THE CANADIAN BILINGUAL IMMERSION DEBATE

A Synthesis of Research Findings

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LEARNING THROUGH TWO LANGUAGES: STUDIES OF IMMERSION AND BILINGUAL EDUCATION. *Fred Genesee.* Cambridge, MA: Newbury House, 1987. Pp. vii + 213.

FRENCH IMMERSION: MYTHS AND REALITY. *Hector Hammerly.* Calgary, Alberta: Detselig Enterprises, 1989. Pp. 164.

The two books reviewed here represent dramatically contrasting points of view on immersion education. Genesee's volume is a calm, cautiously articulated, thorough review and synthesis of hundreds of studies on bilingual/immersion education in Canada and the United States. Hammerly's volume is an emotional, polemical, one-sided account of his personal views on Canadian immersion education, with scant research evidence cited to undergird his opinions. This review article provides an overview of current research on bilingual/immersion education, with a focus on a presentation of Hammerly's concerns and Genesee's syntheses set within a broad frame of reference.

Hammerly has passionately stated his concerns about the immensely popular Canadian immersion bilingual programs in this book as well as in several previous publications (e.g., Hammerly, 1985, 1987; Pellerin & Hammerly, 1986). The main issue for Hammerly is the development of *accuracy* in second language production, especially of concern in remote foreign language settings (defined as regions where students have little or no access to native speakers of the language being taught). As Hammerly describes his position, one is reminded of the age-old debate between those who support language teaching methods that focus on accuracy versus those

supporting methods that focus on fluency. Hammerly argues that his is a balanced view, but his emotional tone leaves the reader with the conclusion that he prefers that accuracy be the main focus of the first years of language instruction. This puts him in a rather lonely position as one of the few current supporters of early focus on form, when both first and second language acquisition research of the last 20 years has provided extensive evidence that for children, adolescents, and adults, language is acquired through a developmental process that focuses first on language use through meaningful communicative activities in the language, combined with steps along the way that sometimes involve a focus on language form with conscious self-editing and development of refinement of rules of the language (e.g., Brown, 1987; Ellis, 1985; Slaughter, 1988; Strickland, 1990).

To place Hammerly's concerns in a broader context, it is helpful first to define language proficiency. Three or four decades ago, language proficiency was generally thought of as development of the four skills of listening, speaking, reading, and writing across the three domains of pronunciation, grammar, and vocabulary—a two-dimensional, relatively simple perspective. Language teaching methods and textbooks of the 1940s, 1950s, and 1960s mostly reflected this perspective. As increasing numbers of researchers in the late 1960s and early 1970s began to describe the need to develop communicative competence and to define what that might be, new domains in pragmatics were acknowledged by most linguists, including paralinguistic dimensions of language, sociolinguistic appropriateness, and discourse strategies in oral and written formal thought patterns. A third dimension of language to superimpose on the four language skills and six language domains above is the acquisition of knowledge both of structure (the oral and written form) of each meaningful unit of language, and of meaning associated with that structure (semantics).

Additional dimensions of the acquisition process include the specific register(s) of each context in which language is to be used. For example, mathematical language has its own unique register, differing from that of language arts (which demands its own skills in metalinguistic awareness), and each in turn differing from the language register of computer science. In other words, there is a language register (with its own vocabulary, grammar, and pragmatics) unique to each academic field, each profession, and each context in which people live their lives. Each year of added maturity and life experience adds yet another dimension to the complexity of language development, with language expected to be more cognitively complex as each year of a person's life passes. Formal schooling adds to this dimension of cognitive complexity by exponentially expanding a student's language development into new areas of experience. Overall, language skills, domains, and dimensions interact with each other in very complex ways.

In light of this complexity, Hammerly's simplistic view of the language domains that should be taught in a formal language class is in direct conflict with most research evidence of the past two decades. Hammerly's (1988) personal opinion is that "discourse and sociolinguistic factors are not major components of classroom language learning despite the fact that they have been stressed in recent years. . . . The emphasis in classroom instruction should be on the native-like use of the sounds,

the grammatical rules and patterns, and the vocabulary of the target language" (p. 573). Hammerly (1989, p. 29) states that structure should be emphasized before vocabulary development. He rejects pragmatic language as being "nonstandard and even idiosyncratic. Beginning students of French need to rely primarily on realistic but specially designed oral samples" (p. 60). Hammerly's views of language teaching appear to be based on the tenets of behavioral psychology and structural linguistics when he states that "mastery of any complex body of knowledge or set of habits (learning a second language is both) requires focusing on what is to be learned one point at a time. Gradation involves going from the simple to the complex, the regular to the irregular, the frequent to the infrequent" (p. 60). This view is in complete contradiction with most current second language acquisition research, which has demonstrated the zigzag nature of language acquisition with complex structures sometimes acquired before simple structures, irregular structures frequently acquired before regular forms, and so on.

To return to "a carefully graded, step-by-step" (Hammerly, 1989, p. 62) approach to learning a second or foreign language is to ignore all the overwhelming research evidence that not only natural second language acquisition but also *foreign* language acquisition in the classroom is a dynamic, creative process developed through contextual, meaningful activities that focus on language use (e.g., see the research syntheses in Allwright & Bailey, 1991; Chaudron, 1988; Cohen, 1990; Ellis, 1985, 1988; Freed, 1991; McLaughlin, 1984, 1985). Chaudron (1988) presented a strong case, in his synthesis of hundreds of research studies on language learning in formal classrooms, that there is a natural developmental process occurring in all foreign/ second language learning: "There is little doubt that most language syllabi and instructional practices present structures that are inappropriate for learners' stage of acquisition or natural-universal sequences in development of specific target language forms" (p. 164). In other words, the natural order of acquisition is a stronger force than textbook writers' and teachers' views of simple to complex and other attempts at "logical" sequencing.

In contrast to Hammerly's personal opinions, Genesee (1987) takes a careful look at a wide range of research across the disciplines of linguistics, psycholinguistics, social psychology, psychology, sociology, and anthropology, as well as education research, to present a comprehensive synthesis of studies on bilingual/immersion education. Genesee's detailed descriptions of program variations in immersion/bilingual education in the United States and Canada are very insightful analyses of some of the complex variables influencing acquisition of second/foreign language in these programs. Across all types of bilingual programs for majority and minority students, the acquisition of foreign/second language proficiency is only one of several goals. Equally important is students' successful academic development in each subject area for each grade level as well as continuing students' acquisition of first language proficiency. "Immersion programs emphasize acquisition of the second language in order to perform academic tasks—to this extent, second language learning in immersion is incidental to learning cognitive skills and acquiring knowledge" (p. 26).

Genesee (1987, pp. 27–61) provides a synthesis of research findings on the effect of Canadian immersion programs on majority language students' native language

development (English), second language development (French), and academic achievement. He concludes that overall, majority language students do exceedingly well in bilingual immersion programs, without sacrificing their English language development or their academic achievement; in fact, they sometimes outperform comparison groups that are being schooled monolingually. What Genesee carefully reports is that in second language (L2) development of listening comprehension, reading, and functional proficiency, immersion students are for the most part comparable to native speakers of French, but their L2 productive skills, speaking and writing, are not at native-like levels of proficiency. This is Hammerly's main point. While Hammerly insists that immersion researchers have attempted to downplay this finding, Genesee cites a number of studies that have openly reported these results. Other studies on this issue are cited in Allen, Cummins, Harley, Lapkin, and Swain (1988).

Hammerly's (1989) proposed "solution" to the problem of improving the L2 speaking and writing skills of immersion students is to do away with immersion as a model for foreign language instruction and return to traditional teaching of foreign language as a subject, with a focus on sequenced grammar, by introducing 2 hours of French language instruction per day in Grade 5. Educators know the impracticality of such an idea. Teachers barely have enough time to cover the core curricular subjects of language arts, mathematics, science, and social studies in a given day; school administrators, teachers, and parents would refuse to accept a loss of one-third of the curricular day to an exclusive focus on a foreign language. The wide acceptance of immersion as a model is largely due to students' acquisition of some skills in second/foreign language at no cost to their overall academic achievement in school.

> That the primary focus of immersion programs is academic achievement is evidenced by the fact that the programs are deemed highly successful despite the evident linguistic weaknesses of immersion students. More native-like levels of second language proficiency at the expense of normal academic achievement would not have been regarded by Canadian educators or parents as success. What is important about the students' level of second language development is that it does not limit their academic development. (Genesee, 1987, p. 176)

Both delayed immersion (introduced in Grade 4 or 5) and late immersion (introduced in Grade 7) address Hammerly's proposals that intensive second language learning start when the older student is cognitively more able to focus on language form. Hammerly does not discuss these immersion models in his book in any detail; instead, he categorically rejects all immersion programs. However, the immersion research demonstrates that students in delayed and late immersion programs do not perform better on productive skills than students in early immersion. Nor is there any research evidence that foreign language classes taught as a subject, as Hammerly proposes, produce students who perform better on productive skills. On the optimal age issue, Genesee (1987) concludes that "second language proficiency tends to increase the earlier immersion begins and the more second language exposure

the learner has. Thus, early total immersion generally yields higher levels of second language proficiency than early partial immersion, delayed immersion, or late immersion" (p. 191). Genesee goes into much more detail than it is possible to present in this short review; his synthesis of research is well worth examining in depth. He reminds the reader that research to date has shown that older students are more efficient second language learners than younger learners, but extended exposure to the second language may be crucial in acquisition of second language.

Other solutions to improving the productive skills of French immersion students have been proposed by a number of researchers. Rather than scrapping immersion as Hammerly proposes, a more reasonable strategy involves working with immersion teachers to determine the appropriate points in the curriculum for introducing a formal focus on error correction, as well as using meaningful, motivating strategies for focus on form. Current approaches used in native language arts classes appear to hold promise for second/foreign language arts, such as formally teaching writing as a process that involves multiple stages that move from initial editing for communication, to final stages that involve editing for form (Goodman, Haussler, & Strickland, 1984; Graves, 1983; Johnson & Roen, 1989). Other strategies might include more emphasis on cooperative learning through problem-solving tasks that develop higher levels of proficiency in speaking and writing across many oral and written language genres (Heath, 1986; Kagan, 1986). These and other proposals are discussed extensively in Harley, Allen, Cummins, and Swain (1990).

Returning to the question of the "ideal" age to begin instruction in a second language, Hammerly (1989, p. 50) presents no research evidence to support his belief that age 10 or 11 is the best time to begin systematic foreign language classroom instruction, with his choice of second-best age being young adulthood, ages 18–25. He categorically rejects all the extensive research on the age issue, stating that most of this research is based on natural language acquisition rather than systematic foreign language instruction. Nonetheless, hundreds of studies, at least half of which are based on research in foreign language classes, have been conducted (e.g., research syntheses are presented in Collier, 1988; Harley, 1986; Hyltenstam & Obler, 1989; Long, 1988; Scovel, 1988). These studies illustrate the difficulty of separating age from the hundreds of other variables that influence the second/foreign language acquisition process. It is doubtful that we will ever answer the age question with certainty because the circumstances (variables) for each student acquiring a target language vary greatly from individual to individual. For example, age for L2 development appears to be strongly related to first language (L1) cognitive development; that is, if a student does not reach a level of strong cognitive development in L1, he or she may have difficulty reaching full cognitive development/proficiency in L2 (Collier, 1988, 1989b). Thus, it is irresponsible to oversimplify the research by pronouncing one age as the best age to begin instruction in a foreign language. What the age research does demonstrate is that it is not a disadvantage to begin a foreign language at any particular age (as long as development of L1 is not discontinued)—all ages are possible—but there are maturational constraints that influence processes such as the development of native-like pronunciation, which is more likely to be acquired when introduced before puberty.

Another major variable that Hammerly presents by ignoring most of the research of the last two decades is the role of L1 in L2 development. He seems to hold to the tenets of the older form of contrastive analysis theory from the 1960s that most student errors are caused by the first language. He does acknowledge that L1 influence has both a positive and negative role, but he presents the errors that French immersion students make as mostly the result of L1 interference. The studies on which Hammerly bases his point of view are case studies, based on a very small student sample. While these data present a small contribution to the growing research base, no generalizations can be made based on the few studies that he cites until more have been conducted. An extensive number of studies from both foreign language classroom learning and natural second language acquisition research have shown that there is significant L1 influence on L2 in the very early stages of L2 learning and a fair amount of L1 influence on L2 pronunciation, but much less L1 influence on L2 acquisition of lexicon, morphology, syntax, and pragmatic aspects of language (Ellis, 1985). Cummins's theory of common underlying proficiency (in Cummins & Swain, 1986) explains some positive aspects of L1 transfer to L2 (including cognitive development, academic knowledge, and life experience). Linguists exploring linguistic universals have discovered that most languages share many universal characteristics; this research has provided some insights into core and peripheral grammar as one possible explanation for differences between L2 structures that are developmentally acquired while other L2 structures are influenced by the structures of L1 (Ellis, 1985).

One more assumption of Hammerly's that seems quite out of touch with the current research base is that his emphasis on a gradual, sequenced introduction to structures in L2 assumes that the whole grammar system of a language can be formally taught. However, most grammarians acknowledge that proficiency in an L2 cannot be acquired exclusively through formal instruction. Most schools require that students spend at least 1 hour per day working on refinement of skills in their L1 throughout Grades K–12 plus 2 years at the college level. At least half this classroom time is generally spent focused on various aspects of structure of the language. Even given all this focus on L1 form, many university professors complain that students do not know how to speak or write their own L1 well. Language is an extremely complex system. Textbook writers for foreign language classes are well aware that they do not begin to cover all aspects of one language's grammar system. For example, it is not possible for an English as a foreign language teacher to teach all rules and the exceptions to those rules for use of the article in English. Natural exposure to L2 is needed to refine a student's knowledge or competence to native-like proficiency levels. Hammerly seems to be very offended that in the case study data that he examined, French immersion students made errors in some of the structures typically taught in a first-year traditional French class. However, students in such a class rarely demonstrate their mastery of the formally taught structures when tested using natural language samples, as was done in the immersion studies. Perhaps a focus for future studies might be to examine when certain structures are formally introduced in each type of program and what classroom patterns/strategies best assist with acquisition of form, measured by performance assessment using oral and written language samples.

To return to proposed solutions to the development of L2 speaking and writing skills, another perspective is gained from Genesee's (1987) research synthesis. Through studying the complex variables in majority and minority relations, insights into second/foreign language acquisition can be viewed within a broader context. The overall educational goal of any type of schooling is for *all* students to do academically well in school, across the curriculum. Within this broader context, Genesee analyzes research on majority and minority students' academic achievement in all types of bilingual programs in the United States and Canada. In this research synthesis, he concludes that bilingual immersion programs, with strong curricular affirmation of two languages and cultures throughout students' schooling (K–12), have been a very effective school model for all students, including members of minority ethnic groups, students of minority language or minority dialect background, students from lower socioeconomic backgrounds, students with below-average intelligence, and students with language or learning disabilities. That is, all these groups, when schooled in two languages, have achieved academically at levels higher than or equal to their matched comparison groups being schooled monolingually. This represents truly remarkable results for one school program model, and is almost unique in the school effectiveness research.

Genesee's chapters (1987, pp. 116–170) on bilingual education as it has developed in the United States are instructive in their implications that the transitional model for minority language students has not served as an effective school model. Rather, it has tended to maintain the status quo in U.S. majority–minority relations and in minority student academic achievement. The short-term L1 support given in these programs subconsciously sends the message to students that their language and culture are not valued by the society, negatively affecting students' self-esteem. Also, for younger students, the 1–3 years of L1 support in a transitional bilingual program is not likely to be sufficient to reach the L1 cognitive levels needed to be academically successful in L2 (Collier, 1989b; Spener, 1988).

In contrast, immersion and maintenance models of bilingual education, with their emphasis on K–12 support for both L1 and L2, have the potential to overcome some of the limits of the transitional model. Genesee analyzes societal factors influencing minority language students' academic achievement through a thoughtful synthesis of varied research perspectives from sociology, anthropology, and social psychology, proposing several strategies for change:

> Certain approaches to changing the sociocultural fabric of schools in order to upgrade the status of minority language students and optimize their academic performance are indicated by the present framework. It follows from this framework that it is not sufficient to merely use the students' home language in bilingual programs; nor is it sufficient to employ members of the minority group in the school only as teachers and support personnel. What is called for is the use of the students' home language and the employment of minority language group members in ways that upgrade their status and power relative to that of English and English-speaking people. This might mean "over-using" the minority language or "over-representing" the minority group in the administrative hierarchy of the school, relative to their predominance in the community at large, in order to offset the inferior social status otherwise associated with the group. (Genesee, 1987, pp. 168–169)

Other strategies for change that Genesee summarizes from the research base involve fundamental changes in the curriculum, including the use of cooperative learning tasks in multiple-ability classes.

What Genesee does not present in sufficient detail is the potential of integrated, two-way bilingual programs. These programs are mentioned in one section (Genesee, 1987, pp. 125–129) as an innovation of both Canadian immersion and U.S. bilingual programs. While Genesee states that in the United States, the San Diego Immersion Project was "the first program of this sort" (p. 126), the first public school two-way bilingual program in the United States was actually initiated in 1963 in Dade County, Florida. Since that time, many successful two-way bilingual schools have been implemented in the U.S., and they continue to expand in number. In a two-way program, majority language students attend classes all day with target language speakers, receiving their academic instruction in both L1 and L2 for as many years as the school system can provide. Key features of two-way programs include long-term instruction in both languages, optimal dual language input and output, focus on an academic curriculum, integration of language arts and content areas, separation of languages for instruction, an additive bilingual environment, a positive school environment, high-quality instructional personnel, and home/school collaboration (Lindholm, 1987, pp. 5–12). Some U.S. two-way programs use the early total immersion model, introducing all instruction in the *minority* language in kindergarten and gradually adding instruction in English each year until by Grade 4, there is half a day of academic instruction in each language, while others implement half a day of academic instruction in each language from the first year of schooling (labeled *partial-immersion* in Canada).

While little research has been conducted to date on two-way bilingual programs, there is some research evidence that majority language students are more likely to develop native-like proficiency in their L2 speaking and writing skills when given the opportunity to study with peers who are native speakers of the target language (Collier, 1989a; Crawford, 1989). This is an important topic to pursue in future research in order to determine the generalizability of these findings. If integrated two-way programs have an impact on building deeper proficiency in L2 skills of speaking and writing, then these models may have the greatest potential for majority and minority students' success in both academic achievement and fuller development of L2 proficiency.

Another advantage of two-way programs is that they have the potential to lessen social distance between majority and minority language students as well as to change unequal social status relations between groups. In segregated programs, social distance from target language speakers may remain, which influences students' attitudes toward the target language group and may not ease majority–minority relations (Genesee, 1987). In the Canadian immersion programs, generally Anglo-Canadians are schooled separately from Franco-Canadians. While in general, students from immersion programs have better attitudes toward speakers of the target language than comparison groups being schooled monolingually (Lambert, 1984), there are still limits to students' attitudinal change. Anglo-Canadian graduates of immersion programs are very positive in their attitudes toward standard French

spoken in France but somewhat less accepting of French varieties spoken in Canada. They also express less interest in developing friendships with Franco-Canadians, even though they are very positive about the importance of being bilingual and bicultural (Swain & Lapkin, 1981). Genesee (1987, pp. 100–115) summarizes the social-psychological research on immersion students, describing the sociopolitical climate as a major factor in attitudinal research. He also posits a second explanation for limited attitude change among students in Canadian immersion settings:

> There may be limits to the extent of attitude change that can be achieved and sustained in second language programs that do not provide real meaningful contact between the learner and members of the target language group. Students may need opportunities to form friendships or to interact with members of the other language group before they can develop stable positive attitudes toward them. (Genesee, 1987, p. 106)

In a study of graduates of a two-way Spanish–English bilingual program, Collier (1989a) found that, as adults, the English-speaking graduates were very involved with assisting Hispanic communities in the U.S. to make progress in gaining access to society's institutions. In addition, both English-speaking and Spanish-speaking graduates were maintaining their proficiency in Spanish and English and using both languages in professional contexts, and they kept many social networks with speakers of both languages in professional, academic, and personal settings. Genesee concludes his analyses of variables affecting minority and majority students' schooling by emphasizing the importance of conceptualizing educational problems in all their complexity. This includes an examination of not only linguistic and cognitive factors but also sociocultural perspectives.

Using immersion research findings to address issues of effective schooling for minority language students, Genesee (1987) emphasizes three key instructional features: "(1) an integrated approach to language and academic instruction, (2) an interactional basis for second language learning, and (3) an emphasis on intrinsic motivation to learn academic material" (p. 174). These same instructional features might be applied to all educational programs for all students. Future research should examine immersion students' progress towards development of greater proficiency in L2 speaking and writing skills in a more interactive/experiential curriculum. Cummins (1989, pp. 33–34) speaks of this model as having the following major characteristics:

1. genuine dialogue between student and teacher in both oral and written modalities;
2. guidance and facilitation rather than control of student learning by the teacher;
3. encouragement of student–student talk in a collaborative learning context;
4. encouragement of meaningful language use by students rather than correctness of surface forms;
5. conscious integration of language use and development with all curricular content rather than teaching language and other content as isolated subjects;
6. a focus on developing higher level cognitive skills rather than factual recall; and
7. task generation that generates intrinsic rather than extrinsic motivation.

The effectiveness of this type of bilingual schooling, with strong curricular affirmation of two languages and cultures throughout students' schooling (K–12) taught through an interactive/experiential curriculum, may have strong potential. Students in such a program are challenged to move beyond the narrow conceptions of education as knowledge transmission to education as preparation for the global cross-cultural awareness and problem-solving skills needed for the twenty-first century.

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