CONTENT-BASED INSTRUCTION: ITS PROSPECTS AND CHALLENGES

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ABSTRACT

This paper discusses the Content-Based Instruction (CBI). CBI is a teaching approach using a second or foreig-language focussing more on the subject material instead of the language aspects. In short, many subjects in CBI such as Mathematics, Physics, and Biology are taught using the second or foreign language. In such a way, students are more motivated because they use the second or foreign language to get information related to the subject being learned. Although the use of second or foreign language will be meaningful for the students, CBI still shows its challenges, such as in determining: who will be the teacher, language teachers or subject-matter teachers? If the answer is the language teachers, the question is whether or not are they capable of mastering the given subject?; however, if the answere is the subject-matter teachers, the question is do they present the material in an accurate target language or not? This problem constitutes evaluation. Thus, is the language or specific subject to evaluate?

Key words: *Content-Based Instruction, second or foreign language, specific subject*

I. Introduction

When we talked about methods of teaching using second or foreign languages, we usually referred to a set of teaching activities, which focused on the language being studied and practiced. In the audio-lingual method, for example, teachers asked students to familiarize and internalize the structure of the language. To do so, the students should often fragment the language into its bits and pieces of words, phrases, and clauses. It was due to the fact that the method was based on structural linguistics, viewing language as a system of struc-turally related elements for the encoding of meaning (Richards and Rodgers, 2001: 54-56).

Recently some methods of language teaching trying to connect the study of language to the study of other areas of interest have emerged. One of them is Content-Based Instruction (CBI). As the name suggests, CBI integrates the learning of target language and the learning of some other contents (Larsen-Freeman, 2000: 137). The notion of integrating content-and language-learning objectives has stimulated interest globally among language professionals and some content specialists. One indication includes a fall 2003 international conference with the theme of "Integrating content and language: Meeting the challenge of a multilingual higher education" (Stoller, 2004: 263). In this paper I would like to discuss the nature of the method, its prospects and challenges.

2. The Nature of CBI

2.1 The meaning of CBI

CBI is an approach to second or foreign language teaching in which teaching is organized around the content or information that students will acquire, rather than around a linguistic or other type of syllabus (Richards and Rodgers, 2001: 204). Krahnke (1987: 65) defines it as "the teaching of content or information in the language being learned with little or no direct or explicit effort to teach the language itself separately from the content being taught". In this connection, Brown (2001: 234) states that CBI refers to "concurrent study of language and subject matter, with the form and sequence of language presentation dictated by content material."

It appears from the definitions that CBI integrates the learning of language and the learning of some other contents, often academic subject matter, like mathematics, physics, and biology. The activities of the class are focused on the subject being taught, and are geared to stimulate students to think and learn through the target language. Thus, attention is shifted from learning language *per se* to learning language through content (Stryker and Leaver, 1997a: 5).

2.2 Characteristics of CBI

Stryker and Leaver (1997a: 6-11) proposes three characteristics of CBI: subject matter core, use of authentic language and texts, and appropriate to the needs of specific students. In connection to the first characteristic, Stryker and Leaver (1997a: 6-7) state that the organization of the curriculum is derived from the subject matter, rather than from forms, functions, situations, or language skills of the target language. Communicative competence of students is acquired during the process of learning about the subject matters such as math, science, art, social studies, history, or economics. In this case, CBI tries to eliminate the artificial separation between langu-age instruction and subject-matter classes which exists in most educational settings.

The second characteristic of CBI is the use of authentic language and texts. The teaching materials are selected primarily from those produced for native speakers of the target language. Learning activities focus on understanding and conveying meaningful messages and accomplishing realistic tasks using authentic language. What the teachers need to consider is to "shelter" the materials, making them accessible to the students at their level of proficiency. An important part of sheltering the materials is knowing how to grade activities and utilize a broad variety of teaching strategies (Stryker and Leaver, 1997a: 8-9).

Finally, in CBI, the content and learning activities correspond to the linguistic, cognitive, and affective needs of the students and are appropriate to their p·o-fessional and personal interests. A CBI program is dynamic and constantly changing. Although initial guesses are frequently made concerning the materials that will be most appropriate for students, an ongoing assessment of students' outcomes should inform teachers in the continuing choice of the materials and 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 (Stryker and Leaver, 1997a: 9-11).

2.3 Models of CBI

Some common models of CBI include (1) theme-based instruction, (2) sheltered content instruction, (3) adjunct language instruction, (4) Language for Specific Purposes, and (5) immersion program (Stryker and Leaver, 1997a: 4-5; Richards and Rodgers, 2001: 205-207). Theme-based

instruction refers to a language course in which the syllabus is organized around themes or topics such as health, environment, and education. Language analysis and practice develop from the topics that form the framework for the course. The class might begin from reading a certain topic, followed by other activities like oral discussion and written assignment. Discussion about language elements such as grammar and vocabulary might evolve out of those activities (Stryker and Leaver, 1997a: 4).

Sheltered content instruction is content courses taught in the second or foreign language by a content teacher, to a number of second or foreign language students grouped together for this purpose. In this class, the teacher presents the content in a way which is comprehensible to the students. Usually the teacher chooses texts of a suitable difficulty level for the students and adjusts course requirements to accommodate the students' language capacities (Stryker and Leaver, 1997a: 4). Sometimes, the teacher should modify their own speech in response to students' requests (Mucumeci, 1996: 286).

Adjunct language instruction refers to a course that connects the study of a second or foreign language and the study of a particular subject matter. In this case, students are enrolled in two linked courses – a content course and a language course – with both courses sharing the same content base and complementing each other in terms of mutually coordinated assignments. This kind of course can enhance students' self-confidence with a feeling of using the new language to accomplish real tasks (Stryker and Leaver, 1997a: 4).

Language for Specific Purposes (LSP) is a course that tries to serve the language needs of students who need language in order to accomplish specific roles — such as engineer, lawyer, and doctor – and who need to acquire content and real-world skills through the medium of the target language rather than master the language for its own sake. English for specific purposes (ESP), English for occupational purposes (EOP), and English for academic purposes (EAP) are some examples of LSP (Richards and Rodgers, 2001: 207).

Immersion program is a type of foreign language instruction in which the regular school curriculum is taught through the medium of the foreign language. The foreign language is the vehicle for content instruction; it is not the subject of instruction. The subject might be history, economics, mathematics, physics, chemistry, geography, and biology. The goals of an immersion program include developing a high level of proficiency in the foreign language and gaining designated knowledge and skills in the content areas of the curriculum (Richards and Rodgers, 2001: 206).

2.4 Theories of Language and Language Learning

Some assumptions about the nature of language underlying CBI are as follows. Firstly, language is text and discourse based. In CBI the role of language is as a vehicle for learning contents; therefore, the linguistic units are not limited to the level of sentences but also beyond the sentential level, that is, text and discourse. This involves study of textual and discourse type and structure of written texts like description, narration, recount, explanation, discussion, and procedure. Secondly, language use involves integrated skills. In CBI students are often involved in activities that integrate the four language skills – listening, speaking, reading, and writing. The students might read and take notes, listen and write a summary, or respond orally to what they have read and listened. Thirdly, language is purposeful. In CBI language is used for spe-

cific purposes. The purpose may be academic, vocational, social, or recreational. For students to receive maximum benefit from CBI, they need to be clear in tune with its purposes and the language codes that signal and link these expressions of the purpose (Richards and Rodgers, 2001: 207-209).

Some theories of language learning on which CBI is grounded are as follows. In the first place, students learn a foreign language more successfully when they use the language as a means of acquiring information, rather than as an end in itself. In CBI the students use the foreign language to grasp the information from the subject matter being studied. Secondly, students learn a foreign language more successfully when the information they are acquiring is meaningful. In CBI the contents and learning activities correspond to the students' needs and interests. Thirdly, CBI seeks to build on students' knowledge and previous experience. Students do not start out as blank slates but are treated as bringing important knowledge and understanding to the classroom. The starting point in presenting a lesson is therefore what the students already know about the content (Richards and Rodgers, 2001: 209-211).

3. The Prospects of CBI

In content-based classrooms, students might be encouraged and empowered since they are focused on subject matter that is important to their lives. Students are pointed beyond transient extrinsic motivation, like grades and tests, to their own competence and autonomy as intelligent individuals capable of doing something with their new language. It is closely related to the meaningful learning principle underlying CBI saying that people learn a foreign language more successfully when they use the language as a means of acquiring information, rather than as an end in itself. In CBI students are focused on very useful, practical objectives as the subject matter is perceived to be relevant to long-term goals (Brown, 2001: 235).

CBI can also have positive effects on self-confidence. By constantly using their new foreign language skills to accomplish real tasks, students develop more confidence in their ability to use the language. Besides, CBI can also accelerate foreign language proficiency. By constantly using their language skills to grasp information in the subject matter, students develop the skills – listening, speaking, reading, and writing. Even, they are also able to develop vocabulary and discourse competence (Stryker and Leaver, 1997b: 285). In this connection, Wesche and Skehan (in Stoller, 2004: 262) state:

> *In successful CBI, learners master both language and content through a reciprocal process as they understand and convey varied concepts through their second language ... CBI may be seen as particularly relevant to learners who are preparing for full-time study through their second (or weaker) language, at any level of education.*

4. The Challenges

Some key questions in connection with the implementation of CBI are set forth by Stryker and Leaver (1997b: 286-302). The questions are closely related to the characteristics of CBI: subject-matter core, use of authentic language and texts, and appropriate to the needs of specific students.

The questions related to the first characteristic are as follows: (1) How can we build the necessary interdisciplinary foundation? (2) How do we achieve the desired balance between language and content? (3) Which subject do we select and how do we sequence them? (4) Who will

teach the course, a language teacher, a content specialist, or both? and (5) How do we define and evaluate student learning outcomes? (Stryker and Leaver, 1997b: 286).

The questions dealing with the second characteristic are as follows: (1) How do we provide students with the appropriate authentic materials? (2) What are the appropriate activities and tasks to exploit this authentic materials? (3) How do we incorporate student schemata? and (4) What is the role of students' first language in coping with authentic language and text? (Stryker and Leaver, 1997b: 2294).

The questions concerning the last characteristic are as follows: (1) How do we make an accurate needs assessment? (2) How do we ensure that students are cognitively, linguistically, and affectively prepared for the program? (3) How can we accommodate the widest possible range of learner profile? (4) How do we deal with error correction to maximize learning and motivation? and (5) How can we use student input to ensure ongoing evaluation and adjustment? (Stryker and Leaver, 1997b: 302).

The questions above represent some challenges CBI should encounter seriously. In terms of the teacher, for example, who will teach the course, a language teacher, a content teacher, or both. In order for CBI to work effectively and for students to be able to learn new subject matter while learning target language, the teachers must be more than just good language teachers or just good subject matter teachers. They must be knowledgeable in the subject matter and know how to elicit that knowledge from their students. In fact, this kind of skills is not often found in a single teacher (Stryker and Leaver, 1997b: 292-293).

Another example of challenge concerns with the evaluation: How do we define and evaluate student learning outcomes? When there is a dual focus on content and language, defining and evaluating student learning outcomes becomes a more complicated task than in traditional approaches. The problem is how to achieve desired balance between language and content. Teachers should prepare and use a battery of tests that address student growth in all for language skills as well as growth in content knowledge (Stryker and Leaver, 1997b: 294).

5. Conclusion

In this paper I have presented the nature of CBI. It refers to the concurrent study of language and subject matter, with the form and sequence of language presentation dictated by content material. This kind of approach contrasts sharply with many practices in which language skills are taught virtually in isolation from substance content. When language becomes the medium to convey informational content of interest and relevance to the students, they develop their intrinsic motivation, self-confidence, as well as their language proficiency. The challenges encountered in content-based classrooms concern with (1) creating an interdisciplinary foundation, (2) balancing language and content, (3) building the scaffolding, (4) student readiness, (5) the teacher, (6) measuring outcomes, (7) providing authentic input, (8) preparing the materials, (9) sheltering content, (10) the use of students' first language, (11) cognitive and linguistic readiness, (12) encouraging linguistic risk-taking, (13) error correction, and (15) student input.

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