Content-Based Instruction
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Content-Based Instruction:
From Theory to Practice

Stephen B. Stryker and Betty Lou Leaver

Learning a second language has been compared to learning to ride a bicycle, learning to play tennis, or learning to play a musical instrument. In spite of broad recognition that the best way to learn these skills is by *doing* them, not just by studying about them or performing exercises and drills, our traditional foreign language classes resemble music classes in which all of the learners' time is spent practicing scales and studying theory, and they are not permitted to play any real pieces until they are proficient enough to give a recital. Content-based foreign language instruction, on the other hand, encourages students to learn a new language by playing real pieces—actually *using* that language, from the very first class, as a real means of communication. Furthermore, the philosophy of content-based instruction (CBI) aims at empowering students to become independent learners and continue the learning process beyond the classroom. After all, the ultimate goal we foreign language teachers should have for our students is that they spread their wings, leave the nest, and soar off on their own toward the horizon. CBI is a way of showing our students how to can fly.

CBI, as demonstrated in the following chapters, is a truly holistic and global approach to foreign language education. CBI can be refreshing and liberating for both teachers and students, offering an alternative to the tedium and boredom so often associated with the piecemeal, bottom-up approaches of linguistically driven curricula. More a philosophy than a methodology, there is no singular formula for CBI. Some of the most common models, implemented by increasing numbers of second and foreign language educators worldwide, include sheltered content courses, adjunct courses, theme-based and area studies modules, Language for Special Purposes (LSP), discipline-based instruction, and foreign languages across the curriculum (FLAC). All of these variations of CBI, in myriad combinations, are illustrated in the following chapters.

The term "sheltered content," once an erudite term used in second language acquisition, has become a mantra in many public school systems in the United States (especially in California) that encompasses specially designed math, science, history, English, and social studies courses for K-12 second language learners. In a sheltered class, the teacher uses special methods and techniques to "shelter subject matter," i.e., make the content more accessible to second language learners. In this general sense, all the authors in this volume use sheltered methods and techniques in their foreign language classrooms.

"Adjunct courses" have appeared in many secondary and postsecondary settings as a means of connecting English as a Second Language (ESL) classes, often offered in a language institute on or near campus, to content classes in the regular academic program. Several authors of the chapters that follow, especially in FLAC, use a variation of the adjunct model to make connections between the study of a foreign language and the study of a particular subject matter. Just as sheltered content approaches can make connections that stimulate students' interest, adjunct courses can enhance students' self-confidence with a feeling of using the new language to accomplish real tasks.

"Theme-based approaches," which have existed for a long time in foreign language education, are often supplementary activities that interrupt the systematic study of grammar with readings and activities on topics such as food, music, dating, and the family. In CBI, these kinds of themes often take on a central role in the curriculum. The content modules described by several of the contributors are, in a sense, expansions of the theme-based concept, but in these cases the entire course is designed around in-depth study of topics such as a country's economy, political system, family structure, or the role of women in the society. Instead of being add-ons to a course based on the study of grammar, the study of grammar in these courses becomes linked to, defined by, and dependent upon the topics.

Language for Special Purposes (LSP) courses, currently very common in ESL and English as a Foreign Language (EFL) classes around the world, are now offered in many foreign language programs as well. For example, the courses at the Foreign Service Institute (FSI) and the Defense Language Institute (DLI) described in this volume have strong elements of language for special purposes in that the content is aimed at preparing students for specific positions in overseas assignments—a diplomat in Mexico City or a military peace keeper in Bosnia.

The content of LSP courses is relatively easy to determine depending on what those "special purposes" are; however, in academic foreign language programs determining content is less clear cut. Content is frequently decided arbitrarily by the teacher and is usually based on academic tradition. Literature, the most common of the "content" courses offered in intermediate and advanced foreign language programs, can be combined with elements of LSP. One such successful combination of LSP with the study of literary academic subjects is presented in Klahn's Contemporary Mexican Topics Course in Chapter 9.

FLAC programs, an innovation started in the 1970s and now implemented in dozens of universities in the United States, incorporate the use of a foreign language as a research tool in selected courses across the entire university curriculum. This approach has students using their foreign language ability to read primary sources for information and, as such, helps students to make meaningful use of their language skills while enriching their cross-cultural knowledge. Two successful programs in FLAC are presented: Straight's program at SUNY-Binghamton in Chapter 11 and Shaw's courses at the Monterey Institute of International Studies in Chapter 12.

Experience in foreign language classrooms has convinced us that content-based approaches such as these have the potential to enhance students' motivation, to accelerate students' acquisition of language proficiency, to broaden cross-cultural knowledge, and to make the language learning experience more enjoyable and fulfilling. Moreover, students who experience a well-organized content-based program are more likely to become autonomous, lifelong learners—to develop the wings they need to fly on their own.

What Is CBI?

As we originally suggested in our article in *Foreign Language Annals* (Leaver and Stryker 1989), CBI can be at once a philosophical orientation, a methodological system, a syllabus design for a single course, or a framework for an entire program of instruction. CBI implies the total integration of language learning and content learning. It represents a significant departure from traditional foreign language teaching methods in that language proficiency is achieved by shifting the focus of instruction from the learning of language *per se* to the learning of language through the study of subject matter.

We see a CBI curriculum as one that 1) is based on a subject-matter core, 2) uses authentic language and texts, and 3) is appropriate to the needs of specific groups of students. All three characteristics are essential for success. We will first look at what is meant by "subject-matter core."

Subject-matter core

The fundamental organization of the curriculum is derived from the subject matter, rather than from forms, functions, situations, or skills. Communicative competence is acquired during the process of learning about specific topics such as math, science, art, social studies, culture, business, history, political systems, international affairs, or economics.

Over the last few decades there has been a movement in language education away from studying *about* language toward a focus on using a language as a tool to communicate. Yet in actual practice, most foreign language courses and texts, including some that call themselves communicative, continue to follow a grammatical-structural or skill-based orientation. Foreign language curricula in too many instances continue to use bottom-up approaches that focus on form rather than top-down approaches that focus on meaning. In our experience, bottom-up approaches rarely spark student interest and motivation and have often created frustration and anxiety. In other words, many disenchanted learners leave the nest before they ever learn to fly.

Swaffar (in Krueger and Ryan 1993) distinguishes between the top-down approach of CBI, in which students are asked to look first at the overall meaning of whole works before attending to the sentence level operation of vocabulary and syntax, and the bottom-up approach of traditional language instruction, which focuses mainly on the words and syntactic structures within sentences. Language-based courses, according to Swaffar, assume that language must be mastered before content can be understood, whereas content-based courses assume the reverse: "... students must think about what content means in order to know what they are looking for in language" (185). Thus, attention is shifted from learning language *per se* to learning language through content.

Contrary to some popular thinking that a focus on content knowledge requires a sacrifice of linguistic skill, our experience in CBI classrooms indicates that linguistic development need not be ignored nor taken for granted. In CBI courses there is constant interplay between language and content. Richard Jurasek provides an excellent summary of this central assumption:

A student's exposure to meaningful subject matter phrased in the second language yields content mastery and linguistic mastery. This is a long way from the not-too-distant past when foreign language teaching was basically content-free—class time was filled with manipulation of linguistic forms and discussion of correct usage. Since those bad old days, program designers and researchers have been modeling the ways content-focused and use-oriented programming can motivate, facilitate and recontextualize undergraduate foreign language learning (in Krueger and Ryan 1993, 85).

We consider content mastery and linguistic mastery, believed by many to be strictly sequential, to be synergistic. Brinton, Snow, and Wesche, in describing the ascendancy of CBI in the teaching of English as a second or foreign language, propose that ". . . content-based instruction aims at eliminating the artificial separation between language instruction and subject-matter classes which exists in most educational settings" (in Oller 1993, 137).

Unfortunately, this artificial separation between language instruction and subject-matter classes remains an obstacle in many, if not most, foreign language settings. The reasons stem from a combination of cultural factors—insular social values, a lack of perceived need for integration of language and content, old teaching habits based on false assumptions, and an educational bureaucracy mired in the past. While research and experience indicate the advantages of a content-driven curriculum in foreign language classrooms, teachers' unfamiliarity with second language acquisition processes reinforces false assumptions, such as the idea that the study of language equates to the study of grammar, that meaning should be communicated through translation, that the study of culture equates to the study of literature, or that students must be "fluent" before they are ready to study real content. Our educational bureaucracy, not interdisciplinary by nature, perpetuates the separation of language and content.

In sum, the implementation of a subject-matter core in a foreign language curriculum raises a number of issues that CBI teachers must consider:

- How can we build the necessary interdisciplinary foundation?
- How do we achieve the desired balance between language and content?
- Which subjects do we select and how do we sequence them?
- Who will teach the course, a language teacher, a content specialist, or both?
- How do we define and evaluate student learning outcomes?

These are some of the key questions that will be addressed by the authors of the following chapters, and we will discuss these issues in more detail in the final chapter. Next, we look at the second criterion for CBI.

Use of authentic language and texts

The core material—texts, videotapes, audio recordings, and visual aids—are selected primarily from those produced for native speakers of the language. Learning activities focus on understanding and conveying meaningful messages and accomplishing realistic tasks using authentic language.

One of the major characteristics of CBI is the extensive (though not necessarily exclusive) use of materials taken directly from the culture being studied. Depending on the language, the decision to use a subject-matter core may require the use of authentic texts exclusively. In some cases, the only textbooks available for teaching selected subject matter (e.g., mathematics, physics, history) are those produced for native speakers of the language. Therefore, CBI teachers can find themselves routinely working with materials that are, in the traditional view, far beyond the current linguistic expertise of their students. In such a case, the important issue is not so much what those texts *are* but what the teacher *does* with them.

If the teacher knows how to effectively "shelter" the texts, making them accessible to the students at their level of proficiency, most students can benefit from the use of authentic materials in any content area, even if their linguistic skills are minimally developed. Bernhardt (1986), posing the rhetorical question of whether there are "proficient texts" or "proficient readers," suggests that the idea of "graded texts" should be replaced by "graded activities." An important part of sheltering content is knowing how to grade activities and utilize a broad variety of teaching strategies; among these are using context effectively, recycling or spiraling information, exploiting students' background knowledge and schemata, using peer work, and teaching coping strategies. Such expertise is more likely to be found in a language teacher than in a subject-matter specialist, including specialists in literature.

Language teachers who lack expertise in sheltering content tend to avoid using authentic texts because they fear that students will be overwhelmed and frustrated by the material. Often, teachers believe that some grammatical features and vocabulary are inherently easier and must be learned first (e.g., the dative case before the genitive case or indicative before subjunctive). In actuality, graded language texts often present students with even more frustrating experiences than some authentic texts. The artificial language of foreign language texts does not provide students with models of how people really communicate in the foreign language. Such artificial language lacks natural redundancy, depriving students of multiple cues for comprehension. Rarely do graded language texts lead efficiently to language proficiency gain.

If the teacher carefully selects the content, students will study topics for which they already possess schemata (i.e., the relevant linguistic, content, and cultural background knowledge). Using content and context together to understand messages, students develop coping mechanisms for dealing with unknown language in other contexts, ultimately fostering the development of foreign language proficiency.

In the following chapters the contributors to this volume relate how their students gained proficiency through the use of texts and activities that traditional foreign language teachers would eschew. In these cases, the effective use of authentic language and texts has been a powerful force in propelling students to higher levels of foreign language proficiency. When students successfully negotiate the meaning encountered in authentic written or spoken language, they experience increased self-confidence, which in turn leads to gains in motivation and achievement. They also develop learning strategies for coping with unknown vocabulary and grammar and handling unpredicted situations in the environment in which the foreign language is spoken.

Some of the specific questions related to the use of authentic input that will be addressed in the following chapters are the following:

- What are the appropriate authentic materials and how can we obtain them?
- How do we provide students with authentic spoken input?
- What are the appropriate activities and tasks to exploit this authentic input?
- How do we incorporate student schemata?
- What is the role of students' first language in coping with authentic language and texts?

We now look at the meaning of the third criterion for CBI.

Appropriate to the needs of specific students

The content and learning activities correspond to the linguistic, cognitive, and affective needs of the students and are appropriate to their professional needs and personal interests.

A CBI curriculum must initially correspond to students' needs and remain highly fluid and flexible. A CBI program is dynamic and constantly changing. Although we often have to make initial guesses concerning the topics and the materials that will be most appropriate for a particular group of students, an ongoing assessment of students' outcomes should inform teachers in the continuing choice of subject matter, the selection of authentic texts, and the effectiveness of certain activities. Carefully monitoring student reactions alerts teachers to the linguistic, cognitive, and affective needs of the students and assists them in making the necessary adjustments in the program.

Monitoring students' linguistic development is especially important. Due to differences in schemata, individual students will find some linguistic features salient and others less so, resulting in student A learning a different set of grammar rules and vocabulary than student B. To ensure that all students are able to learn from the materials presented, teachers need to be aware of what items have and have not been acquired and by which students. Some students in CBI programs are comfortable using schemata to induce meaning, i.e., guessing. Others, who have a lower tolerance for ambiguity, possess fewer strategies for coping with unknown language and feel a greater need for confirmation of their hypotheses by authority—a teacher, a grammar reference book, or a dictionary. They often prefer to memorize. Sometimes, students do not feel that they are learning "unless it hurts" (Maly 1993, 40).

On a cognitive level, there are dozens of learner profiles (i.e., the aggregate of learning style variables within an individual student). These include such variables as whether students learn better through sight or sound, prefer to induce or deduce, focus on the whole or on the parts, look for differences or similarities, and process information sequentially or in parallel. There are limitless cognitive variables in a classroom. Each learner profile is associated with its own set of learning strategies, and each learner reacts differently to any given set of teaching strategies. Teachers who understand teaching strategies and learner profiles have a distinct advantage in helping to make authentic content materials accessible to all students in the classroom. One basic strategy for covering a broad spectrum of learning styles is to vary the presentation. Mohan (1986) recommends using a combination of "expository approaches"—lectures, readings, presentations and discussions—and "experiential approaches"—role plays, workshops, simulations, field trips, demonstrations, and interaction with native speakers. The contributors to this volume, recognizing the importance of varying the presentation, describe a broad variety of ways in which differing learner profiles can be accommodated within one classroom.

Affective variables (i.e., students' feelings and emotional reactions) play no less crucial a role. While most students in a CBI class respond enthusiastically when they feel a sense of achievement in working with real-life materials and real-life issues, students who feel frustrated can lose their motivation. Some students feel more comfortable working alone while others need peer support. Some students want praise for their efforts while others want praise for their accomplishments. Some students are angered by overt correction while others are frustrated by the lack of it. An astute teacher will constantly assess and adjust to the affective needs of students and try to maintain what Krashen (1982) refers to as a "low affective filter."

There are benefits in giving students a voice in determining the curriculum in CBI. Participation in choosing topics and activities has been found to be highly motivating and has resulted in a course changing direction in order to better meet the needs of students. Furthermore, student-generated themes and activities create an atmosphere in which the students take responsibility for their own learning and the teacher becomes more of a "manager of student learning" (Maly 1993, 41).

Some of the specific questions regarding student needs that will be addressed in the following chapters are:

- How do we make an accurate needs assessment?
- How do we ensure that students are cognitively, linguistically, and affectively prepared for the program?
- How can we accommodate the widest possible range of learner profiles?
- How do we deal with error correction to maximize learning and motivation?
- How can we use student input to ensure ongoing evaluation and adjustment?

Variations on the Three Criteria for CBI

The questions above, as well as those posed earlier concerning subject-matter core and authentic materials, are answered by the contributors to this volume in vastly different ways. For example, sometimes the subject matter may be delivered in a mixture of the native language and foreign language, while other times information may be "recycled" in the foreign language after initial exposure in the students' native language. The texts may not always be "authentic" in the strictest sense: they may be abridged or edited for beginning language learners. Some programs may place greater emphasis on meeting the academic needs of students, others on meeting

linguistic or affective needs. Sometimes the subject matter may be systematically augmented by explicit grammar lessons. In short, there are many ways that these components can be successfully combined, depending on the setting, the needs of the students, the objectives of the program, the availability of materials, and most importantly, the preparation and disposition of the faculty. The models presented in subsequent chapters, each unique, demonstrate the many combinations that are possible under the broad umbrella of CBI. In our retrospective chapter (Chapter 13), we look back on all eleven case studies and discuss these variations, point out similarities and differences, and discuss some of their implications.

In order to fully appreciate these CBI models, we feel it would be useful to review CBI theory and practice in the larger context of second and foreign language education over the last few decades. In the following sections of this introduction we will discuss CBI and the new paradigm, the development of CBI in ESL and immersion programs, and, finally, the emergence of CBI in foreign language settings.

Communicative Competence, the New Paradigm, and CBI

In the broadest sense, CBI is part of what has been termed a "new paradigm" in language education. This new paradigm centers on the concept of fostering our students' "communicative competence" in the foreign language, that is, the ability to communicate with native speakers in real-life situations—authentic interpersonal communication that cannot be separated from the cultural, paralinguistic, and nonverbal aspects of language (Spolsky 1978). This concept is especially relevant to CBI since, in order to prepare our students to live and work in a new culture, we must create a direct link between the classroom and the culture being studied. This cannot be accomplished effectively in a program that focuses primarily on grammatical competence.

Canale and Swain (1980) elaborated four specific components of communicative competence: grammatical, discourse, sociolinguistic, and strategic competencies. The first two categories, grammatical competence and discourse competence, describe language *usage*. *Grammatical* competence includes knowledge of language structure—the phonemes, the morphemes, and the rules of syntax. *Discourse* competence includes the ability to successfully link sentences for communicative or rhetorical purposes. The second two categories, sociolinguistic competence and strategic competence, describe language *use*. *Sociolinguistic* competence includes the ability to use language appropriate to a given situation including the appropriate choice of register and knowing when to say or not to say

something. *Strategic* competence refers to the ability to use inference paraphrasing, and repetition to cope with situations in which language o comprehension is lacking.

Traditional bottom-up foreign language approaches place primary emphasis on grammatical and discourse competence—language *usage*. CB programs typically place primary emphasis on sociolinguistic and strategic competence—language *use*. CBI is especially suitable for facilitating the development of all four language skills (listening, speaking, reading, and writing) while simultaneously focusing on the functional *use* of language in authentic settings.

In a summary of "Communicative Language Teaching," H. Douglas Brown (1994, 245) describes four characteristics shared by various communicative approaches. These four characteristics, listed below, provide an excellent summary of the pedagogical precepts of "the new paradigm"— and of CBI.

1. Classroom goals are focused on *all* of the components of communicative competence and not restricted to grammatical or linguistic competence.
2. Language techniques are designed to engage learners in the pragmatic, authentic, functional use of language for meaningful purposes. Organizational language forms are not the central focus but rather aspects of language that *enable* the learner to accomplish those purposes.
3. Fluency and accuracy are seen as complementary principles underlying communicative techniques. At times fluency may have to take on more importance than accuracy in order to keep learners meaningfully engaged in language use.
4. In the communicative classroom, students ultimately have to use the language, productively and receptively, in *unrehearsed* contexts.

In her discussion of discipline- and content-based approaches and the change of paradigm, Claire Kramsch (in Krueger and Ryan 1993) observes that foreign language study has become more than a mere linguistic enterprise but ". . . also a social, cultural, historical adventure, because it is the study of *language as social practice*." She observes that in this new paradigm for foreign language teaching " . . . the traditional distinctions between language and literature, big 'C' culture and little 'c' culture, competence and performance, general education and vocational training, are not as clear-cut as they used to be, even though academic structures

have often remained the same" (204). Kramsch identifies four general advantages to discipline-based approaches: 1) diversification of sources of knowledge by drawing from fields such as linguistics, sociology, anthropology, etc., 2) use of a variety of discourse forms rather than just the traditional discourse of the foreign language classroom, 3) diversification of the purposes of foreign language study both as a tool for general education and for specific professional purposes, and 4) the enhancement of the theoretical dimension of foreign language study as a subject matter (208).

Two prominent champions of teaching second and foreign languages through subject matter are Stephen Krashen and Tracy Terrell. In describing their "Natural Approach" to teaching foreign language, Krashen and Terrell (1983) differentiate between language *learning*—gaining the knowledge of language rules consciously and critically through classroom activities— and language *acquisition* —the subconscious ability to use the language communicatively as a result of sufficient "comprehensible input." They recommend content activities as an effective means of providing students with comprehensible input in the classroom and base their claim, in part, on the success of the Canadian immersion models in which children achieve proficiency and literacy in a foreign language by learning subject matter such as mathematics, science, and history in the target language. They claim that the success of such programs is due to their focus "on the message and not the form" (124).

Krashen (in Oller 1993) argues that "sheltered subject-matter teaching," which he calls SSMT (and we are calling CBI), is the most effective way to teach a foreign language. He anticipates strategies described in later chapters of this volume when he observes:

> Implementation of SSMT requires some planning and effort, but it is not as hard to do as some exotic language teaching methods. One possibility is to move toward SSMT gradually, beginning with short modules as part of traditional intermediate classes. As these modules are developed and introduced into the curriculum, the language courses will take on the character of content-based second language classes and second language medium classes (148).

Ian Martin (in Anivan 1990) echoes Krashen's view that "thematic modules" offer a good way to initiate a CBI approach. He started a CBI program in his ESL program in Toronto by introducing thematic modules into existing courses. This approach allowed teachers to experiment with only minimal changes to the existing programs, obviating the need to design whole new courses. He proposes that the modular format is ideally suited

to CBI curriculum because the modules are self-contained and, therefore, flexible, movable, and relatively inexpensive to implement since elaborate interdisciplinary collaboration is not required.

Several of the contributors to this volume utilize modules similar to those described by Krashen and Martin. The "thematic module" approach is used by Sternfeld (Chapter 3, Italian), Ryding and Stowasser (Chapter 5, Arabic), Stryker (Chapter 8, Spanish), Klahn (Chapter 9, Spanish) and Chadran and Esarey (Chapter 10, Indonesian).

In the following section, we turn our attention to the development of CBI in "immersion" bilingual programs and in programs for English as a Second Language in public schools—developments that have had a significant impact on CBI in foreign language education.

CBI in K-12 Immersion and ESL Classrooms

In "immersion programs" and "sheltered English" classrooms, CBI serves as either a component of a curriculum or as the organizational framework for an entire curriculum. Contemporary CBI gained prominence in the 1960s with experiments in elementary and secondary education in the former Soviet Union and Canada. In the former Soviet Union, experimentation with content-based instruction was carried out at a large number of special secondary foreign language schools where all subjects were taught in the foreign language. These programs began in the early 1960s but disappeared by the mid-1980s, when staffing of such schools became impossible because of increasing demand and an inadequate number of qualified teachers (Garza 1987; Nikonova 1968; Star Mountain Inc. 1991).

In Canada in the early 1960s, CBI served as the methodological cornerstone of second language "immersion" programs for K-12 students. The immersion programs, most notably the St. Lambert Experiment in Montreal (Lambert and Tucker 1972), were influential in bringing CBI methodology to the attention of second and foreign language educators everywhere. Similar to the Russian model in concept, the Canadian immersion model started kindergarten students learning all subject matter in the foreign language. Designed primarily to teach French to English-speaking children, these programs enjoyed success, publicity, and, ultimately, emulation (Swain 1975; Hart, et al. 1977; Cummins 1989). The Canadian model was adopted for similar programs in the United States. One of the early examples was the Culver City Experiment (Cohen 1976). By the mid-1990s there were scores of immersion programs in the United States, most of them serving Spanish-English bilingual communities.

In the U.S. public education system, where the need to integrate language and content learning is essential, content-based sheltered English courses

are proving successful for students who enter K-12 classes with little or no English proficiency, especially for students who are preparing to enter English-only classes. The State of California, for example, in an effort to deal with an onslaught of over one million students who do not speak English as their native language (1996 statistics), has officially embraced sheltered content courses, or "specially designed academic instruction in English (SDAIE)," as the most efficient approach for transitioning children who speak English as a second language into English-only classrooms.

Theories and models to support CBI in ESL and bilingual settings are now common. Brinton, Snow, and Wesche (1989) describe three models for CBI at multiple levels: 1) *Theme-based courses* are organized as a series of modules in which the language teacher teaches both subject matter and language; 2) *Sheltered instruction* is specially designed subject matter teaching given to a group of second language learners by a content specialist; and 3) *Adjunct instruction* requires that students be enrolled concurrently in a language course and a content course that are linked through collaboration between the two teachers. These three models have become almost commonplace wherever English as a Second Language and English as a Foreign Language are taught.

Chamot (1986), who labels her CBI instructional model the Cognitive Academic Language Learning Approach (CALLA), sets three goals for instruction: 1) to meet the academic needs of elementary and secondary English language learners, 2) to provide a bridge between ESL and mainstream education, and 3) to provide instruction based on a cognitive model of learning.

Nunan (1989) suggests "task-based instruction" to enhance a CBI curriculum. Task-based activities focus the students' attention on meaning rather than form. He distinguishes between "pedagogic tasks" that are aimed at formal language-learning (such as following the teacher's instructions to make a drawing) and "real-world tasks" that are more authentic (such as filling out a job application). The "real-world task" is related to something that the students will have to do with the language. He suggests the use of three types of tasks to stimulate student interaction: information gaps (e.g., find out what is missing in two pictures), reasoning gaps (e.g., find what is wrong with a picture), and opinion gaps (e.g., rate your favorites and tell why). Task-based instruction has been combined with CBI very successfully in ESL and EFL programs to pair students to exchange information and to solve problems—that is, negotiate for meaning.

One of the major recurring themes in the chapters ahead is the importance of connecting what goes on in CBI classrooms to "real-world

tasks." Corin, in Chapter 4, is particularly articulate on the topic of how successfully task-based and content-based approaches can converge.

CBI in Adult ESL and EFL Programs

Paralleling the development of CBI in K-12 schools is an increasing use of CBI frameworks in postsecondary ESL and EFL settings. Snow and Brinton (1988a) have developed an "adjunct model" of CBI language instruction in ESL courses. In this collaborative model, ESL courses at the University of California at Los Angeles (UCLA) are linked with introductory-level content courses in anthropology, computer science, geography, political science, psychology, and social science. Students spend twelve to fourteen hours per week in an ESL class and eight hours in content classes. The ESL and content instructors coordinate lesson assignments. By sharing content and coordinating assignments, the ESL teachers can concentrate on the language and cognitive skills, as well as on the knowledge needed by the students to perform well in their content courses. "The perspective taken," write Snow and Brinton, "is a reciprocal relationship between language and content. Students must be given opportunities to 'learn to write' and 'learn to read,' but must also be allowed to 'write to learn' and to 'read to learn' in order to fully participate in the educational process" (4).

Adamson (1993), in his discussion of content-based approaches in college-level ESL courses, describes his success with "precourses." He argues that adjunct courses alone frequently tend to create a "submersion" environment in which none but the most linguistically advanced and cognitively well-prepared students can survive. He also points out that adjunct courses require extensive (and often impractical) collaboration and cooperation between content and language teachers. His "precourse" combines elements of both adjunct and theme-based approaches that are more appropriate for a single-teacher course. In this model, "students enrolled in a theme-based course join a regular content course for less than a full semester and are tutored in the content subject and in academic strategies by their ESL teachers" (96). This is one of many ESL models at the college level that establishes a connection with regular university courses. Connections such as these have become part of an interdisciplinary movement that has produced several collaborative experiments, including the FLAC programs that are described in Chapters 11 and 12.

Content-based models are becoming increasingly common in EFL settings as well. Johnston (1991) describes CBI courses at Temple University's Japan campus that are offered to Japanese students preparing

for study in the university's English-language academic program. The CBI courses include sheltered content courses in geography, history, literature, art, biology, and psychology. These courses were developed, scheduled, and taught by the English instructors themselves. The instructors also conducted the needs assessment, collected and selected authentic materials and texts, designed tasks and activities appropriate to the students' proficiency levels, and evaluated the outcomes. This huge effort gives testimony to the extraordinary faith and dedication of a group of teachers who were "true believers."

In 1989, the Language Centre for Finnish Universities in Tampere, Finland, undertook an experiment teaching history in English. In order to accomplish this, a historian was paired with a language teacher. While student reaction was positive, teachers wrestled with the same questions that we wrestle with in this volume: What is the right mix of content and language in teaching a history course? Which is primary and which is support? Given the positive initial experience, the experiment was expanded to include the department of literature (Kurki-Suonio 1990).

Crandall and Tucker summarize several program models now common in ESL and EFL settings. These include English for Specific Purposes (ESP), English for Academic Purposes (e.g., Adamson and Johnston, cited above), Vocational English, and, more recently, English for Foreign Student Assistants. Crandall and Tucker identify three basic approaches: 1) integrated language/content instruction by a language teacher, 2) integrated instruction taught by a content teacher, and 3) parallel courses. They suggest, as an ideal CBI program, the combination of all three, and they cite the example of an EFL program in Honduras developed by the Center for Applied Linguistics. In that program, designed for students preparing to enter universities in the United States, math and science courses are taught by bilingual instructors who begin with Spanish and integrate progressively more English over a period of three trimesters, ending up with all-English instruction. Simultaneously, English teachers are introducing more and more content into their courses, using both sheltered content and parallel courses. Of course, such a program requires considerable planning and cooperation across the disciplines (in Anivan 1990, 86-87).

An EFL program recently developed by the American Council for Collaboration in Education and Language Study (ACCELS) in Tashkent, Uzbekistan, takes full advantage of contemporary experience and research in CBI, and develops some new aspects of its own. Taught by a team of foreign language teachers who rely on the knowledge of the students themselves as a source of content expertise, the ten-month (700-hour)

intensive English course for Ministry of Justice officials aims at taking beginners to an ILR level-3 (professional proficiency) via a content-based curriculum. The curriculum is based on a comparative study of American and Uzbek history, geography, culture, government, and administration of justice. Students acquire English language skills through the study of authentic materials, interaction with American expatriates, research, and preparation of studies and reports. Evaluation procedures consist of "prochievement tests" (which combine language proficiency and content achievement), graded projects, and the Test of English as a Foreign Language (TOEFL). Based on the success of the Ministry of Justice course, the ACCELS country director selected CBI as the curriculum design for the American Language Center, opened in May of 1997.

In summary, many ESL, EFL, and immersion educators have adopted CBI as a preferred methodological framework. They have already moved beyond theory to the institutionalization of CBI. A few crossover ESL/EFL educators have carried these ideas into foreign language settings (Tracy Terrell, for example), but a large part of the foreign language teaching community remains mired in structural, grammar-translation, audiolingual, or literature-based approaches. The need for change has been apparent to many foreign language educators. Following a seminar on content-based language instruction conducted by the Center for Language Education and Research (CLEAR) at UCLA, Crandall and Willetts (1986) noted that "the successes of content-based instruction as evidenced in immersion programs and in sheltered English programs need to be carried further into other more traditional foreign language programs." We, of course, wholeheartedly endorse this view. We, as well as our contributors, would like to see CBI more fully integrated into foreign language instruction.

CBI in Foreign Language Programs

CBI models and methods have already appeared in many foreign language settings, including university programs and major language institutes. Successful university language department programs include courses in French at the University of Ottawa, business courses in French at Drury College, political studies courses in Russian at George Washington University, a Greek mythology course in French at Northern Arizona University, a scientific-technical program in French at Napier College in Scotland, a Russian course at the Caspian Naval Academy in Azerbaijan, English courses in China and Hungary, and German courses at the University of Kiev. Several successful CBI models in higher education are described in Krueger and Ryan (1993), including the program in economics and

international business at Eastern Michigan University, the international engineering program at the University of Rhode Island, Russian courses at Harvard University, and a course in anthropology in Japanese at Brown University.

Language for Special Purposes (LSP) courses are usually taught entirely in the foreign language, as is the case at Eastern Michigan University's World College, mentioned above, which specializes in teaching LSP courses in the area of international business. World College has done much to bring CBI to the attention of foreign language educators and business leaders through its annual conferences on teaching foreign languages for business and the professions.

Along similar lines, Clemson University has a Language and International Trade Program in which the curricular model is a cross between LSP and language department CBI courses. Students major in a foreign language plus some technical specialty. A second year Spanish class focuses on economic/political/social characteristics of areas where the language is spoken, and an upper division course on current events in a foreign language is planned. These latter two courses are taught by a faculty member with a joint appointment as professor of languages and professor of political science (Morris 1997).

CBI courses developed entirely within a foreign language department (i.e., without collaboration with another discipline) are somewhat different. These, like the LSP courses, are usually single-teacher models, although in some cases they may include four-handed instruction (i.e., two instructors teaching together in one classroom). In single-teacher models the instructor is usually an experienced language teacher who uses a variety of sources to develop the required content knowledge. An excellent example of the academic, single-teacher model is presented by Vines in Chapter 6 of this text. In the mid-1980s she designed "French for Journalism" courses that are still being offered at Ohio University. Vines describes her efforts to develop the necessary content expertise by attending conferences and workshops and through extensive reading. Other single-teacher language department models in this volume include the Basic Russian Program described by Leaver in Chapter 2, the Mexico Program described by Klahn in Chapter 9, and the Italian course described by Sternfeld in Chapter 3.

Using both single-teacher and collaborative models, the Foreign Service Institute (FSI), the training school of the United States Department of State, began to experiment with CBI in the early 1980s. Collaborative models, which pair a language instructor with a content specialist, are especially appropriate at the FSI where there are two parallel programs, one in the

School of Language Studies and one in the School of Area Studies. The goal of the FSI experiments was to integrate the area/culture studies programs and the language programs in such a way that the students, United States government officials and diplomats, would be able to "hit the ground running" at their overseas posts. Four of those programs are described in this volume.

The earliest all-CBI program at the FSI was in Russian (Leaver, Chapter 2), while later programs were implemented in Arabic (Ryding and Stowasser, Chapter 5), Indonesian (Chadran and Esarey, Chapter 10) and Spanish (Stryker, Chapter 8). Not only did these programs successfully integrate language and content, all of them significantly improved student foreign language proficiency. In the cases in which program entry and exit testing was done, students' proficiency scores (as measured by the oral proficiency interview) showed significant increases in relatively short periods of time.

CBI came later to the Defense Language Institute (DLI), the military language school in Monterey, California. In the early 1990s, several language departments, including German, Russian, Czech, and Ukrainian, experimented with both single-teacher and multi-teacher approaches. The latter three combined a content-based program with task-based methods. Some of the most interesting of the CBI courses at DLI were the multi-teacher "conversion" courses designed to teach a third foreign language to students who already knew a related second language. One such course, designed to convert Czech or Russian to Serbian and Croatian, is described by Corin in Chapter 4.

The FSI and DLI programs, although taught in highly intensive, specialized settings, provide viable models for the design, implementation, and evaluation of CBI programs in other settings, as well as interesting insights into the foreign language acquisition processes of adult students, which we discuss in our final chapter.

Foreign Languages Across the Curriculum (FLAC)

The basic idea behind FLAC is that students study an academic subject, or portions thereof, in a foreign language as a part of their regular university curricula. According to Straight (1994 and in Chapter 11 of this volume), the key characteristic of FLAC is that a foreign language is used as the medium of instruction and learning irrespective of the subject matter that is taught. Frank Ryan, a proponent of FLAC programs, argues that ". . . theories of the nature of language and of communicative competence acquisition both lead to the conclusion that an LAC situation provides all of the necessary conditions for language acquisition" (in Straight 1994,

47). Most FLAC programs are designed for students who have already achieved a minimum proficiency in a foreign language and desire to maintain or further develop their language skills. In a discussion of the FLAC program at the University of Minnesota, Klee and Metcalf identify four discrete objectives: 1) to demonstrate to undergraduates the benefits of acquiring a foreign language, 2) to hone students' analytic and critical abilities in the foreign language, 3) to encourage continuing development of students' language skills, and 4) to provide opportunities for faculty to utilize their foreign language abilities in the humanities and social sciences (in Straight 1994, 104).

FLAC programs require collaboration between a content teacher and a language teacher. One of the major goals in FLAC, in the words of Lambert (1994), is to "deghettoize" the language departments by putting faculty in contact with their colleagues in other departments. In Chapter 12 Shaw describes five different models for such collaboration at the Monterey Institute for International Studies.

FLAC courses have been called area studies-foreign language integration courses or interdisciplinary courses. Straight calls them "language-based content courses." Such courses frequently use multi-teacher models. The relationship between the teachers in a multi-teacher course can take many forms, from an adjunct model to a model in which the content specialist works very closely with a language teacher and acts as a source and guide for the students. In response to the logistical challenge (and, of course, the added expense) of having a language teacher work with a content teacher, Straight hired and trained a cadre of international graduate students who acted as language resource specialists.

Jurasek, who pioneered one of the first FLAC programs at Earlham College in 1982, describes FLAC as the intersection of content teaching and foreign language teaching located outside of the foreign language department curriculum. He mentions, among nineteen programs, those at SUNY-Binghamton, Brown, Carnegie Mellon, Earlham, Minnesota, Ottawa, St. Olaf, and the University of California at Santa Cruz. Some of these programs are broadly described in Krueger and Ryan (1993) and in Straight (1994); however, as Jurasek points out, these texts do not reveal details of what happens in the actual classrooms. He calls for the production of "dedicated handbooks that describe successful skill-using activities, how-to cookbooks at the syllabus-, classroom- and text-levels" and workshops on what works and what does not (in Straight 1994, 138).

Our goal in compiling this volume has been to provide precisely such a "dedicated handbook." Three of the contributors to the above-mentioned

volumes, Klee, Shaw, and Straight, describe their programs in subsequent chapters, providing detailed information regarding the design, content, methods, and evaluation procedures.

Testing Issues in CBI

One of the major challenges in CBI is how to evaluate the outcomes, especially the growth in students' oral proficiency skills—a central goal in most of the foreign language models presented in subsequent chapters.

Communicative language teaching and learning require communicative language testing. Testing for communicative competence—measuring those four characteristics described by Canale and Swain—cannot be accomplished by traditional pen and pencil tests and certainly not by discrete-point grammar tests. If we agree with Spolsky that proficiency means the ability to communicate with native speakers in real-life situations, then a "proficiency test" must involve such spontaneous interactions. The oral proficiency interview was developed to accomplish this goal. Since most of the programs described in this book use the FSI, ACTFL, or Interagency Language Roundtable (ILR) oral proficiency interview as the major instrument in the evaluation process, we think it would be useful to explain how the process works and what the ratings mean.

The oral proficiency interview, first developed at the FSI in the 1950s, introduced the idea of scoring a student on a proficiency scale based on a one-on-one personal oral interview in which no writing is involved. That FSI prototype has evolved, over the decades, into the Interagency Language Roundtable (ILR) test, a broadly accepted procedure for conducting an oral proficiency interview and a reading test and awarding scores in both speaking (S) and reading (R) skills. The ILR scale ranges from "zero" (no proficiency) to "five" (native-speaking proficiency), with half-point increments, designated as "plus," along the five-point scale.

The ILR testing procedures continue to be used by all agencies of the federal government. Due to the nature of the ratings and the time and expense of administering the tests, which often take over one hour to complete, the oral proficiency interview and reading tests were not particularly suitable for academic settings.

The American Council on the Teaching of Foreign Languages (ACTFL), working with the Educational Testing Service (ETS), adapted the ILR concept and created an oral proficiency test and scale that are more suitable for academic settings. Figure 1 compares the ILR and ACTFL scales.

ILR	ACTFL
5 Functionally Native Proficiency	Superior
4 Advanced Professional Proficiency	
3 General Professional Proficiency	
2 Limited Working Proficiency	Advanced High
	Advanced
1 Elementary Proficiency	Intermediate High
	Intermediate Mid
	Intermediate Low
Memorized Proficiency	Novice High
0	Novice Mid
No Proficiency	Novice Low

Fig. 1 The ILR and ACTFL Proficiency Scales

Figure 1 illustrates how the ACTFL expanded the lower end of the ILR scale (0 to 1) to reflect student achievement in academic foreign language classrooms and suggest more positive linguistic levels of proficiency, i.e., "Novice Low," "Novice Mid," and "Novice High" levels (rather than the label "0+" used in the ILR scale). ACTFL uses four basic levels of proficiency. *ACTFL-Novice* refers to students who have had no prior experience with a foreign language and would be considered at ILR levels of 0 and 0+. *ACTFL-Intermediate* refers to students who have basic survival skills and would be considered at ILR levels of 1 and 1+. *ACTFL-Advanced* refers to students who have basic communication skills and would be considered at ILR levels of 2 and 2+. Finally, *ACTFL-Superior* refers to students who are functional in the language and would be scored at an ILR level 3 or above.

At each level of the ACTFL scale, *functions, context, content,* and *accuracy,* are measured. Figure 2 describes each level and gives definitions in each of the three categories.

Global Tasks/Functions	Context	Content	Accuracy	Text Type
SUPERIOR Can discuss extensively by supporting opinions, abstracting and hypothesizing	Most formal and informal settings	Wide range of general interest topics and some special fields of interest and expertise; concrete, abstract, and unfamiliar topics	Errors virtually never interfere with communication or disturb the native speaker	Extended discourse
ADVANCED Can describe and narrate in major time/aspect frames	Most informal and some formal settings	Concrete and factual topics of personal and public interest	Can be understood without difficulty by speakers unaccustomed to non-native speakers	Paragraph discourse
INTERMEDIATE Can maintain simple face-to-face conversation by asking and responding to simple questions	Some informational settings and a limited number of transactional situations	Topics related primarily to self and immediate environment	Can be understood, with some repetition, by speakers accustomed to non-native speakers	Discrete sentences and strings of sentences
NOVICE Can produce only formulaic utterances, lists, and enumeration	Highly predictable common daily settings	Common discrete elements of daily life	May be difficult to understand, even for those accustomed to non-native speakers	Discrete words and phrases

Fig. 2 ACTFL Assessment Criteria: Speaking Proficiency. Source: *ACTFL Oral Proficiency Interview Tester Trainer Manual,* Kathryn Buck, ed., 1989.

Many of the contributors to this volume have used the ILR or ACTFL tests in designing and evaluating their CBI programs. Since these tests measure only global listening, speaking, and reading skills, other means must be used to test for writing skills and content knowledge. In those programs in which only the ILR tests were used to measure outcomes (i.e., the FSI and DLI programs), there was no formal measure of students' content knowledge or of foreign language writing ability. This reflects the special circumstances at the FSI and the DLI where only oral and reading skills are measured and writing is not a required skill. The content learning is seen as a secondary (though highly desirable) objective and as a vehicle to speed up language acquisition.

However, in most settings, an ILR or ACTFL test is not adequate; there is a need to measure growth in content knowledge and in writing. FLAC programs, of course, already have content exams in place and, unlike foreign

language programs, are not usually concerned with measuring linguistic development.

Some CBI instructors are exploring the possibility of testing both content and language through "proficiency-based achievement tests," which combine both the language proficiency and content achievement components (Campbell 1996). A standard technique in proficiency-based achievement tests is to measure students' knowledge of subject matter using standard oral and reading proficiency testing techniques. This combination was implemented in an experimental basic Russian course at the DLI where, after five weeks of studying the history of Russia, students took a multiple choice test on Russian history; their grades were based on answering the history questions correctly. Implicit in the accomplishment of this task was not only the knowledge of the historical events but also the language proficiency required to understand the content questions and test organization. In a strategy suggested by students at the DLI, Czech instructors in a content-based course gave students two sets of grades on their achievement tests: a grade for content and a grade for language.

The challenge of measuring both proficiency and achievement in a CBI foreign language curriculum is addressed creatively—and very comprehensively—by Klee and Tedick in Chapter 7. In addition to the ACTFL oral proficiency test, they designed an "assessment battery" that measures reading, writing, listening, and grammar, all within the context of an academic theme.

Funding CBI

Among the challenges mentioned by experimenters in CBI and FLAC, including all the contributors to this volume are the special personnel considerations and large amounts of preparation and maintenance. We should point out that many of the programs described in this volume were funded initially by special grants and that some of the programs have been either eliminated or scaled-down because of the expenses involved. Several major foundations sponsored these experiments. For example, the Pew Memorial Trust funded experiments at the Monterey Institute of International Studies. The National Endowment for the Humanities (NEH), the Fund for Improvement of Post-Secondary Education (FIPSE), and the United States Information Agency (USIA) have helped fund the experiments at SUNY-Binghamton.

Most of the programs described in this volume are still ongoing in 1997. Once established, some of them have required no extraordinary funding to maintain. These issues are discussed by the individual authors

in their chapters. We comment at greater length on funding and administrative support in our final chapter.

Summary

The eleven case studies that are described in subsequent chapters were undertaken by "true-believers" who responded to a compelling need to prepare their students to move from the classroom directly into a new cultural environment. Many of the students involved in these programs went on to live, work, or study overseas. These CBI programs helped them to develop the language skills and the cultural knowledge to get off to a good start in their international careers—the wings to fly from the nest and soar on their own.

The programs you will read about represent a broad variety of settings that include two United States government institutions (the Foreign Service Institute and the Defense Language Institute), an institute for graduate professional studies (Monterey Institute of International Studies), and five universities: Columbia University, SUNY-Binghamton, the University of Utah, the University of Minnesota, and Ohio University. The authors describe their curricula in considerable detail and speak frankly about the special challenges in developing, maintaining, teaching, and evaluating their programs. Each author addresses the key questions we have raised in this chapter concerning subject matter, authentic materials, and student need, and these questions will return to guide our discussion of the pros and cons of CBI in the final chapter.

The overall success of these eleven programs demonstrates that CBI can be implemented effectively in a variety of ways with positive results when there is adequate administrative support and a passionate commitment to CBI philosophy on the part of the teachers. We hope these case studies will provide models and methods for others to emulate, as well as stimulate thought concerning the foreign language teaching and learning process.

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Part Two

CBI at Novice Levels of Proficiency