

Academic skills

If language teachers are to prepare students to learn content in a second language, they themselves should be proficient users of the academic skills and strategies that support content learning. Unfortunately, these skills are rarely the focus of explicit instruction, with the notable exception of some intensive English or first-year academic writing programs. Rather, in most settings, learners are expected to acquire these skills in an ad hoc fashion simply by "being students." That they often fail to do so should not be surprising.

Future CBI teachers should be able to research and comprehend content from a diverse range of academic fields, both in order to model proficient academic performance for their students and to enable them to develop effective CBI lessons and materials. These teachers will need to develop skills such as information retrieval, note-taking, paraphrasing, summarizing, and synthesizing. As noted above, future CBI teachers will also have to present academic content in a way that makes it accessible to learners of varying levels of target language proficiency and academic preparedness. To do so, future CBI teachers will also need to have a firm command of oral presentation and academic writing skills.

As noted earlier, the acquisition of these skills cannot be left to chance. That is, pre-service teachers should not be expected to develop advanced proficiency in these critical academic skills simply by writing a few research papers or giving a handful of presentations in the course of their university education. Rather, each of these skills should be the focus of explicit instruction, preferably in the early stages of the pre-service CBI teacher education program. As pre-service teachers approach graduation, treatment of these skills should gradually shift from practice-through-application to sustained consideration and

discussion of how they will teach these skills as future teachers.

Pedagogical knowledge and skills

To be able to make both language and content accessible to students, future CBI teachers will need to possess a range of professional knowledge and skills. In this section, I will consider five areas that should be incorporated into pre-service CBI teacher education programs.

Effective practices, not all-encompassing methods. The professional texts and journals that have appeared in our field over the past decade have been full of discussions of “post-method approaches” and “principles of effective language teaching.” But when one speaks to new teachers or students in language-teacher education programs, one often hears about courses that are little more than a review of the “named” language teaching methods, such as Suggestopedia or The Silent Way. Even the way that Communicative Language Teaching is often presented—with few specifics and little beyond a vague notion of what it is not: all the bad old methods that didn’t work—can understandably lead pre-service teachers to believe that ours is a field that is still searching for that one perfect method that will magically turn all of our students into polyglots. In place of this slavish devotion to methods, pre-service CBI teachers need to be introduced to and given extensive opportunities to observe and try out for themselves teaching practices that have been shown through empirical research to support effective language and content learning.

Stoller (2002) outlined a number of such practices that have proven to be especially supportive of student learning in CBI classrooms. Typically, successful CBI classrooms provide students multiple opportunities to receive sustained input on the content they are learning. Successful CBI classrooms also typically incorporate learning tasks and project work that encourage collaboration between learners. Oftentimes learners are asked to work together to complete multi-stage group projects that take them deeper into a topic than a typical language-learning textbook will. Like mainstream subject-area classrooms, successful CBI language classes engage students in a process of gathering information,

processing that information, and reporting on what they have learned. Because students are engaging with a variety of sources and reporting what they learn in a variety of ways, successful CBI classrooms also tend to allow for the natural integration of language skills. CBI also provides a natural framework for the integration of learning strategies and language-use strategies.

Perhaps the most radical difference between CBI classrooms and traditional language classrooms is the way that language is taught. In the CBI classroom, language instruction is presented in a highly contextualized manner. Rather than being based on a chronological progression of grammatical forms as in more traditional language classrooms, the selection of grammar and vocabulary activities in CBI classes is based on the texts that students are asked to read or listen to in order to learn and relate new content knowledge. Good CBI also makes use of a wide range of visual support and graphic organizers to scaffold content and language learning. Finally, successful CBI classrooms often incorporate some culminating activity that allows students to synthesize new information about a given topic and display it in creative, personally meaningful ways.

Understanding how different learners learn differently. In addition to the practices mentioned in the previous paragraph, future CBI teachers need to recognize that different learners will progress through content and language learning stages at different paces, and will need different types and amounts of scaffolding support to achieve content and language learning targets. These teachers will need to develop skills for identifying what motivates individual learners, along with skills to help those students set and achieve personal learning objectives. They will need to help those learners understand how they themselves learn best, and how they can develop cognitive and metacognitive strategies to improve their learning performance. Finally, future teachers will themselves need guidance on how such student-centered teaching can be incorporated within the context of their specific local or national educational system, which may not necessarily be structured to support differentiated instruction of this sort.

Materials development and syllabus design.

The shortage of relevant, appropriate materials is a constant dilemma for CBI teachers. Generally, language-learning textbooks that purport to be content- or theme-based rarely treat a given topic in sufficient depth to afford students multiple opportunities to receive sustained input on the topic. At the same time, subject-area course books designed for use with native-speaker students will likely not provide sufficient language scaffolding to support content learning by second language users. As a result, most committed CBI teachers have to become materials developers. To do this, they need skills for adapting authentic materials to support learner comprehension (Evans, Hartshorn, and Anderson 2010). Or, when they cannot find suitable authentic materials, they have to be able to create purpose-built materials (Swales 2009). Future teachers should be able to work with other teachers in a collaborative spirit to develop and share materials. Thankfully, there are now online repositories of CBI lessons and materials (e.g., <http://carla.umn.edu/cobalt/lessonplans/search.html>; <http://ccn-clil.eu/index.php?name=MaterialBrowse>). These useful collections will continue to grow if future CBI teachers are prepared to contribute lesson plans and materials that they create for their own classes.

Assessment for learning. In many educational systems, standardized tests determine what teachers and students do in the classroom. While many educators decry such “teaching to the test,” they are nevertheless expected (by school directors, parents, and students themselves) to do everything possible to make sure the students do well on major national exams. In the context of language learning, the result is that students may be able to solve common exam question types (e.g., grammar or vocabulary gap fills, multiple-choice reading comprehension questions), but may not necessarily be able to use English for actual communication. In contrast, in effective CBI classrooms, assessment is used to support student learning, rather than to direct it. Teacher and students use information gathered via different assessments to gauge how students are progressing towards content and language-learning goals and to determine whether additional instruc-

tional time or learning support is needed for students to achieve those goals.

In many ways, making the shift from an exam-driven assessment approach to one that is more student-centered may be seen as a policy question that is beyond the control of the local school or teacher. That is, it may be seen as something that must be resolved at the national level. However, it may also be possible to address such issues at the level of the school or classroom. All it takes are a few enlightened school directors or department heads to find creative solutions to institutional assessment and grading policy. The objective should be to empower teachers to use classroom assessments for their intended purpose: giving students feedback on their learning performance that can be used to improve subsequent learning.

But if future CBI teachers are to be empowered in this way, they also need to possess skills that will allow them to make productive use of this power. This means being able to design classroom assessments that go beyond discrete-point grammar and vocabulary quizzes. It also means being able to give substantive feedback that goes beyond error identification and direct correction. It means being able to give in-depth qualitative feedback on student performance and progress towards content and language learning objectives. And it means being able to guide students in developing effective peer- and self-assessment skills.

Incorporating educational technologies.

We all recognize that new technologies are impacting the ways that languages are taught and learned. Some EFL teachers may be enthusiastic adopters of new technologies, while others may be more hesitant or unconvinced of their merit. But, for increasing numbers of us, one thing that is certain is that our students—a group that includes future teachers—are growing up in a world where digital technologies play a central role in their everyday lives. This close involvement with technology is changing the way these students approach and consume information, and the way they expect information to be presented to them. As a result, future CBI teachers will need to possess technological skills that will allow them to reach Net Generation students.

Many technologies are already being used to effectively support CBI projects. It has become commonplace in schools and classrooms around the world to use the Internet as a means to access information. To be effective consumers of Internet information, students need to be taught how to effectively evaluate the trustworthiness of information sources. It is also now common for students to collaborate with peers from around the world on content and language-learning projects. Such international collaborative projects give students important opportunities to learn firsthand about using English for intercultural communication.

With all the content- and language-learning tools and resources that are available, future teachers must be cautioned against using the “computer as babysitter” approach to instruction. CBI teachers (future or present) should not simply plop students down in front of a Computer-assisted Language Learning program or the Internet and say “Go on, be autonomous! Learn English!” Unfortunately, this has been an all-too-common approach to integrating technology into the language classroom.

In place of this approach, future CBI teachers will need to be able to prepare well-structured, well-rationed learning tasks that incorporate technology and provide the necessary support for students to benefit from that technology. Ultimately, future CBI teachers won’t necessarily have to be taught about specific technologies such as concordancers or video editing software as much as they will need to be taught how technology can be effectively incorporated into content and language teaching.

Content-language interface skills

Many of the items in the three sets of knowledge and skills presented above are topics that many good pre-service teacher education programs already address with their students. This last set considers two aspects that are more specific to instructional approaches that integrate language and content learning. The first is the need for future CBI teachers to understand the links between emerging L2 proficiency and language and content learning progress. The second is the equally important need for

future CBI teachers to be able to work effectively with subject-area teachers.

Future CBI teachers will need a clear understanding of how emerging proficiency in both the first and second language will impact content and language learning achievement. There is often popular concern around English-medium or dual-language instruction that students will fail to develop both their understanding of academic content and their native language skills. A great deal of evidence, however, especially from Canadian immersion education, shows that given sufficient time and support, bilingual students ultimately perform as well or better than their monolingual peers on both content and native language assessments, despite initially lagging behind.

Future CBI teachers need to be aware of this research and need to know how the learning processes and progress of students in dual-language programs will differ from those of students in traditional monolingual programs. This knowledge will enable these teachers to adjust their instructional strategies appropriately and reassure concerned parents, students, and school directors.

Future CBI teachers will also need the professional and social skills to form effective partnerships with subject-area instructors. In traditional educational settings, there is an assumption that language teaching and content teaching are two separate things, and that one is the responsibility of the language teacher and the other is the responsibility of the content teacher. In schools that sincerely want to undertake a CBI approach, the view should be that teaching language and teaching content are a shared responsibility. This view is typically rare among subject-area teachers. But even in the most traditional settings, one or two enlightened subject-area teachers may realize that their students will need additional language support if they are really going to use English to acquire new content knowledge. And these instructors, if they are truly enlightened, may actually realize that they themselves will need assistance structuring their lessons so that the concepts they are teaching (in L1 or L2) can offer proper support for and reinforcement of student learning. Future CBI teachers will need to be able to identify and work with potential partners like this (Horn, Stoller, and Robinson 2008).

Conclusion

Future CBI teachers will have to possess a broad range of professional knowledge and skills to help language learners achieve objectives that are relevant in the globalized academic world. These teachers will themselves need to possess sufficient linguistic and academic skills to be able to access content in English. They will also need appropriate pedagogical knowledge to support their students in acquiring advanced academic language proficiency. In some settings, these demands may require teacher educators to rethink their approach to language teaching and teacher preparation. Although this may seem like a daunting undertaking, the potential payoff would be well worth the effort: When language courses become a means for learning about the world we live in, rather than just learning about a language, students will better appreciate the relevance of English to their personal learning goals and their future objectives. As they progress in their learning, students will see that becoming more proficient in English enables them to learn more about the topics and fields that interest them most. This is the virtuous circle of increased motivation and improved learning that awaits future CBI teachers and their students.

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