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Focus on Post-secondary Instruction

Chapter 6

A Six-T's Approach to Content-Based Instruction

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Professionals in many instructional settings are developing approaches to content-based instruction (CBI) which emphasize the multiple benefits of integrating language and content instruction for second language (L2) students. The approaches vary, however, representing diverse contexts for instruction, different perspectives on the integration of content and language, and differing assumptions about content, language, and learning strategies. Despite differences in theoretical and practical orientations, these approaches to CBI uniformly view language as a medium for learning content, and content as a resource for learning language. In addition, they endorse purposeful and meaningful language use in the classroom, while assuming a distinction between academic and social language. Most approaches also assume pre-selected, predetermined content, specified in institutional curriculum guidelines or existing course offerings.

Over the past decade, we have developed a new approach to content-based instruction which seeks to incorporate the criteria stated above. We have labeled our approach a Six-T's Approach; the significance of the label will be easily understood by the second half of the chapter. Our approach has been influenced by a range of other CBI approaches; an overview of these will help to situate our views on CBI. Below we outline eight well-documented approaches to content-based instruction. Although the descriptions are only simple indicators of much richer instructional approaches and educational philosophies, they highlight important issues related to CBI. We then describe the Six-T's Approach as another option for the development of CBI.

EIGHT APPROACHES TO CONTENT-BASED INSTRUCTION

One of the best-known approaches to CBI is one we label the *Center for Applied Linguistics (CAL) approach*. For a number of years, CAL has been carrying out broad-based research on CBI and training K-12 teachers in content-area instruction to make learning tasks more manageable for language-minority students (Burkart & Sheppard, 1994; Crandall, 1987; Kauffman et al., 1994; Sheppard, 1994; Short, 1994; Spanos, 1990; Tucker & Crandall, 1989). CAL's efforts have focused on (a) how to integrate the teaching of content and language (Crandall, 1993; Short, 1991, 1994), (b) how the language used in particular academic content areas may create comprehension problems-not due to the content but to the language itself, and (c) how to assess students' knowledge of language and subject matter (Short, 1993a). Based on CAL's activities across the United States, and its analyses of

language demands in different content areas, many instructional recommendations, teaching techniques, and assessment tools have been developed to achieve CBI objectives.

A second well-known set of approaches to CBI follows from discussions of *English for Academic Purposes (EAP) instruction* at North American universities. This work is best represented by studies reported in Adamson (1993), Brinton, Snow, and Wesche (1989), Snow (1993), and Snow, Met, and Genesee (1989). They suggest that content-based EAP instruction may follow one of three prototype models: sheltered instruction, adjunct instruction, and theme-based instruction. In the two former models of instruction (sheltered and adjunct), content is relatively predetermined; in the latter case* (theme-based), content is selected by the language teacher (and/or students). Extensions of this framework -from strictly EAP contexts to other instructional contexts-have also been explored (Snow, 1991a; Wesche, 1993).

A third approach, sometimes overlapping with the second one, is that of *university-level foreign language CBI* (Krueger & Ryan, 1993b; Straight, 1994; Wesche, 1993). There are two distinct contexts for this general approach. The first involves foreign language instruction that is organized around cultural, geographic, historical, political, and literary themes. For example, in North America, students might attend a university language course defined by a curriculum that is centered on content themes related to the countries in which the language is spoken (Musumeci, 1993). The second context involves instruction in non-language courses (e.g., philosophy, history, anthropology, political science) that makes extensive use of informational resources in a foreign language (Jurasek, 1993; Sudermann & Cisar, 1992) or in content courses taught in a foreign language (Krueger & Ryan, 1993b). The latter two contexts have, at times, made use of sheltered and adjunct formats to combine language and content (Wesche, 1993).

A fourth distinguishable approach is that developed by Mohan (1986,1990; Tang, 1992, see also Chapter 5 in this volume). In this approach to K-12 language and content instruction, learning centers around the use of *discoursal knowledge structures* to convey content information. The key to the approach is the assertion that all content information is organized according to six basic types of knowledge structures: description, sequence, choice, classification, principles, and evaluation. The first three types of knowledge structures (description, sequence, and choice) represent more specific ways to organize information; the latter three (classification, principles, and evaluation) represent more general patterns for organizing knowledge, allowing for generalization and theorizing. Regardless of the persuasiveness of Mohan's overall theory of knowledge structures, the approach provides a pedagogical framework for combining content and language instruction, as well as for helping students develop higher order thinking skills (see Tang, Chapter 5 in this volume).

This approach provides teachers with a natural forum for introducing detailed content information while also helping students see the discourse patterns that support and organize many types of content knowledge. It is assumed that the identification of underlying knowledge structures in one topic area, signaled in various ways through the language used, will transfer to other content areas, thereby providing students with skills for future classroom settings. Mohan and Tang emphasize the importance of using graphic representations to reveal textual knowledge structures and to help students develop competence in academic discourse. The coordination of language and content learning resulting from this approach to CBI reinforces knowledge structures and teaches related language functions and forms.

A fifth approach to CBI is that of researchers in Australia who propose a *genre-based approach to K-12 literacy instruction with a content emphasis* (Christie, 1991, 1992; Collerson, 1988; Martin, 1993). Based on Halliday's functional theory of language use (see Eggins, 1994), this approach proposes that language forms and language uses serve communicative functions; these functions are reflected in basic instructional genres which students can recognize and then use for their own learning purposes. In this respect, the genre-based approach is similar to the Canadian approach presented by Mohan (1986, 1990).

A sixth approach is that of language *immersion programs* in K- 12 contexts in North America. In these instructional contexts, content which is normally taught to first language students is taught to students in their second language. Extensive research documents the relative success of this approach (Met, 1993; Swain, 1988, 1991; Wesche, 1993). However, little attention has been given to *how* to teach content in a way that is appropriate for L2 learners, and little discussion is reported of ways that instruction is specifically designed to focus on and enhance language learning (Swain & Lapkin, 1989).

A seventh approach is the *Cognitive Academic Language Learning Approach*, or CALLA (Chamot & O'Malley, 1994; O'Malley & Chamot, 1990). Initially developed for L2 students in North American secondary education contexts, this approach combines emphases on language development, content-area instruction, and explicit strategy training. Its goal is to prepare language minority students to handle advanced academic skills and 'content knowledge in mainstream classrooms. In CALLA lessons, content drives decisions about academic language objectives and the types of learning strategies that are appropriate. Just as Mohan's model reinforces the importance of graphic organizers, the CALLA approach relies heavily on scaffolding, that is, "the provision of extensive instructional supports when concepts and skills are being first introduced and the gradual removal of supports when students begin to develop greater proficiency, skills, or knowledge" (Chamot & O'Malley, 1994, p. 10).

An eighth approach combining language and content instruction is a version of *whole language instruction* explored by Enright and McCloskey (1988) and others in elementary school contexts (e.g., Manning, Manning, & Long, 1994; Meinbach, Rothlein, & Fredericks, 1995; Roberts, 1993). In this approach, instruction centers on thematic units or theme cycles which integrate language-skills instruction and content information from social studies, natural science, arts, math, and so on. The emphasis is on purposeful language use to communicate personally important and motivating content. Thematic units are developed by brainstorming possible topics within a theme, transitioning between topics to provide thematic coherence, and developing a culminating task to complete the cycle (see also Faltis, 1993; Peregoy & Boyle, 1993; Walmsley, 1994).

An examination of these eight approaches to CBI leads us to believe that there is, in fact, much more overlap among them than the preceding classificatory discussion would indicate. These approaches (and perhaps a few others) share a number of common features which any good CBI program would want to incorporate and which we have tried to incorporate into our Six-T's Approach. In general, these approaches promote student involvement in content learning, provide opportunities for student negotiation of language and content tasks, allow for cooperative learning, focus on the development of discourse-based abilities, and use content materials that should motivate students.

CONTENT-BASED INSTRUCTION IS THEME-BASED INSTRUCTION

A further commonality (at least implicitly) among many of the approaches discussed above, and a central curricular notion in the Six-T's Approach, is that all CBI is fundamentally theme-based (cf. Brinton, Snow, & Wesche, 1989). This assertion is perhaps best introduced by considering two quite different content-based instructional contexts.

In applied linguistics graduate programs, courses such as Introduction to Linguistics, Psycholinguistics, Sociolinguistics, and TESOL Methodology (or virtually any other course) are essentially theme-based. That is, each course is a sequence of topics tied together by the assumption of a coherent overall theme. For example, Psycholinguistics can address topics such as language comprehension, language production, language acquisition, and applied issues in psycholinguistics (e.g., bilingual processing, development of reading skills). In this case, the course covers four topics that are held together by an overarching theme captured by the course title and a general interest in language and the mind. An Introduction to Linguistics course generally amounts to a different topic per week, as do introductory courses in

sociolinguistics and TESOL methodology. Similar interpretations can be given for almost any university-level course (except, perhaps, performance courses which stress repetition and skills practice, e.g., piano or sculpting). The challenge for any university instructor is to create a sense of seamless coherence among the various topics which combine to create a theme for a given course.

Similarly, at the other end of the educational spectrum, elementary school classrooms are organized around thematic units as the basic structure of the curriculum. As Walmsley (1994) states, the elementary curriculum consists of content-area themes (e.g., themes drawn from social studies, math, health, music), calendar-related themes (e.g., seasons, national holidays, anniversaries of specific events), conceptual themes (e.g., themes that are organized around abstract concepts such as "courage" or "growing up"), biographical themes (e.g., a famous person), current event themes (e.g., local or national issues), and form themes (e.g., genres such as myths, legends, science fiction). In elementary school contexts, themes are central ideas which (a) help teachers define and plan appropriate classroom activities; (b) suggest more specific topics for exploration; (c) allow for the learning of appropriate content, language structures, and learning strategies; and (d) lead to significant culminating projects.

An examination of other educational settings would further illustrate how CBI instruction is fundamentally theme-based. Theme-based curricula are prevalent at the secondary level in science, math, social studies, and literature classrooms as well as in vocational programs (Chamot & O'Malley, 1994; O'Malley & Chamot, 1990; Richard-Amato & Snow, 1992a; Tchudi, 1993). Theme-based instruction is also becoming more common in intensive English programs housed in institutions of higher education (Benesch, 1988).

In most educational contexts, thematic instruction is basic; that is, practically all instruction is theme-based. In the CBI literature, there are common references to other models of content-based instruction (e.g., adjunct or sheltered instruction models). These models are not alternatives to theme-based instruction; rather, they represent two different organizational structures for carrying out theme-based instruction. For this reason we see the two terms, *content-based instruction* and *theme-based instruction*, as interchangeable.

In the next section we outline the Six-T's Approach, a new approach to theme-based instruction that is applicable to a wide range of CBI contexts and that does not presuppose institutional pre-selection of content-area knowledge; it has applications both when the teacher controls content and when content is controlled by a central curriculum plan. Moreover, the theme-based nature of the approach can be incorporated into a sheltered curriculum and within certain adjunct programs.

DESIGN CRITERIA FOR THE SIX-T'S APPROACH

Given the broad interpretation of theme-based instruction presented above, we outline the *Six-T's Approach to language and content instruction*. The approach has three basic goals:

1. the specification of theme-based instruction as central to all CBI
2. the extension of CBI to support any language-learning context, including those in which teachers and program supervisors have the freedom to make major curriculum (and content) decisions
3. the organization of coherent content resources for instruction and the selection of appropriate language learning activities.

With the Six-T's Approach, as with any curricular approach, it is also assumed that first consideration must be given to an array of student needs, student goals, institutional expectations, available resources, teacher abilities, and expected final performance outcomes. When these criteria are specified, informed decisions can be made about the six curricular components which define the Six-T's Approach: Themes, Texts, Topics, Threads, Tasks, and

Transitions.

Themes are the central ideas that organize major curricular units; they are chosen to be appropriate to student needs and interests, institutional expectations, program resources, and teacher abilities and interests. Normally a class explores more than one theme in a given term or semester. (See Figure 6.1 for a brief list of sample themes from different instructional settings.)

FIGURE 6.1 Sample themes from different instructional settings

Sample themes	Possible instructional setting
Insects	Elementary school classroom
The solar system	Middle school or high school classroom(s)
Demography	University intensive English program
Austrian historic monuments	High school foreign language class (German)

Texts, defined in a broad sense, are content resources (written and aural) which drive the basic planning of theme units. Text selection will depend on a number of criteria: Student interest, relevance, and instructional appropriateness provide a first set of guidelines for determining text selection; format appeal, length, coherence, connection to other materials, accessibility, availability, and cost represent secondary criteria. Four basic types of texts, as specified in Figure 6.2, are used in theme units.

FIGURE 6.2 Four basic types of texts used in theme units

Types of texts	Examples of content resources
Instructor-compiled content resources	Readings of various genres, videos, audiotapes, maps, tables, graphs, software
Instructor-generated content resources	Lectures, worksheets, graphic representations, bulletin board displays
Task-generated content resources	Student freewrites, discussions, problem-solving activities, graphic representations, library searches, debates, surveys/questionnaires
External content resources	Guest speakers, field trips

Topics are the subunits of content which explore more specific aspects of the theme. They are selected to complement student interests, content resources, teacher preferences, and larger curricular objectives. In general, topics should be organized to generate maximum coherence for the theme unit and to provide opportunities to explore both content and language. A given theme, unit will evolve differently depending on the specific topics selected for exploration. For example, a teacher could choose to develop a theme unit on Native Americans by exploring the Navajo, the Hopi, and the Apache (each tribe representing a different topic for the theme unit); conversely, the same theme unit could be developed to examine the tensions that exist in contemporary Native American communities by means of three different topics: rural versus urban living, traditional versus contemporary religious practices, and the values of young and older generations. These examples, as well as those outlined in Figure 6.3, illustrate how theme units can be developed in different ways, depending on the topics designated (or negotiated) for exploration.

FIGURE 6.3 Different sets of topics which can define a theme unit

Theme	One set of sample topics	Another set of sample topics
Insects	a. Insects which are helpful b. Insects which are harmful c. Insects which eat other insects d. Insects which eat vegetation	a. Ants b. Bees c. Caterpillars
Solar system	a. Humans in space b. Technology in space c. Research in space d. Pluto	a. Earth b. Venus c. Mercury
Demography	Impact of population on a. air b. water c. natural resources	Population trends a. in developing countries b. in developed countries c. and their impact on the environment

Threads are linkages across themes which create greater curricular coherence. They are, in general, not directly tied to the central idea controlling each theme unit. Rather, they are relatively abstract concepts (e.g., responsibility; ethics, contrasts, power) that provide natural means for linking themes, for reviewing and recycling important content and language across themes, and for revisiting selected learning strategies. Threads can bridge themes that appear quite disparate on the surface (e.g., American education, demography, and toxic wastes), thereby fostering a more cohesive curriculum. There can be a number of threads linking thematically different content, providing opportunities to integrate information and view both language and content from new perspectives. Figure 6.4 illustrates how one thread could be used to link five different theme units.

FIGURE 6.4 Thread that provides linkages among different themes

Thread that links various theme units	Themes
Responsibility to uphold civil rights for citizens control pollution regulate family size conduct ethical research protect endangered cultures	Civil Rights Pollution Demography Solar System Native Americans

Tasks, the basic units of instruction through which the Six-T's Approach is realized day-to-day, are the instructional activities and techniques utilized for content, language, and strategy instruction in language classrooms (e.g., activities for teaching vocabulary, language structure, discourse organization, communicative Interaction, study skills, academic language skills). In the Six-T's Approach, tasks are planned in response to the texts being used. That is, content resources drive task, decisions and planning. Major tasks, sequenced within and across themes to realize curricular goals, are recycled with higher levels of complexity as

students move from one theme unit to the next and as students progress through the academic year. Devising a series of tasks which leads toward a final culminating activity or project-one which incorporates the learning from various tasks in the theme unit-is particularly effective; culminating activities whir require the synthesis of content information help students develop the skills they will need in regular content-area courses, and provide a sense of successful completion for students as well. Specific examples of tasks are given in the following section and are discussed at greater length in Brinton, Goodwin, and Ranks (1994); Brinton, Snow, and Wesche (1989); Chamot and O'Malley (1994); and Mohan (1986).

Transitions are explicitly planned actions which provide coherence across topics in a theme unit and across tasks within topics. Transitions create links across topics and provide constructive entrees for new tasks and topics within a theme unit. Two major types of transitions are particularly effective: topical and task transitions. (See Figure 6.5 for sample transition activities.)

FIGURE 6.5 Sample transitions that provide coherence across topics and tasks

Transition type	Sample transition activities in a theme unit on demography
Topical transitions	A deliberate shift in emphasis from global population trends, to trends in developing countries, to trends in developed countries, to trends in students' home countries. Students are explicitly made aware of these transitions.
Task transitions	Students are asked to (a) interpret a graph depicting population trends; (b) create a new graph with raw data obtained from a classroom survey; (c) write an interpretation of the new graph; (d) reconstruct the graph on the computer; (e) incorporate the graph into a research paper, bulletin board display, or oral presentation.

The six T's provide the means for developing a coherent content-based curriculum. In this approach, the *themes* become the primary source for curriculum planning. A variety of relevant and interesting *texts* leads to *topic* selection. A coherent set of topics is expected to stimulate student interest, I create connections that maintain student involvement, and allow for the completion of a meaningful final project. Specific *tasks* are designed to teach the language knowledge and content information central to the texts for a given theme unit, thereby meeting student needs and achieving curricular priorities. *Transitions* and *threads* create additional linkages throughout the curriculum, creating a sense of coherence and seamlessness.

Unlike structural, communicative, or task-based approaches to language teaching, the Six-T's Approach views content (in essence, defined by the theme, texts, and topics) as driving all curricular decisions. That is, a content-based course, following a Six-T's framework, must initially be defined by specifying themes, assembling appropriate texts which will support the themes, and designing/negotiating a coherent set of supporting topics. Varied and plentiful content resources (i.e., texts) provide opportunities for relevant language learning activities and strategy instruction. They also provide opportunities to use language and content for meaningful communicative purposes. The language, strategy, and content learning activities that arc an integral part of this approach should be generalizable to a wide range of text resources.

The primacy accorded to text resources reflects the assumption that specific content materials can also constrain possible language tasks, language structure awareness, and communicative uses. Language learning and learning strategy tasks should not be artificially

imposed on any available set of content resources; that is, sequences of tasks should not be decided on without determining whether specific content resources-written and/or aural-are compatible with the sequences.

A BRIEF EXAMPLE

A relatively brief example, taken from a higher education intensive English program setting with an English for Academic Purposes (EAP) emphasis, will demonstrate how the Six-T's Approach operates. Note that despite the setting for which the example was designed, the issues that arise in planning and implementing the theme unit are applicable to other instructional settings that endorse a content-based approach to language instruction (e.g., elementary, secondary, adult, and other university settings).

To frame the example, we first outline the core objectives for the EAP curriculum being illustrated. The curriculum will

1. prepare students to learn subject material through their L2,
2. introduce students to academic language and study skills needed in mainstream classes,
3. simulate the rigors and expectations of regular university courses in a sheltered environment,
4. promote students' self-reliance and positive engagement with learning,
5. motivate students to use language to learn something new about topics of interest and of relevance to their situation.

One theme that is generally appropriate for EAP students in the United States is that of *civil rights*; the theme not only is intriguing to students but also serves as a window to understanding the new U.S. environment in which they are living. Fortunately, there are extensive content resources available, a wide range of topics worth exploring, and many opportunities for student contributions to support such a theme unit. A civil rights theme unit could easily be a semester long university course or a brief unit in an L2 textbook. In our example, it is a three-week unit comprising ten hours of classroom instruction per week, for a total of thirty hours (equal in time to a two-credit university course).

Following the preliminary decision to use civil rights as a *theme*, various *texts* were assembled and examined. Interesting and appropriate materials from a number of sources were selected (e.g., videos, readings, newspaper clippings, charts and graphs, guest speakers, radio program excerpts).^[1] Based on text selections, related *topics* were considered and then a set of topics was designated for the unit. Topics, for the civil rights theme included, on this occasion, the history of African Americans in the United States, the civil rights movement in the United States, and civil rights leaders in the United States (with an emphasis on African Americans).^[2]

After texts were assembled and topics determined, the material was examined for *threads* which could easily link the civil rights unit to other themes in the fifteen-week course (e.g., Native Americans, demography, pollution, American education). Among the possibilities for threads were the notions of responsibility, collaboration, and ethics.^[3] These concepts form natural bridges between civil rights issues and issues raised in other theme units, creating a sense of curricular coherence and giving students opportunities to review and reconsider previous learning in relation to current material.

As an example, the thread of "ethics" could easily link the themes specified above if students were asked to consider (a) the ethics of civil and human rights movements (civil rights unit), (b) the ethics of the imposition of "Western ways" on Native American peoples in North America (Native American unit), (c) the ethics of governmental intervention in family planning (demography unit), (d) the ethics of clean water regulations (pollution unit), and (e) the ethics of honest research and reporting in academia (American education, unit).

Text materials were then evaluated in terms of the language and learning strategy needs of EAP students. In general terms, *tasks* typical of an EAP context^[4] were designated as important for students and as complementary to text resources; the two constraints governing decisions were that the tasks be keyed to the theme being explored, and that they be natural extensions of the content resources (i.e., texts) being used to develop the theme.

At this point, the curriculum planners began thinking about a significant culminating task that would provide a sense of closure to the unit and give students an opportunity to synthesize and/or apply content and language learned throughout the unit. Final projects considered were as follows: a group report on current civil rights activities; poster displays exploring different topics covered in the theme unit (Esposito, Marshall, & Stoller, 1997); a debate on some aspect of civil rights; a research paper and corresponding oral presentation on a civil rights topic of individual student interest; a media presentation reporting on civil rights violations in designated parts of the world.

Transitions were contemplated after topics were selected and learning tasks developed. Although it is difficult to actually finalize transitions before a theme unit begins, it is important for teachers/curriculum planners to view transitions as crucial components of this approach to CBI. With properly orchestrated transitions, students sense the logical progression from one topic to the next and from one task to the next. Efforts to bridge topics and tasks provide coherence within and across topics and contribute to the overall coherence of the theme unit. Transitions should not be overspecified in advance, since teachers should take advantage of emerging classroom situations to create meaningful transitions.

Transitional activities can take up but a minute of class time or involve a complex set of problem-solving activities to create meaningful linkages. In the case of the civil rights unit, purposeful transitions occurred when students (a) chose a U.S. discrimination case and related it to a similar incident in their own countries; (b) examined how the history of African Americans in the United States led to the modern civil rights movement; (c) nominated three notable figures in the civil rights movement and analyzed their leadership qualities. Other transitions occurred when students were asked to predict new topics, discuss the importance of prior tasks, consider issues that prior tasks did not address, brainstorm additional concepts and associations, engage in guided speed writings, discuss the relationship between the latest reading and a prior reading, and relate personal experiences to past-and upcoming tasks.

IMPLEMENTING A SIX-T'S APPROACH

The civil rights unit described above illustrates the means by which the Six-T's Approach is implemented and the ways in which the six T's create coherent and meaningful instructional units for content and language learning objectives. We recognize, however, that any brief example is incomplete and likely to raise as many questions as it answers. Thus, in this section we anticipate a number of these questions by considering initial planning issues and outlining step-by-step procedures for implementing the Six-T's Approach. It is important to keep in mind, however, that each instructional context will impose its own constraints on, and opportunities for, adaptation and variation.

Initial Planning Considerations

Before actually planning a theme-based curriculum that uses a Six-T's Approach, curriculum designers need to evaluate five important preplanning considerations. First, they must review students' needs (based on critical needs analyses), institutional expectations and corresponding objectives, resource possibilities, and teacher preparation. The results of such a review will determine (and constrain) the content, language, and learning skills which students will need to, and be expected to, develop. These considerations should lead to straightforward taxonomies of important language skills, learning strategies, and task options for language practice and content exploration. Such lists, however, should not be viewed as rigid specifications of required tasks or necessary sequences of activities; rather, they should

be seen as additional resources for planners to reflect on, and consider, when implementing a specific theme unit.

Second, planners need to ascertain the extent to which the curriculum is institutionally predetermined or shaped by teacher and/or student choices. While *theme* choices may be constrained by the institution, teachers, and/or content resources, specific *topics* may be open to student selection and/or negotiation. Student choice may also play a role in determining learning tasks and culminating projects.

Third, designers need to decide on the degree of "tension" a theme is permitted to generate. Tension arises when students consider complex and/or controversial issues associated with varying perspectives and alternative viewpoints on topics defining a theme unit (see also Williams & Reynolds, 1993). In EAP contexts, for example, it is our view that themes which highlight and/or create some amount of tension promote student involvement and engagement with the content. Finding the delicate balance between sufficient and excessive tension is important and highly variable. Clearly, too much tension should be avoided because it will create a classroom atmosphere that obstructs rather than enhances language and content learning.

Fourth, planners need to determine the number of theme units to be explored and designate the amount of time devoted to each theme unit (and topics within theme units). The number of theme units incorporated into a curriculum (and their duration) is highly variable and largely dependent on institutional constraints. Theme units may last intensely for one to three weeks or less intensely for four to ten weeks. It is also possible for multiple themes to run simultaneously over the course of a year, with student work on any given theme only occurring on an intermittent basis.

Fifth, planners must consider their own commitment to CBI and its objectives. Themes may be viewed as little more than convenient shells for language improvement activities or as a means for serious engagement with important concepts. We believe that the need for serious engagement is a requirement of CBI. Themes that serve as convenient opportunities for unimportant and incoherently linked language and content activities do not engage students in meaningful and long-lasting language and content learning.

Steps for implementing a Six-T's Approach

Once preliminary issues are considered, language educators can actually begin planning and then implementing theme units following the Six-T's framework. Below we sketch out the general steps one would take to implement the Six-T's Approach. We present the steps in a sequential manner, though in fact the process is quite fluid and requires planners to revisit and reconsider earlier steps as the planning process progresses.

Step One. The first step requires establishing the content to be, used through theme determination, text selection, and topic designation. Defining the content of theme units at the outset—as determined by themes, texts, and topics—follows from the argument that curricular decisions need to be content-driven rather than task- or language-driven as a first priority. Although the determination of themes, selection of texts, and designation of topics could be seen as following a sequenced order, in practice they tend to be decided on interactively.

In some settings, themes, texts, and/or topics are decided on by a centralized group of curriculum planners, leaving few decision-making responsibilities at this level to teachers and local curriculum planners. In other settings, teachers and curriculum planners have more significant decision-making powers. When in a position to make theme, text, and/or topic decisions, teachers/planners need to anticipate student interests, look for engaging content materials that can lead to a strong culminating task-, and outline opportunities for coherent sequencing. In addition, they should keep the following in mind:

1. *Themes* should be based on conceptually important and relevant ideas for one's particular students and instructional setting; themes that are relevant to the local context are particularly effective. For example, in the context of a southwestern U.S. classroom, a theme on Native Americans can be considered locally relevant and of great interest to students at all instructional levels. Other considerations for initial theme selection will depend on (a) the types and extent of interesting and appropriate material that are available, and (b) the number of options for captivating topics within the theme unit.
2. A range of *texts* that complements core institutional objectives and includes a variety of genres and formats at the appropriate level of difficulty must be assembled in order to determine (a) which content material will be motivating, (b) which material will provide an engaging lead-in to the theme, (c) which topics are best in light of the content resources available, (d) which threads surface to create additional linkages across themes, and (e) which culminating tasks or projects are natural extensions of the content. Including texts that introduce varying perspectives on the theme and/or topics under consideration is crucial; the tasks that spring forth from texts with alternative perspectives can lead to important critical thinking skills and strategy training.
3. In most settings, *topics* are determined by core content resources. Additional topics can be selected by students-individually, in groups, or as a class-to give students greater involvement in curriculum decisions. What is particularly important in terms of topic selection is the need to select a coherent set of topics, rather than a disparate set of superficially linked topics, that fit under the broader theme.

Step Two. The second step involves selecting possible threads that emerge from final theme, text and topic designations. Related tasks can be developed later at appropriate times during theme exploration to encourage students to consider these threads, which will naturally connect themes and add coherence to the overall curriculum.

Step Three. Step three involves making decisions about the sequencing of content (themes, topics, and texts) and the length of theme units. Sequencing decisions will largely be based on (a) the availability of content (e.g., guest speakers, field trips, special events), (b) the relative ease or difficulty of tasks likely to follow from the content, and (c) the cognitive demands made on students as they manipulate the content and carry out culminating activities. As a culminating task, for example, a theme that lends itself easily to a research paper should be sequenced after a theme that lends itself to a descriptive paper. A theme that lends itself to a debate on abstract issues should follow a theme that lends itself to a straightforward oral presentation of facts and figures. When making sequencing decisions, planners must also consider the evolving nature of each theme unit as the instructional orientation evolves from more teacher-centered to more student-centered during the term.

Step Four. An additional consideration at this point is the extent of teacher involvement, knowledge of thematic content, and willingness to learn additional information with the students. Walmsley (1994) refers to the need for teachers to "bump up their knowledge," arguing that teachers need to read additional information on designated topics. Such a commitment builds teacher motivation and enthusiasm, provides teachers with expanded expertise that students can call on, allows teachers to introduce multiple perspectives on the content under consideration, and provides teachers with additional options for classroom tasks. The extent to which such "bumping up" is necessary is a question we leave open, but some form of teacher investment is necessary.

Step Five. Step five requires the specification of core objectives for each theme unit in terms of language, content, and strategy learning. This also involves the planning of selected tasks and task sequences to open and close the unit.

Step Six. The sixth step involves the initial design of tasks to carry out the content and language goals of each theme unit. Selected tasks should emerge from content resources rather than be arbitrarily imposed on them; they should develop students' language learning, facilitate the learning of content, and model strategies for language and content learning. Tasks, viewed as integral parts of a coherent content framework, should serve larger

content-learning and language-use purposes.

Step Seven. The seventh step involves the initial determination of transitions across topics and across tasks. These should be explicit but kept flexible so that teachers can take advantage of student-generated resources and other unexpected variations that typically arise in any complex teaching situation. Transitions will facilitate a natural and systematic flow of content and tasks from one day to the next.

Step Eight. The final stage involves the fine-tuning of theme units while they are being implemented. When theme units are taught, it is expected that plans will change and vary as teachers take advantage of students' interests and ongoing input. As each theme evolves, new topics will emerge that are of interest to students, requiring teachers (and motivating students) to locate and/or create additional support materials and tasks. Supplementary resources can give students additional opportunities to "bump up" their own knowledge and, in many cases, to engage in a certain amount of individualized learning, thereby increasing student interest in and engagement with the theme unit. Supplementary resources can also provide teachers with opportunities to integrate new tasks and transitions into the unit, and to exploit additional threads as these resources connect the current theme to other themes in new conceptual ways.

CAVEATS

Content-based instruction, in its various configurations, entails some potential difficulties. It is important to point them out so that teachers and curriculum planners can avoid them and design more effective instructional units for content and language learning.

First, planners need to keep language and content learning in balance. It is easy for teachers to become excited about interesting and appealing content and overlook the language exploitation aspects of instruction. CBI should not overemphasize content nor underemphasize language learning activities.

Second, it is important that those implementing theme units not lose sight of content and language learning objectives, and the time allotted to meet those objectives. Achieving planned objectives, pacing the activities appropriately, and providing a sense of closure are important components of CBI if interest and motivation are to develop and remain high. There is often the temptation to allow "well-received" themes, topics, and/or tasks to "run too long." The key is to know when to move on to the next stage of the curriculum so that students maintain a level of excitement and engagement in content and language learning.

Third, it is important not to overwhelm students with too much content. There are usually many ways to exploit interesting content for language learning purposes without moving through large sets of resources too quickly. Sometimes teachers become so involved in their own content learning that they want to share all their new insights (and content resources) with students. Despite the fact that students are often motivated by teacher enthusiasm, they also need sufficient time to work with and reflect on the content and language of the assigned texts. It is better to examine the same set of content sources from a range of perspectives and for a variety of purposes than to cursorily examine excessively large amounts of content.

Fourth, teachers and curriculum planners have spent far more time exploring issues related to the design and implementation of CBI than on procedures for the *evaluation* of content and language learning in CBI classrooms. Once again, we run into the problem of balance. How much content learning do we evaluate and how much language learning do we evaluate? Evaluation of content and language is an important part of CBI. Excluding the assessment of one area, in order to focus on the other, does not serve the students well. Teachers and planners must keep in mind the need to evaluate both content and language on a regular basis. (See Turner, Chapter 15, and Weigle and Jensen, Chapter 16, in this volume.) (See also Brinton, Snow, & Wesche, 1989; Chamot & O'Malley, 1994; Meinbach, Rothlein, & Fredericks, 1995; Roberts, 1993; Short, 1993.)

CONCLUSION

In this chapter, we have set out to examine current perspectives on content-based instruction and describe an approach which is adaptable to many instructional contexts. Even though our discussion of the Six-T's Approach drew on examples from an EAP pre-university curriculum, the general goals and planning procedures are applicable to K-12 contexts for English as a second dialect students, language minority students, and immigrant students. In addition, the principles organizing the Six-T's Approach can be used to reorganize foreign language curricula and assist in adapting EFL instruction into more coherent and interesting formats.

The Six-T's Approach is exploratory in nature, and there are a number of issues which still need to be addressed in greater depth. Important among these are more detailed investigations of (a) task taxonomies as they relate to theme units and transitions across topics; (b) the concept of threads and their contributions to curricular coherence; (c) the connections between topics and themes as the former support and extend the latter; (d) assessment of student language and content development, and curricular success overall; and (e) principles of text selection.

Despite the need for further refinement of the Six-T's Approach, it offers language educators means for devising coherent curricula that will facilitate both content and language learning. The motivation and student engagement with learning that result from this approach can provide students with more successful classroom experiences and- prepare them for the rigors of mainstream classes.

¹ The primary text materials selected for this unit were entitled America's Civil Rights Movement, a complete teaching packet with a text, (Free at last: A history of the civil rights movement and those who died in the struggle) and a video (A time for Justice: America's civil rights movement), available from Teaching Tolerance, Southern Poverty Law Center, 400 Washington Ave., Montgomery, AL 36104.

² Topics that were rejected for this three-week unit but that could be used in future units-with a different set of texts but the same theme--include civil rights for different ethnic minorities in the United States; discrimination based on gender, age, and disability; and civil rights and discrimination in other Countries.

³ Many other abstract notions could serve as threads to link this theme unit with others: for example, respect, human rights, collaboration, cooperation, social structures, power, conflict, authority, law, truth, innovation, and change.

⁴ Tasks typical of in EAP curriculum include listening to lectures and taking notes, using notes for reading and writing tasks, small group discussions and problem solving, learning and using key vocabulary, associating and brainstorming key concepts with graphic organizers, finding and incorporating relevant information from outside sources, reading and writing activities across various genres, writing activities focusing on synthesis and argumentation, and practicing test-taking strategies. More in-depth discussions of tasks relevant to CBI instruction are found in Brinton, Goodwin, & Ranks (1994); Brinton, Snow, & Wesche (1989); Chamot & O'Malley (1994); Mohan (1986); and Short (1994).