

Digest

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Integrating Language and Content: Lessons from Immersion (EDO-FL-96-04)

National Center for Research on Cultural Diversity and Second Language Learning

This Digest is based on a report published by the National Center for Research on Cultural Diversity and Second Language Learning, *Integrating Language and Content: Lessons from Immersion*, by Fred Genesee. Copies of the report are available from NCRCDLL, 1118 22nd St. NW, Washington, DC 20037.

One of the most interesting innovations to emerge in second language education during the last three decades is the language immersion program. In this method of language instruction, the regular school curriculum is taught through the medium of a second language. The first immersion programs were developed in Canada to provide English-speaking students with the opportunity to learn French, Canada's other official language. Since that time, immersion programs have been adopted in many parts of North America, and alternative forms of immersion have been devised. In the United States, immersion programs can be found in a number of languages, including French, German, Spanish, Japanese, and Chinese.

With the purpose of highlighting the lessons to be learned from immersion, this Digest presents selected findings from research carried out to evaluate the effectiveness of immersion programs in Canada and the United States. These lessons are related to the importance of (1) integrating language with content instruction, (2) creating classroom environments that are discourse-rich, and (3) systematically planning language instruction along with content instruction.

Language Integration Over Isolation

The first lesson to be learned from immersion is that when second language instruction is integrated with instruction in academic content, it is more effective than teaching the language in isolation. Proficiency in the target language is not a prerequisite to academic development; rather, language learning results from using language to perform authentic communicative functions.

During the last 10 years, there has been a shift away from teaching language in isolation to integrating language and content instruction. There are at least four reasons for this shift. First, language is acquired most effectively when it is learned for communication in meaningful and significant social situations. The academic content of the school curriculum can provide a meaningful basis for second language learning, given that the content is of interest or value to the learners.

Second, the integration of language and content instruction provides a substantive basis for language learning. Important and interesting content, academic or otherwise, gives students a meaningful basis for understanding and acquiring new language structures and patterns. In addition, authentic classroom communication provides a purposeful and motivating context for learning the communicative functions of the new language. In the absence of content and authentic communication, language can be learned only as an abstraction devoid of conceptual or communicative substance.

A third reason for the shift toward language and content integration is the relationship between language and other aspects of human development. Language, cognition, and social awareness develop concurrently in young children. Integrated second language instruction seeks to keep these components of development together so that second language learning is an integral part of social and cognitive development in school settings.

Finally, knowing how to use language in one social context or academic domain does not necessarily mean knowing how to use it in others. The integration of second language instruction with subject content respects the specificity of language use. For example, evidence indicates that the way language is used in particular academic domains, such as mathematics (Spanos, Rhodes, Dale, & Crandall, 1988), is not the same in other academic domains, such as social studies (Short, 1994).

A variety of integrated approaches to second language teaching have been developed. Immersion is a specific type of integrated instruction. The primary focus of immersion is not language learning but academic instruction. Immersion programs have proved to be successful; the academic achievement of immersion students is comparable to that of students educated through their native language. This indicates that the students in immersion programs acquire the second language skills they need to master the academic skills and information appropriate for their grade level.

Opportunities to Use the Target Language

The second lesson to emerge from research on immersion is that approaches that provide opportunities for extended student discourse, especially discourse associated with activities selected by individual students, can be particularly beneficial for second language learning.

Research on French immersion programs in Canada has shown that immersion students often perform as well as native French-speaking students on tests of French reading and listening comprehension. However, they seldom achieve the same high levels of competence in speaking and writing. Although functionally effective, the oral and written skills of immersion students indicate a number of shortcomings. Immersion students' grammar is less complex and less redundant than that of native speakers and is influenced by English grammar. The available studies suggest that this results, in part, from learning environments in which there is a lack of opportunity to engage in extended discourse.

The solution to the shortcomings in immersion students' productive skills seems to lie in the use of methodologies that

apply techniques to practice language forms with a communicative approach. "Such tasks and activities will meet the same criteria as is demanded of the communicative teaching of grammar: purposefulness, interactivity, creativity, and unpredictability" (Clipperton, 1994, p. 746).

Activity-centered immersion programs, particularly those that focus on individual choice of learning activity, achieve high levels of second language proficiency even in the productive skills. Stevens (1976) compared students who worked on self-selected activities in collaboration or consultation with other students and who were expected to make oral and written reports in the target language on their work with students who all worked on the same teacher-directed activities at the same time and in the same way. Although students in the activity-centered program used the target language for only 40% of the school day, they attained the same levels of target language speaking and reading proficiency and almost the same levels of reading and writing proficiency as the students in the teacher-centered program, which provided all instruction in the target language. The success of the activity-centered classes can be attributed to two main factors: 1) students had regular opportunities for extended discourse; and 2) students were highly motivated because they used the target language in situations of personal choice.

In sum, the use of instructional strategies and academic tasks that encourage increased interaction among learners and between learners and teachers is likely to be beneficial for second language learning.

Effective Curriculum Design

The third lesson to be learned from immersion is that the integration of language and academic objectives should be carefully planned, providing for the presentation, practice, and application of specific language forms that are necessary for discussing different academic content. If integrated instruction is not planned systematically, teachers may use strategies that are not optimal for promoting full second language development. Swain (1988) examined how immersion teachers used French to teach a variety of academic subjects. The study found that teachers used a functionally restricted set of language patterns, corrected content more often than linguistic form, and were inconsistent in their corrections of linguistic form. These results suggest that in an effort to make academic material as comprehensible as possible, immersion teachers might be adopting communication strategies that rely on linguistic skills their students already have, and students may not be challenged to learn new language skills. In order to develop the students' language skills fully, immersion teachers must progressively model more complex language and use instructional activities that demand more complex language skills from students.

Instructional strategies and tasks must be carefully selected so that students use and learn targeted aspects of the language. Without such systematic plans, teachers may provide inconsistent or even random information about language forms. A systematic focus on the structural aspects of the language greatly enhances learning of targeted grammatical features.

Increased attention to language forms does not mean less focus on communication and meaning. Salomone (1992) reports on an immersion program in the United States that "exemplifies the current trend of all second language instruction: using the

second language rather than knowing about the language, with bilingualism as the ultimate instructional goal" (p. 9). However, having verified a lack of accuracy and a continued "fossilization" in the students' speech, teachers in the program studied by Salomone incorporated systematic planning and explicit teaching of the grammar and vocabulary component of the syllabus. This strategy greatly improved the results. Other studies describe the specifics of direct language instruction in an immersion context (e.g., Clipperton, 1994; Laplante, 1993) or show the benefits of identifying the semantic and syntactic features and language functions and tasks that are part of the academic language for a content area and incorporating them in the design of lesson plans (Short, 1994).

Conclusion

Experiences in immersion classes illuminate the practice of second language teaching and indicate effective ways of attaining high levels of academic content mastery and target language proficiency. Evaluations of a variety of immersion programs suggest at least three elements of general relevance for second language instruction: 1) instructional approaches that integrate content and language are likely to be more effective than approaches in which language is taught in isolation; 2) an activity-centered approach that creates opportunities for extended student discourse is likely to be beneficial for second language learning; and 3) language objectives should be systematically targeted along with academic objectives in order to maximize language learning.

References

- Clipperton, R. (1994). Explicit vocabulary instruction in French immersion. *Canadian Modern Language Review*, 50, 736-49.
- Laplante, B. (1993). Stratégies pédagogiques et enseignement des sciences en immersion française: Le cas d'une enseignante. *Canadian Modern Language Review*, 49, 567-88.
- Salomone, A. M. (1992). Student-teacher interactions in selected French immersion classrooms. In E. B. Bernhardt (Ed.), *Life in language immersion classrooms* (pp. 97-109). Philadelphia: Multilingual Matters.
- Short, D. (1994). *Integrating language and culture in middle school American history classes* (Educational Practice Rep. No. 8). Santa Cruz, CA and Washington, DC: National Center for Research on Cultural Diversity and Second Language Learning.
- Spanos, G., Rhodes, N., Dale, T., & Crandall, J. (1988). Linguistic features of mathematical problem-solving: Insights and applications. In J.P. Mestre and R.R. Cocking (Eds.) *Linguistic and cultural influences on learning mathematics* (pp. 221-40). Hillsdale, NJ: Lawrence Erlbaum.
- Stevens, F. (1976). *Second language learning in an activity-centered program*. Unpublished master's thesis, Concordia University.
- Swain, M. (1988). Manipulating and complementing content teaching to maximize second language learning. *TESL Canada Journal*, 6, 68-83.

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Digest

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Integrating Foreign Language and Content Instruction in Grades K-8 (EDO-FL-95-07)

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Content-based instruction is a method of teaching foreign languages that integrates language instruction with instruction in the content areas. In this approach, the foreign language is used as the medium for teaching subject content, such as mathematics or social studies, from the regular classroom curriculum. The method is receiving increasing attention because it allows schools to combine the goals of the second language curriculum and the regular curriculum, making language learning the vehicle for strengthening general skills and knowledge. "Language is not just a medium of communication but a medium of learning across the curriculum. The goal of integration is both language learning and content learning. Content-based classrooms are not merely places where a student learns a second language; they are places where a student gains an education" (Mohan, 1986, p. 8).

Not only does the content-based language class complement the regular classroom curriculum, it becomes an integral part of the entire school program. The success of language immersion programs (where subjects are taught entirely in the foreign language) has stimulated interest in using content-based learning in other types of elementary and middle school foreign language programs that have traditionally been organized thematically around vocabulary topics. Incorporating subject content in early language programs puts language into a larger, more meaningful context and provides situations that require real language use. Genesee (1994) suggests that traditional methods often disassociate language learning from the rest of the student's day as well as from cognitive, academic, and social development. Content-based instruction is part of an integrated approach that brings these domains together. The benefits of studying language through subject content are evident in students' language and content acquisition.

In content-based instruction, students become proficient in the language because the focus is on the exchange of important messages, and language use is purposeful. The language that students use comes from natural situations, such as a science unit on the solar system or a social studies lesson on the geography of a country.

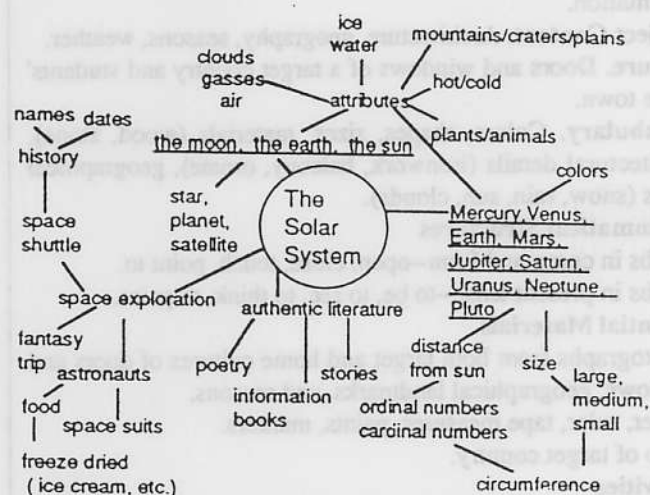
Planning for Content-Based, Thematic Teaching

In thematic teaching, the curriculum is organized around a thematic center that can originate in the classroom, the school, the environment, or the target culture. Activities that teach language concepts along with the content are interrelated and are planned to fit within the framework of a lesson or thematic unit. Such an integrated, holistic approach is based on the premise that when students are engaged in meaningful activities they acquire language, including writing, as naturally as they learned to walk and talk.

The thematic center may be a curriculum area, such as the Middle Ages; a word like "inside"; a theme such as houses; or a story in the target language. Webs or semantic maps are an ideal way to brainstorm curriculum activities based on these themes. A web graphically shows how the activities and the target language are interrelated. Caine and Caine (1991) indicate that facts and skills presented in isolation need more practice and rehearsal to be stored in the brain than

does information presented in a meaningful context. The web maps out the context in which second language learning is combined with subject content and cultural learning in an integrated language process. Webs can be organized in different ways (e.g., free form, by content discipline, by multiple intelligences). The following web and chart are examples of thematic or content-based planning.

A Free-Form Web



Planning a Unit on Puerto Rico Using Multiple Intelligences (Gardner, 1993)

Bodily-Kinesthetic. To introduce vocabulary about Puerto Rico, ask the students to take a picture or item representing something about Puerto Rico out of a magic box. Ask students to point to the item, pass the item, put the item on the table, put it on a part of the body, etc.

Spatial. Give students a graphic organizer with a circle in the center that says "Puerto Rico" and spokes coming out from the center. Have the students fill in each spoke with one aspect about Puerto Rico.

Linguistic. As students take each item out of the magic box, describe the item to them. "This is a *coquí*. It is a small frog that only lives in Puerto Rico. It sings, '*coquí, coquí, coquí*.'" Write a Language Experience Story about Puerto Rico using the language used to describe the items from the magic box.

Musical. Teach the song *El Coquí* to the students.

Logical-Mathematical. Have students use a small picture of a *coquí* to measure the distance between places on the map (1 *coquí*=10 miles) and calculate how long and wide Puerto Rico is, how far it is from Ponce to San Juan, etc. *

Interpersonal. Divide the class into pairs with one partner as A and the other as B. Give each pair an A and B pair sheet. Have them "read" their sheets to each other to practice the vocabulary illustrated on the sheet and to decide if their sheets are the same or different.

Intrapersonal. After tasting typical foods from Puerto Rico, make a graph of the food students like and dislike.

* activity by Eileen Lorenz, Montgomery Co. Public Schools (MD)

Pesola (in progress) has developed a curriculum planning framework for the integration of language and content based on the thematic unit. In her model, the dynamic relationships among language, academic content, and culture interact so that all three elements form the core of the language lessons. She describes a comprehensive framework to follow in the planning process, including (1) a thematic center; (2) outcomes for language in use, content, and culture; and (3) activities, assessment strategies, materials, and classroom setting. Making choices in all three areas of language, content, and culture, and maintaining a balance among them is the fundamental basis of this model. Part of Pesola's framework is the Unit Plan Inventory, which is outlined below. It shows the many aspects of planning that must take place for successful language and content integration in a unit on architecture.

Planning for a Content-Based Unit on Architecture Using the Unit Plan Inventory

Language in Use. Describing, giving information, asking for information.

Subject Content. Architecture, geography, seasons, weather.

Culture. Doors and windows of a target country and students' home town.

Vocabulary. Colors, shapes, sizes, materials (wood, stone), architectural details (ironwork, balcony, ornate), geographical terms (snow, rain, sun, clouds).

Grammatical Structures

- Verbs in command form--open, close, touch, point to.
- Verbs in present tense--to be, to see, to think, to paint.

Essential Materials

- Photographs from both target and home cultures of doors and windows, geographical landmarks, and seasons.
- Paper, ruler, tape measures, paints, markers.
- Map of target country.

Activities

- Introduce vocabulary through Total Physical Response (TPR) sequence with photos of classroom doors and windows.
- Sort photos by doors/windows, target country/home town, size, shape, material, color.
- In pairs, estimate then measure doors and windows in classroom.
- Use TPR sequence of map geography, seasons, and weather of target country and home town.
- In small groups, paint the original window with a view in the target country or home town.
- Describe a window in writing or orally.
- Display windows in the classroom, have students choose the window they like the best and write why they like it.

Assessment

- Observe students' participation, assess for understanding.
- Observe students' participation, assess for accuracy and pronunciation.
- Assess for participation, use of target language, and accuracy.
- Assess for inclusion of all elements, presentation, and participation in group project.
- Evaluate written paragraph for accuracy and meaning.
- Evaluate student writing for coherence, interest, and accuracy.

*Based on and adapted from a unit prepared by Pam Morgan,
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Suggestions for Planning Lessons that Integrate Language and Content Instruction

When planning for the integration of language and content instruction, the distinctive characteristics and needs of young students found at each level of cognitive and educational development must be considered. Who are the students? What is the range of their social and cognitive development? What are they interested in? Second language acquisition research informs us about the value of teaching strategies such as providing comprehensible input, planning many listening activities, and giving the students numerous opportunities to use their language and to negotiate meaning.

The following are suggestions for planning lessons that integrate language and content in early language programs:

1) Become familiar with the regular classroom curriculum by observing your students' regular classrooms, reading the school's curriculum guide, talking with the teachers about their curriculum and to the students about what they are studying.

2) Plan to integrate content that you are interested in and will take time to research. Start on a small scale and select only one or two topics from the regular curriculum. Think in advance about the units you would like to plan so that when you are traveling or attending conferences you can begin to collect resources to enrich your units.

3) Use a web or a curriculum planning format that promotes the integration of language, content, and culture.

4) Design interesting activities for the students that do the following:

- use the students' prior knowledge and personal experience;
- ask students to work in a variety of groupings (whole class, individually, in pairs, and small groups);
- use holistic strategies that integrate listening, speaking, reading, and writing and naturally connect language and content;
- challenge the students to think critically; and
- address the students' multiple ways of learning.

Conclusion

Incorporating content-based instruction into elementary and middle school foreign language classrooms is a way of providing a meaningful context for language instruction while at the same time providing a vehicle for reinforcing academic skills. Teaching through content is fun and worthwhile for both the students and the teacher. Although it takes more time to plan and create materials for content-based instruction, the results are well worth the effort.

References

- Caine, R. N., & Caine, G. (1991). *Making connections: Teaching and the human brain*. Alexandria, VA: ASCD.
- Gardner, H. (1993). *Multiple intelligences: The theory in practice*. New York: Basic Books.
- Genesee, F. (1994). *Integrating language and content: Lessons from immersion* (Educational Practice Report No. 11). Santa Cruz, CA and Washington, DC: National Center for Research on Cultural Diversity and Second Language Learning.
- Mohan, B. (1986). *Language and content*. Reading, MA: Addison Wesley.
- Pesola, C. A. (in progress). *Background, design, and evaluation of a conceptual framework for FLES curriculum*. Ph.D. Dissertation, University of Minnesota, Minneapolis.

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