

DOCUMENT RESUME

ED 239 509

FL 014 200

TITLE Studies on Immersion Education. A Collection for United States Educators.

INSTITUTION California State Dept. of Education, Sacramento. Office of Bilingual Bicultural Education.

SPONS AGENCY Department of Education, Washington, D.C. Equal Educational Opportunity Program.; Office of Bilingual Education and Minority Languages Affairs (ED), Washington, D.C.

PUB DATE 84

NOTE 193p.

AVAILABLE FROM Publication Sales, California State Department of Education, P.O. Box 271, Sacramento, CA 95802 (\$5.00, plus tax for California residents).

PUB TYPE Reports - Descriptive (141) -- Collected Works - General (020) -- Books (010)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.

DESCRIPTORS *Bilingual Education; *Educational Research; Educational Theories; Elementary Secondary Education; Foreign Countries; French; *Immersion Programs; *Limited English Speaking; Minority Groups; Program Administration; Program Descriptions; *Second Language Instruction

IDENTIFIERS Canada

ABSTRACT

A collection of papers on immersion programs focuses primarily on their applicability for language minority students, and addresses some common myths and misunderstandings about immersion education. In "An Overview of Issues in Immersion Education" (Wallace Lambert), major issues and misconceptions are outlined. A second group of papers includes: "Historical and Theoretical Foundations of Immersion Education (Fred Genesee); "Canadian French Immersion Education: Current Administrative and Instructional Practices" (Sharon Lapkin and James Cummins); and "A Review of Immersion Education in Canada: Research and Evaluation Studies" (Merrill Swain). The final group of papers looks at the situation in the United States, in "The Immersion Education Approach to Foreign Language Teaching" (Russell N. Campbell), and "The Inadequacy of English Immersion Education as an Educational Approach for Language Minority Students in the United States" (Eduardo Hernandez-Chavez). (MSE)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED239509

Studies on Immersion Education

A Collection for United States Educators

Prepared under the direction of the Office
of Bilingual Bicultural Education

California State Department of Education

F7014200

"PERMISSION TO REPRODUCE THIS
MATERIAL IN MICROFICHE ONLY
HAS BEEN GRANTED BY

Calif. State Dept. of Educ.

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.



Publishing Information

This handbook was funded in part with funds from the Office of Bilingual Education and Minority Language Affairs and the Office of Equal Educational Opportunity Programs, U.S. Department of Education. The opinions expressed herein by the various authors do not, however, necessarily reflect the position or policy of the U.S. Department of Education or of the California State Department of Education, and no official endorsement by the U.S. Department of Education or the California State Department of Education should be inferred.

The document was developed by the Office of Bilingual Bicultural Education, California State Department of Education. The final draft of the manuscript was edited by Janet Lundin, working in cooperation with David P. Dolson of the Office of Bilingual Bicultural Education. This publication was prepared for photo-offset production by the staff of the Bureau of Publications, with the cover design by Norm Wobschall, and typesetting by Lea Shimabukuro and Anna Boyd. The document was published by the Department; printed by the Office of State Printing; and distributed under the provisions of the Library Distribution Act and *Government Code* Section 11096.

Copyright, 1984, by the California State Department of Education

Copies of this publication are available for \$5 each, plus sales tax for California residents, from Publication Sales, California State Department of Education, P.O. Box 271, Sacramento, CA 95802.

A partial list of publications that are available from the Department appears on page 184. A complete list of Department publications may be obtained by writing to the address given above.

Contents

	<i>Page</i>
Acknowledgments	iv
Foreword	v
Preface	vi
Biographical Sketches	vii
Introduction	1
Part One: An Overview of Immersion Education	7
An Overview of Issues in Immersion Education	8
<i>Wallace E. Lambert</i>	
Part Two: Immersion Education in Canada	31
Historical and Theoretical Foundations of Immersion Education	32
<i>Fred Genesee</i>	
Canadian French Immersion Education: Current Administrative and Instructional Practices	58
<i>Sharon Lapkin and James Cummins</i>	
A Review of Immersion Education in Canada: Research and Evaluation Studies	87
<i>Merrill Swain</i>	
Part Three: Immersion Education in the United States	113
The Immersion Education Approach to Foreign Language Teaching	114
<i>Russell N. Campbell</i>	
The Inadequacy of English Immersion Education as an Educational Approach for Language Minority Students in the United States	144
<i>Eduardo Hernández-Chávez</i>	

Acknowledgments

The California State Department of Education is most grateful to the authors of the six papers presented in this collection. Wallace Lambert, Fred Genesee, Sharon Lapkin and James Cummins, Merrill Swain, Russell Campbell, and Eduardo Hernández-Chávez have ably analyzed, organized, and presented valuable information regarding the applicability of immersion education to the context of the United States in general and California in particular.

The work of the project team in the Office of Bilingual Bicultural Education was important to the eventual completion of this document. David Dolson, Fred Tempes, and Maria Ortiz are recognized for their developmental work and content editing of this publication. Other consultants and staff members in the office also made valuable contributions.

The project team was effectively supported by several administrators in the California State Department of Education, including Richard Mesa, Chief Deputy Superintendent; James R. Smith, Deputy Superintendent, Curriculum and Instructional Leadership; Ramiro D. Reyes, Associate Superintendent, Division of Categorical Support Programs; Guillermo Lopez, Chief, Office of Bilingual Bicultural Education; and Maria Ortiz, Assistant Chief, Office of Bilingual Bicultural Education.

Funding for this project was provided by the Office of Bilingual Education and Minority Language Affairs, U.S. Department of Education.

Many more individuals and agencies, too many to list here, provided assistance in the development of this collection. Final responsibility for this publication, nevertheless, rests with the Office of Bilingual Bicultural Education, California State Department of Education.

Foreword

In 1983 approximately 900,000 language minority students were enrolled in California public schools. About half of these students were officially classified as pupils of limited-English proficiency. Even though school districts have faced one budget crisis after another, the commitment to provide language minority students with equal educational opportunities has remained strong. For its part the California State Department of Education is determined to provide educators with the most current information on the design, implementation, and evaluation of effective instructional programs for California's language minority children.

Bilingual education, English as a second language, immersion, and other language teaching programs have been the focus of considerable controversy over the past few years. Political rhetoric and economic hardships aside, communication among educators on these vital issues must continue to take place if appropriate educational solutions are to be found. This publication, along with many other projects by the California State Department of Education, represents a concerted effort to provide California school districts with the type of technical assistance which will promote educational improvements. By developing among school personnel a fuller understanding of special language programs, I am confident that we can work together to eradicate some of the barriers which for so long have divided our majority and minority communities. To achieve that end, I recommend an examination and consideration of the ideas and proposals in this publication as a step in the right direction.

Bill Hoag

Superintendent of Public Instruction

Preface

In 1981 the Office of Bilingual Bicultural Education, California State Department of Education, sponsored the development of what has proven to be a seminal publication entitled *Schooling and Language Minority Students: A Theoretical Framework*. This collection of papers has provided educators with current theoretical and research information on major instructional issues related to the education of language minority students. The volume has been extremely well received at both the state and national levels. This acceptance has encouraged us to continue our efforts to provide school district personnel with useful information concerning effective instructional practices to be used in bilingual settings.

Recently, immersion education has been seriously suggested as an alternative to bilingual education. As such programs are introduced in California, staff members from the Department feel that school district personnel should have a thorough understanding not only of the theoretical and empirical underpinnings of immersion education but also of the predicted outcomes of implementing such programs in California schools. This publication should provide educators with the essential information needed to make important decisions about the appropriate use of strategies for immersion education. This program has significant value for certain students in specific socioeconomic, cultural, linguistic, and educational settings. Although the information provided here may be controversial in some sectors of the educational community, the Department is committed to fulfilling its leadership role by providing school districts with the most current, accurate, and reliable information about innovative educational practices.

JAMES R. SMITH
*Deputy Superintendent, Curriculum
and Instructional Leadership*

RAMIRO D. REYES
*Associate Superintendent,
Division of Categorical
Support Programs*

GUILLERMO LOPEZ
*Chief, Office of Bilingual
Bicultural Education*

Biographical Sketches

Russell Campbell (Ph.D., Linguistics, University of Michigan, 1964) is Professor of English (ESL) and Chairman of the Applied Linguistics Program at the University of California at Los Angeles. He has directed and participated in numerous quantitative and qualitative studies related to the Spanish Immersion Program in Culver City, California. He has also served as President of Teachers of English to Speakers of Other Languages (TESOL) and is a former member of the National Advisory Council of the Office of Bilingual Education and Minority Language Affairs (OBEMLA). He has published numerous articles and books related to various aspects of teaching English as a second language.

James Cummins (Ph.D., University of Alberta, 1974) is Associate Professor in the Modern Language Centre of the Ontario Institute for Studies in Education. His research interests include minority group achievement, bilingualism, and reading disability. In 1979 he was the recipient (with J. P. Das) of the International Reading Association's J. Harris Award for the best paper on detection and remediation of student reading disability. Although he has written and conducted research in several countries, he is probably best-known in the United States for his 1979 article entitled "Linguistic Interdependence and the Educational Development of Bilingual Children," first published in the *Review of Educational Research* (spring, 1979, Vol. 49, No. 2) and then reprinted in the *Bilingual Education Paper Series* of the National Dissemination and Assessment Center, California State University, Los Angeles (September, 1979, Vol. 3, No. 2).

Fred Genesee (Ph.D., Psychology, McGill University, 1974) is Assistant Professor in the Psychology Department, McGill University, and formerly Director of Research for the Protestant School Board of Greater Montreal. He has carried out numerous evaluations of alternative methods of second language teaching, including immersion programs, bilingual education programs, and core programs. His research has also examined neuropsychological and social psychological aspects of bilingualism.

Eduardo Hernández-Chávez (Ph.D., Linguistics, University of California at Berkeley, 1976) is Director of the Instituto de Lengua y Cultura in Elmira, California, and is Adjunct Professor in the Department of Anthropology, California State University, Sacramento. He has written extensively in the area of sociolinguistics, first and second language acquisition, and bilingual education. His recent research includes work on the early development of reading concepts by monolingual and bilingual children.

Wallace E. Lambert (Ph.D., University of North Carolina, 1953) is a professor in the Department of Psychology, McGill University, Montreal, Canada. He was President of the Canadian Psychological Association and is currently a member of the International Social Science Council. He is the author of numerous publications on bilingualism, second language acquisition, and language development. His involvement was critical to the success of the early experiments in immersion education in Canada. Of his more than 150 publications, he is probably best known in the United States for "A Social Psychology of Bilingualism," which originally was published in the *Journal of Social Issues* (April, 1967, Vol. 23, 91—109) and in *Bilingual Education of Children: The St. Lambert Experiment* (Rowley, Mass.: Newbury House, 1972).

Sharon Lapkin (Ph.D., University of Toronto, 1974) is Assistant Professor in the Modern Language Centre, Ontario Institute for Studies in Education. Most of her research projects involve the evaluation of bilingual education programs, including the development of language tests and scoring procedures. Other research includes aspects of French as a second language education in Canada.

Merrill Swain (Ph.D., University of California at Irvine, 1972) is Associate Professor and in charge of the Modern Language Centre, Ontario Institute for Studies in Education. She is also cross-appointed to the Department of Linguistics at the University of Toronto. Her research has been concerned with many facets of bilingualism and second language learning and teaching. Her current research interests include bilingual education for majority and minority language children, the development of bilingual proficiency, and the effectiveness of communicative language teaching.

Introduction

For the past several years, bilingual education has been the focus of intense debate among educators, legislators, and the public in general. State and federal laws established in the 1970s to promote bilingual instructional opportunities for language minority students have come under sharp attack in the 1980s. At the federal level the controversial directives of the U.S. Office for Civil Rights, commonly known as the "Lau Guidelines," were issued as proposed regulations and then, in 1982, withdrawn completely. In California several legislative proposals were submitted to modify or repeal the Bilingual Bicultural Education Act of 1976. These initiatives resulted in a compromise measure, the Bilingual Bicultural Education Improvement and Reform Act of 1980. Yet, even at a time when legal and fiscal supports for bilingual education seem to be uncertain, the number of students who might benefit from such services is increasing dramatically. In California alone the language minority student population is approximately 900,000. Regardless of the outcomes of legislative disputes, conscientious educators will continue to seek information about effective educational programs for these children.

About the time bilingual education was enjoying a revitalization in the United States, another form of bilingual instruction was being promoted in Canada. These programs, referred to as immersion education, are designed to teach French to English-speaking Canadians.¹ Over the last decade many well-controlled research and evaluation studies have been conducted on these French immersion programs. The results have been consistently positive, indicating that students in such programs generally acquire high levels of French proficiency while at the same time experiencing normal academic achievement and English language development. Recently, educators in the United States, impressed by the favorable reports from Canada, have expressed interest in immersion education. Some government officials have even speculated that immersion approaches may serve as an alternative to bilingual education. Other educators feel that certain instructional practices used in immersion programs may have applicability for second language teaching in the United States.

In previous publications the Office of Bilingual Bicultural Education has promoted several important objectives for programs serving language minority students. Regardless of the instructional approach

¹Strictly speaking, these programs do not teach only French as a second language, but any second language, including Hebrew and Ukrainian. French, of course, is the most common. What is common to all of the programs is that the target pupil groups are English speakers.

taken, participating students should (1) attain high levels of oral English proficiency; (2) achieve, to the best of their abilities, in the basic skills of reading, writing, and mathematics; and (3) experience positive psychosocial adjustment to life in an increasingly complex, modern society. Program staff members also recognize the important cultural, educational, vocational, and societal benefits of bilingualism. Thus, these objectives, influenced by local community, family, and individual goals, should serve as criteria by which the value of immersion education for certain populations in the United States can be judged.

In the professional literature, the term *immersion* has been used almost exclusively to refer to dual language programs for English-speaking students in Canada. In the United States a variety of English-only programs for language minority students are sometimes characterized as "immersion" approaches. Often, proposed immersion programs bear little resemblance, either in form or in principle, to the original Canadian models. The common feature of the proposals from the United States seems to be the emphasis on monolingualism. English-only instruction is considered to be sufficient to meet the academic, linguistic, and psychosocial needs of the language minority students. The papers in this publication address immersion education as it has been or is projected to be implemented in Canada and in the United States, both in its classical as well as divergent forms.

The purpose of this collection of papers is to explore cautiously the potential for implementing immersion programs, in whole or in part, in the United States. The focus of the papers will be on the applicability of immersion programs for language minority students. However, attention will also be given to second language programs for English-speaking students. Evidence is available to show that bilingual and cross-cultural educational experiences for majority language students not only improve their language and academic skills but also result in improved social interactions between majority and minority students.

A thorough analysis of immersion programs as they have been developed and implemented in Canada permits us to dispel some of the common misconceptions often held by educators in the United States. First of all, immersion is not and has never been a monolingual program. Reports from Canadian researchers clearly indicate that while French immersion programs are designed to provide extensive second language exposure, English is incorporated into the programs as both a subject and as a medium of instruction. Second, the goal of immersion programs is not simply to develop second language proficiency. Parents and educators have structured immersion programs so that participating students may acquire French at no expense to general school achievement and English language proficiency. Third, the instructional strategies used in immersion programs

differ significantly from those in English-only classrooms in the United States. Unfortunately, Canadian immersion programs are often confused with submersion (sink or swim programs). To the contrary, immersion programs contain specific instructional services designed especially for second language acquirers. Fourth, immersion programs were not developed by the Canadian government and then offered to parents and students. Rather, the impetus for such programs came from parents who, with the assistance of educators and researchers, successfully lobbied for such programs. Finally, immersion programs have not been implemented with language minority students. Essentially, the participants in Canadian immersion programs have been students who linguistically, socially, and economically enjoy majority group status.

Collectively, the authors of this publication address in detail the common myths mentioned above as well as many other prevalent misunderstandings that educators in the United States have regarding immersion education. These authors go on to consider the merits and drawbacks of implementing immersion programs in the United States.

This collection of papers is divided into three major parts. In the first section, Wallace Lambert presents an overview of major issues and confusions related to immersion programs. The second section—consisting of papers by Fred Genesee, Sharon Lapkin with James Cummins, and Merrill Swain—addresses the historical and theoretical foundations of immersion education, current instructional and administrative practices, and the results of more than a decade of well-controlled research on such programs. The third section contains two additional papers which focus on past, current, and predicted consequences of implementing immersion programs in the United States. The papers in the first two sections synthesize the experiences of approximately 15 years of immersion education in Canada. The third set of papers contains reports on the limited experiences of operating such programs in the United States.

In 1981 the Office of Bilingual Bicultural Education sponsored the development of a collection of papers on bilingual education: *Schooling and Language Minority Students: A Theoretical Framework*. Based on the research presented in that volume and subsequent work by the office, several important pedagogical principles related to bilingual schooling were identified.²

Evidence contained in the publication mentioned previously, supplemented by data reported in this volume, enables us to propose several additional principles:

²*Basic Principles for the Education of Language Minority Students: An Overview* (1982 edition). Sacramento: California State Department of Education, 1983.

1. Under optimal schooling conditions, on the average, students realize the full academic benefits of their bilingualism only after four to seven years of appropriate instructional treatment.
2. Bilingually schooled students, at times, even under the very best conditions, may initially lag behind their monolingually schooled counterparts in some literacy-based skills. After three or four years, they begin to catch up; and by six or seven years, they equal and commonly surpass their monolingually schooled counterparts.
3. When the instructional treatment is adequately designed and appropriately matched to local sociolinguistic realities, native speakers of a majority language may be schooled in a second language for an average of approximately 50 to 75 percent of the time from kindergarten through the twelfth grade, with no detrimental effects on their academic achievement and native language development. Conversely, it may also be predicted that many language minority students in the United States could be schooled in their native language for an average of 50 to 75 percent of the time from kindergarten through the twelfth grade as an appropriate means to promote their normal academic achievement, high levels of English language proficiency, adequate psychosocial adjustment, and satisfactory native language development.
4. In formal schooling contexts, additive forms of bilingualism are best achieved through the separate use of two languages. That is, as students are instructed in both their first and second languages, steps are taken so that students are exposed to each language at different times and for distinct purposes.
5. To avoid cognitive confusion and greatly increase learning efficiency, program staff should provide initial literacy instruction in bilingual settings in a sequential manner. That is, basic literacy skills should be developed through one language before reading instruction is introduced in the other language.
6. Underachievers and students with learning disabilities seem to experience no detrimental effects from bilingual instruction. When such children receive bilingual schooling, their academic achievement and native language development are similar to those of their counterparts in monolingual programs.
7. Formal second language instruction, even when provided under optimal conditions, appears to be insufficient to develop all of the language skills needed by second language acquirers. Some amount of exposure through natural social interaction is also required.

While subject to further refinement, these principles, together with other research and theoretical information, form a substantial founda-

tion on which effective and efficient language instructional programs for both minority and majority students can be designed, implemented, and evaluated.

Much of the interest in immersion education and bilingual programs has stemmed from the desire of educators and parents to improve the academic achievement and second language development of students. An interesting spin-off from these programs, however, has been certain prosocial and cross-cultural insights developed among program participants. The evidence suggests that, when schooled bilingually, students realize that "... effective and peaceful coexistence ... calls for opportunities for members of both ethnic groups, starting with young people, to interact in social, educational, and work settings on an equitable basis in order that the mutual strangeness and suspicion can be dispelled" (Lambert, this publication). Lambert goes on to point out that this insight is a powerful tool for understanding and solving group tensions.

In summary, immersion education is an organized curriculum designed to provide second language instruction to majority language students at no cost to their academic achievement and native language development. Such programs have been implemented extensively and with substantial success for English-speaking students. Virtually no systematic information is available concerning the use of immersion education for language minority students. In predicting the possible success or failure of immersion in minority contexts, one must consider important sociocultural as well as educational factors. The problem is most poignantly stated by Genesee (this publication):

To recreate these conditions and implement these approaches to facilitate academic and language learning among minority children will require more than changing the names of the languages involved. Indeed, this task may require changing the basic structure of immersion education as it is known to apply to majority language children.

In the past, students of limited-English proficiency were most often placed in the same classrooms as native speakers of English. They were given the same materials and instructional treatment. Predictably, under these conditions, language minority students frequently did quite poorly in school. As educational researchers began to describe this type of practice more carefully, "sink or swim" learning environments became known as submersion. Submersion programs are defined as a curriculum designed for native speakers of a language, but often used inappropriately with language minority students. In light of this past experience and the research evidence presented in publications such as this one, it is hoped that educators may gain insight into the complexities of bilingualism. Bolstered with a fundamental understanding of immersion programs, educators in the

United States should be able to design and implement effective language programs for both minority and majority students.

This publication will have achieved its purpose if, in the future, immersion education in the United States is not reported as a curriculum originally designed for majority language students learning a second language but often used inappropriately with language minority students. The general success of this publication will be evaluated in terms of the educational community's development of a fuller understanding of the complexities of bilingual schooling.

Currently, California educators, along with others in the nation, are formulating a number of educational reforms with the primary aim of improving school effectiveness. The knowledge that has been garnered from research on bilingual and immersion education presents several alternatives to accomplish the goals of educational innovators. For students who are native speakers of English, immersion education has been shown to be an enrichment program which will improve students' academic achievement, language development, and psychosocial adjustment in addition to fostering high levels of bilingual skills. Conversely, programs given in the mother tongue of language minority students have been shown to achieve similar outcomes for that group of students. Thus, for majority language students, immersion programs are one way in which these students' learning slope over kindergarten through the twelfth grade can be significantly increased when compared to the learning slope of English-speaking students in regular school programs. Equally important is that programs given in the mother tongue of language-minority students have been successful in improving the scholastic performance of these students in a manner which raises their learning slope to the extent that, after four to seven years in the program, these students often achieve as well as or better than their English-speaking counterparts.

The academic and language attainments of students in immersion and mother tongue programs are impressive. On an even footing with these outcomes is the potential of these programs to promote prosocial attitudes and behaviors. As a result of bilingual schooling, majority and minority students seem to gain important cross-cultural perspectives. They develop cooperative and accommodating viewpoints in regard to minority/majority relations. These competencies, when coupled with the academic, language, and cultural insights developed as a result of participation in immersion and bilingual programs, equip students with many of the concepts, skills, and sensibilities that they need to live in harmony with the rest of humankind.

DAVID P. DOLSON
Project Team Leader
Office of Bilingual Bicultural Education

Part One

**An Overview of
Immersion Education**

An Overview of Issues in Immersion Education

*Wallace E. Lambert
McGill University
Montreal, Quebec*

Immersion programs for teaching second languages and developing bilingual skills were initiated in public schools in Canada some 16 years ago. Since then, the development, modification, and implementation of these programs have been described in technical journals, and the effects of these programs on pupils who proceed from one year to another in the programs are documented in an accumulation of longitudinal evaluative studies. Information about the programs and their surprisingly favorable outcomes has caught the attention of educators in various nations, especially in the United States. In order to assess the possible applicability of these programs in the United States, it is important that a clear description of typical immersion programs be made available and sharp contrasts be drawn among immersion, second-language-teaching, and bilingual education approaches. Thus, one aim of this overview is to explain what immersion is and what it is not. A second aim is to explain how immersion programs were initiated and why they were devised basically for native English-speaking pupils in Canada or in the United States—those who are certain that their development of skills in the English language will never be left in jeopardy, either by the educators in charge of the immersion programs or by the home, community, and media environments in which they live. Assured of a solid and continuing English language linguistic environment, mainstream pupils in North American immersion classes are exposed to as much of the new language as possible, short of living in a foreign setting. The effects of the program—especially the effects of having little or no home language instruction—on children in the early elementary years of schooling are very carefully monitored.

The programs were explicitly not meant for Canadian children who have French as the home language. It might be expected that these children could profit in a similar fashion from an immersion-in-English program. But this approach would be an inappropriate use of immersion, and it was painstakingly avoided. As the program develops, we realized that in North America (Canada and Quebec included), French or any home language other than English is vulnerable to neglect and replacement. Thus, French-speaking Canadian

pupils in an English-based immersion program might move toward bilingualism for a short time. Eventually, however, being in this kind of a program would result in a slow subtraction of the students' French and its replacement by English, which, in the North American setting, can too easily be viewed as the more useful, prestigious, or otherwise more valuable language.

The cognitive and educational consequences of this subtraction or replacement process need to be understood. Accordingly, attention will be directed here to a distinction that we, on the basis of available research studies, have made between additive and subtractive forms of bilingualism and the repercussions one can expect if immersion programs, which were designed to be additive, were to be reversed and inadvertently made subtractive. Fortunately, there are ways of avoiding the problems of linguistic and cultural subtraction so often encountered by ethnolinguistic minorities and ways of transforming subtractive experiences into additive ones. These alternatives will be discussed later in this chapter.



Origins, Nature, and Outcomes of Immersion Programs

In this section a discussion of the origins, nature, and outcomes of immersion programs appears. These programs began in an attempt to make Canada a more fair society for all ethnolinguistic groups. These programs were designed so that English-speaking children could enter kindergarten or first-grade classes that are conducted entirely in French. Research studies show that children in immersion programs have definite cognitive, educational, and social advantages. These studies also show that children in immersion programs develop more favorable attitudes toward French Canadians than do control children.

Origins of Immersion Programs

It is important to understand that immersion programs in the Canadian setting were based as much on social-psychological considerations as on linguistic or educational ones. This is very evident in Genesee's paper in this publication. Basically, immersion education started because the original group of parents, educators, and researchers who got the first experimental programs underway hoped to make Canada a more fair and more interesting society not only for the two founding peoples—French-speaking Canadians and English-speaking Canadians—but ultimately for all ethnolinguistic groups in the Canadian mosaic. Although Canadian in content, this educational develop-

ment is pertinent to American society as well because similar social processes run their courses in both settings. In Canada these social processes are more visible because of sociopolitical movements toward independence or separation initiated by French Canadians. In this publication several Canadian-American parallels appear as well as important differences between the two societies. For instance, Canada's constitution has clear provisions for the protection of the language and culture of both French- and English-speaking subgroups, and although Canada has a policy favoring multiculturalism, the government, unlike the case in the United States, does not provide extended support to enable education to be conducted in any of the numerous other home languages spoken by Canadians. Actually, since World War II, immigrants speaking languages other than English or French have made up a sizable proportion of Canada's population.

French Canada constitutes an instructive, socially important case study. French-speaking Canadians have had a long history of finding themselves second-class citizens in a social world that has reinforced Anglo-American values and the English language. The second-class status showed itself in the form of French-speaking Canadians playing subordinate roles to English Canadians, the dominant subgroup in Canadian society comparable to English-speaking whites in the United States. French Canadians have been grossly underrepresented in the upper levels of Canada's status hierarchies. And even in the province of Quebec, where they constitute some 80 percent of the population, French Canadians have not, relative to English Canadians, fared well occupationally or economically. Their style of life has been ignored, ridiculed, and blamed as the cause of their social and economic position. Unfortunately, this type of thinking becomes contagious, and in time even members of the marked minority group begin to believe that they are inferior in some sense and blame themselves for their inferiority (see Lambert, 1967). It takes much reflection in frustrating situations of this sort to see through the sophistry and realize that one's ethnic or social class group is in no way inherently inferior but simply that those with the advantages have learned well how to keep the advantages and that their social class cushion makes the maintenance of their superiority relatively easy for them. Stereotyping or otherwise marking minority groups—people they really know very little about—becomes an effective way for the majority group to keep others out of the power sphere. This form of ethnic power control has been illuminated cogently for the American social structure in a recent review by Sue (1983), and by Hernández-Chávez in this publication.

As social psychologists, we began to study this state of affairs in Canada some 25 years ago, just as two extreme solutions to the

"French-Canadian problem" were coming into vogue. One solution was that French Canadians should "pull up their socks" and start competing—meaning that they should master English and Anglo-American ways and tone down their French-Canadian characteristics. The second solution was that French Canadians should separate—meaning that they should form a separate, politically independent nation where they could be masters of their own fate and where the French-Canadian language and culture could be protected. Both alternatives are problematic because one means giving up a style of life that is precious, and the other means closing a society through separation, closing in the sense that Karl Popper (1967) uses the term in describing sociopolitical attempts to create a conflict-free subworld where the "good old ways" will be regenerated and protected. Instead, the French-Canadian way of life was viewed as something valuable for Canada as a whole—a nation whose potential and fascination rest in its multicultural, multilingual makeup—whether or not it is appreciated as such by most English or French Canadians.

Nature of Immersion Programs

As researchers, we became interested in trying to change the stereotypes that Anglo-Canadian children and their families too often have of French Canadians and the French-Canadian way of life. This then became the guiding purpose for the research initiated at McGill University on early immersion schooling (see Lambert and Tucker, 1972; Swain, 1974; Genesee, 1978-79) wherein English-speaking children, with no French language experience in their homes and little if any in their communities, enter public school kindergarten or first grade classes that are conducted by monolingual French-speaking teachers. If the teachers were not actually monolingual, they pretended not to know English. This early immersion or home-to-school language-switch program, as we call it, is kept exclusively French through the second grade, and only at the second or third grade is English introduced in the form of a language arts program for one period a day. By the fourth grade particular subject matters are taught in English (by a separate English-speaking teacher) so that by the fifth and sixth grades, some 60 percent of the instruction is conducted through English (see Lambert, 1979). The general form of the administration and instruction components of immersion programs in Canada is described by Lapkin and Cummins in this publication.

The concept of immersion schooling was based on a very important and fundamental premise—that people learn a second (or third) language in the same way as they learn their first; that is, in contexts where they are exposed to it in its natural form and where they are socially motivated to communicate. From the first encounter immersion teachers use only the target language. They clearly, patiently,

and repetitively focus on the development of a basic vocabulary in the new language, relying, with the youngest age groups, on plastic art materials, songs, and animated stories. But from the start, the learning of language per se is made quite incidental to learning how to make and do new and interesting things. The new language becomes a constant verbal accompaniment rather than the focus. Later, new ideas of a scientific, mathematical, or problem-solving nature are given the main focus, but even then the accumulation of skill in the new language appears to be incidental, except for short daily periods of French language arts which direct students' attention to the new language itself (see Lambert and Tucker, 1972, and the paper by Genesee in this publication). The teachers' main preoccupation then is to cover fully the content subjects expected of any child in a conventional program at that grade level.

Immersion classes typically consist of only anglophone pupils; thus, a whole class experiences immersion as equals, with no one having the advantage of being a native speaker. In some cases a few children who are native speakers of the target language are introduced into the otherwise anglophone group, and their presence can be useful in many ways. They become excellent teacher aides because they exemplify the fact that children as well as adults use and speak the language and that it has communicational relevance. Being in the immersion classes with anglophones also permits such children to develop a sense of value in their own language because they see that the school system and the families of English-speaking children have decided to make their native language the dominant school language (see Lambert, 1984).

In some instances anglophone parents choose to place their children in predominantly French schools. In such cases the colony of anglophones can be very small (one or two pupils only) or of the same size as the francophone component. The development of expressive language skills in the foreign language is of course much more rapid as the children's opportunities to use the language communicatively with peers are enlarged in this fashion (see Genesee and Lambert, 1983).

By focusing on subject matter mastery and on making language learning incidental, immersion programs differ substantively from second language teaching programs (e.g., French-as-a-second-language programs) where subject matter mastery is not a main goal, where the new language is the focus, and where only small amounts of time are devoted to the second language component. That component also becomes the responsibility of a specialist rather than the classroom teacher. Thus, immersion programs are much more intense and comprehensive than second language programs; and since no specialists are involved, the costs of immersion programs are hardly any differ-

ent from normal costs since the classroom teacher is also the language specialist and the class size (e.g., 30 to 32 pupils to a teacher in Canada) is usually kept normal. There are no paid native-speaker teacher aides in immersion classes.

Immersion education differs from typical bilingual education programs as these are conducted in North America. No bilingual skills are required of the teacher, who plays the role of a monolingual in the target language, if not in fact, and who never switches languages, reviews materials in the other language, or otherwise uses the child's native language in teacher-pupil interactions. In immersion programs, therefore, bilingualism is developed through two separate monolingual instructional routes.

Outcomes: Educational and Cognitive

The consistent findings from 15 years of careful research on children in immersion programs permit several conclusions which bear not only on the linguistic consequences of these programs but on the psychological and social consequences as well. First, immersion pupils are taken along by monolingual teachers to a level of functional bilingualism that could not be duplicated in any other fashion short of living and being schooled in a foreign setting. Furthermore, pupils arrive at that level of competence without detriment to their home language skill development; without falling behind in the all-important content areas of the curriculum, indicating that the incidental acquisition of French does not distract the students from learning new and complex ideas; without any form of mental confusion or loss of normal cognitive growth; and without a loss of identity or appreciation for their own ethnicity. Most important of all in the present context, immersion pupils also develop a deeper appreciation for French Canadians and a more balanced outlook toward them by having learned about the group and its culture through their teacher and through skills they develop with the language of French Canadians. The general outcomes from research and evaluation studies are reviewed in detail in the paper by Swain in this publication.

Instructive examples of the effect of immersion schooling on students' cognitive development are now available even though, because sample sizes are small, these results should be viewed as suggestive rather than definitive at this point. One is a Montreal study by Scott (1973) comparing two subgroups of English-Canadian children who were in all respects a single homogeneous group until the first grade at which time one subgroup entered an immersion program, but the second subgroup did not. Scott worked with data collected over a seven-year period from these two groups of children. One group had become functionally bilingual in French in the meantime through French immersion schooling, while the other had followed a conven-

tional English language education program. Scott focused on the possible effects becoming bilingual might have on divergent thinking, a special type of cognitive flexibility and an important component of general intelligence (see Guilford, 1950, 1956). Measures of divergent thinking provide subjects with a starting point for thought "think of a paper clip" with the request that they generate a whole series of permissible solutions "tell me all the things one could do with it." Some researchers consider divergent thinking to be an index of creativity (e.g., Getzels and Jackson, 1962); at least this kind of thinking is an index of an individual's imagination and of his or her ability to scan rapidly a host of possible solutions. However one might label divergent thinking, the results, based on a multivariate analysis, showed that the functionally bilingual immersion pupils as of the fifth and sixth grades were substantially higher scorers than the nonimmersion control students with whom the immersion pupils had been equated for IQ and social class background at the first grade level. That is, the immersion pupils generated more solutions and a more diversified set of solutions than did the control children. Until replications of this study become available, we have to be cautious in generalizing, but the thrust of this study is the causal link it suggests between bilingualism and cognitive flexibility, with bilingualism being the factor, or one of the factors, that enhances flexibility.

Supportive evidence is also found in quite independent studies of the cognitive effects of immersion programs on anglophone Canadian children in other areas of Canada; namely, the work of Barik and Swain (1976) in Ottawa and Toronto and of Cummins (1975, 1976) in Edmonton, Alberta. Both of these research teams found increases in students' IQs or in divergent thinking scores that appear to be attributable to the development of bilingual skills through immersion schooling.

An impressive array of evidence is thus accumulating that contradicts the common sense notion that becoming bilingual—having two linguistic systems within one's brain—divides a person's cognitive resources and reduces his or her efficiency of thought and/or language. Instead, one can now put forth a very strong argument that there are definite cognitive, educational, and social advantages to being bilingual (see Lambert, 1981). These advantages are experienced as much by children from working class socioeconomic backgrounds as the more advantaged, and for children with various levels of measured IQ, including children with diagnosed learning difficulties (see Genesee, 1983).

What is particularly exciting is that we now have strong evidence to show that monolingual English-speaking Canadian children can handle easily and profitably a double immersion program wherein two foreign languages are used for instruction from kindergarten through

the elementary grades (see Genesee and Lambert, 1983). Incidentally, the striking success of these double immersion programs in Montreal schools makes one think twice about Canadian policymakers who give verbal support to multiculturalism but stop short of providing at least some instruction via home languages. The point is that ethnic minorities in Canada might easily handle and enjoy education that is trilingual—French, English, and home language—just as the Jewish children in the double immersion programs not only manage but also enjoy education that is French, Hebrew, and English.

Outcomes: Sociocultural Attitudes

What is most encouraging about immersion, over and above its educational and cognitive impact, is that it opens children's minds and ameliorates their attitudes toward an otherwise foreign and possibly threatening outgroup (see Lambert and Tucker, 1972; Lambert, 1984). Children in immersion programs develop more friendly and open attitudes toward French Canadians than do the control children. Immersion children say that they feel psychologically closer and more similar to French people than do the controls. Interestingly, the immersion experience has much less effect on general (usually uncharitable) French-Canadian stereotypes that circulate among anglophone Canadians (Lambert, 1984).

The immersion experience also fosters particular sociopolitical insights that monolingual mainstreamers would likely never develop. For example, the immersion children come to the realization by the end of elementary school that peaceful democratic coexistence among members of distinctive ethnolinguistic groups calls for something more than simply learning one another's languages. This oversimplified solution is typically offered by the nonimmersion control groups when they are asked how the tensions between English-speaking and French-speaking Canadians might be reduced (see Blake and others, 1981; Cziko and others, 1980). Having learned the other language well and having learned to appreciate the other cultural group, children with immersion experience realize that much more than language skill is called for. Effective and peaceful coexistence, they argue, requires opportunities for members of both ethnic groups, starting with young people, to interact in social, educational, and work settings on an equitable basis. Only then can the mutual strangeness and suspicion be dispelled. This is a very sophisticated insight. Few of us who try to understand group tensions are likely to see things this clearly.



Immersion Programs in the United States

Thus, a new approach to bilingual education is now available, and since it works as well in other parts of Canada where few, if any, French Canadians are encountered in social life (see Swain, 1974), immersion education, or some variation of it, can be expected to work equally well in the United States. In fact, there are currently a growing number of communities in the United States where comparable early immersion programs for mainstream English-speaking children are underway (in Spanish, French, and German, so far), and from all available accounts, these programs are working splendidly (see Cohen, 1976; Samuels and Griffore, 1979; *End** . . . , 1976; and personal communication from Derrick, 1980; Grittner, 1981; O'Connell, 1981; and Sidoti, 1981). Part of the reason for the success of these programs is that school administrators and principals, after an initial period of skepticism and wariness, become extremely pleased about the outcomes. Furthermore, the costs of the programs are surprisingly low when compared to second language teaching programs. The salaries of immersion teachers are no more expensive than those of regular classroom teachers, and there are no add-on expenditures.

But what really counts as success is the pride and progress reflected by teachers, parents, and pupils. For example, Frank Grittner, the Supervisor of Second Language Education for the State of Wisconsin, has collected data on third grade English-speaking children (few with German ethnic backgrounds) in a German immersion program. These children were taught through German for three years in a plan modeled closely on the Montreal French immersion programs. The Milwaukee experiment took place in a magnet school as part of a plan for desegregation and, thus, some 40 percent of the pupils involved were black Americans. At the end of the third grade, 100 percent of the German immersion pupils scored in the average to above average range on the *Metropolitan Achievement Test for Reading (in English)* compared to 70 percent for Milwaukee schools in general and 77 percent for norm groups throughout the United States. Likewise for mathematics test scores (also tested through English), the respective averages were 92, 71, and 77 percent. Similar very favorable outcomes are available for English-speaking American children in a French immersion program in Holliston, Massachusetts (O'Connell, personal communication, 1981). The Holliston program is exactly the same in structure, time allotted, and procedure as the Montreal programs. In New York City an interesting program of partial immersion in Spanish for English-speaking pupils has been tried out. In this case the "monolingual" immersion teacher comes to

*Only the first major word of a title is given for references in the text that are cited according to their titles. The complete titles appear in the selected references section at the end of this paper.

class one hour per week only, but the homeroom teachers (who know hardly any Spanish) continue the program for one period each day by directing the children in the use of specially prepared materials. The end-of-year reactions and evaluations of parents are extremely favorable. What stands out is the delight parents show as they realize that their children are learning about Spanish-speaking people and developing an appreciation for them at the same time as they are acquiring the basics of the language. They are pleased not for instrumental reasons, but for integrative ones; i.e., not because their children can profit in the business world by knowing Spanish, but because intergroup harmony is initiated (Sidoti, personal communication, 1981). Since these American versions of immersion have now been thoroughly trial tested, we should soon have full-scale reports on these outcomes.

The comprehensive review of programs in the United States in Campbell's paper in this publication presents various new forms that immersion education might take. The variants of the immersion program that might be valuable and relevant when applied in the United States are limited only by one's imagination. For instance, the New York City variant is a partial immersion program with specially prepared materials that can be increased in time and in scope to satisfy the needs of larger numbers of pupils. Since materials are available in several languages, various language options are possible (see Sidoti, 1982). Then there is an extremely valuable Language to Share program devised by Susan Thomas in New England wherein ethnic minority adolescents are trained to be junior teachers of their home languages to pupils two or three years younger than themselves (Thomas, 1980). Similarly, there are possibilities for language exchange programs (Lambert, 1978b) wherein speakers of English, for example, who are interested in learning a particular foreign language would be paired up with peers who have those foreign languages as their home languages and who would exchange two or more hours per week in teaching their home language informally while receiving English instruction in return. The exchanges would be organized and coordinated by a small group of master teachers. In summary, a number of interesting variants or adaptations of immersion programs are emerging in the United States, and these, along with the full immersion programs, will in time be evaluated and judged in terms of the defining conditions outlined by Genesee in this publication.

For me, what all this signifies is that there is now available an effective educational means of helping English-speaking North American young people become functionally bilingual in one or more foreign languages at the same time as they keep up with or surpass their monolingual peers in English language development and in academic achievement. This is a far cry from the old days when the most that

we could expect from school was two or three years of foreign language training that left us somewhere near where we started, never approaching a functional level of bilingual usage. Such training was usually reserved for those headed for college. Anglophone young people now have so much to gain—cognitively, linguistically, and socially—from taking an immersion program option, that more and more parents, I predict, will soon feel neglectful if they do not encourage their children to take that option. The replicated research evidence is strong enough to give parents, educators, and researchers confidence in the approach.

Actually, it is about time that a promising alternative of this sort be made available, judging from the findings of the President's Commission on Foreign Language and International Studies (*Strength . . .*, 1979), which point to ignorance of foreign peoples and foreign languages as an important cause of the slippage of the United States in worldwide competitiveness in economics, diplomacy, and research and development. Some interesting responses to the commission's report are already emerging. For instance, the New York State Department of Education recently proposed a plan entitled *Education for a Global Perspective*, 1982, which incorporates a provision for immersion schooling (involving various foreign languages) for all elementary and secondary school students in the state.

All told, then, immersion is beginning to prove itself as a sound idea for language majority students. Slowly but surely, perceptive parents and educators in the United States, especially those from more privileged social backgrounds, will experiment with this program and help amplify its usage. In fact, we researchers who have worked with immersion have no concerns about its potential for language majority students. Our concerns now revolve around more basic issues; for example, that insufficient attention will be given to the social psychology of foreign or second language learning, leading policymakers and educators to believe that immersion will meet the needs of language minority students as well. This simplistic extrapolation is not only wrong, but dangerous. It has been a major concern for a number of years (e.g., Lambert and Tucker, 1972; Lambert and Taylor, 1983; Genesee and Lambert, 1983) and has led to the contrast we draw between additive versus subtractive forms of bilingualism. This same concern also plays a pivotal role in the thinking of Hernández-Chávez in his paper in this publication.



Additive Versus Subtractive Forms of Bilingualism

In the descriptions just given, one must remember which segments of the Canadian and American societies have played the major role in immersion programs. In both settings programs have been developed by and designed for members of the majority society. Clearly, English-speaking Canadian and English-speaking American mainstream families are those segments of the respective societies which are most secure in their own ethnic and linguistic identity and which are also the most in need of knowledge about and appreciation for other ethnic and linguistic groups. The more that mainstream children are educated in other languages and cultures and thereby made appreciative, the better the chances are that Canada and the United States will become exemplary pluralistic societies. The better, too, are the chances for ethnolinguistic minority children to improve their self-views, because these children might feel immensely heartened and complimented when they realize that mainstream children are making sincere gestures to learn about them, their languages, and their ways of life.

We have referred to the process of developing the bilingual and bicultural skills of English-speaking North American children as an additive form of bilingualism, implying that these children, with no fear of ethnic or linguistic erosion, can add one or more foreign languages to their accumulating skills and profit immensely from the experience—cognitively, socially, educationally, and even economically (see Lambert and Tucker, 1972; Lambert, 1978a). The development of strong skills in a second socially relevant language expands the repertory of skills of these children. These skills do not detract from the children's English home-language base, but rather enable them to maintain at least normal progress. For these children and their parents, it becomes clear that the learning of the second language in no way portends the slow replacement of the first or home language, as would be the case for most linguistic minority groups in North America that are pressured to develop high-level skills in English at the expense of their home languages.

Thus, as we probe the features of additive bilingualism we see in sharp relief the contrast that emerges with the subtractive form of bilingualism experienced by ethnolinguistic minority groups, which because of national educational policies and/or societal pressures, feel forced to put aside or subtract out their ethnic languages for a more necessary, useful, and prestigious national language (Lambert, 1967). In the subtractive case one's degree of bilingualism at any point reflects a stage leading to a gradual disuse of the ethnic home language and a fading of the cultural accompaniments associated with that language and their replacement with another more necessary language and a new cultural accompaniment.

This form of bilingualism can be devastating for children because they are induced through social pressure in the school, community, and even in the home to put aside their home language and replace its use as quickly and thoroughly as possible with English, the more relevant and functional language of the school. The trouble is that, for most language minority children, the home language has been the critical linguistic system associated with the development of basic concepts from infancy on. It would be an enormous mental gymnastic feat for these children to replace and reprogram these concepts into English (concepts like "bigger than/smaller than," "inside/outside," "on top of/under," "mine/yours," "gradually/rapidly") and, at the same time, try to keep up with English-speaking peers in subject matters that introduce new ideas which build on basic concepts. Some observers might wonder why language minority children lag behind in learning new materials through English, why they get discouraged and drop out, or why they start to question who they are and what the value is of the language and culture their parents passed on to them in the first place. In other words language minority youngsters in this typical situation are placed in a psycholinguistic limbo where neither the home language nor English is useful as a tool of thought and expression, a type of semilingualism, as Skutnabb-Kangas and Toukoma (1976) put it. As we learn more about this phenomenon of linguistic and cultural subtraction, it could become a major concept in the relation of language to thought.

The case of French and English in Montreal is instructive because both additive and subtractive features are involved. For anglophones in Quebec, learning French is clearly additive in nature; there is for them no fear of a loss of identity or of the French language dominating English. Since francophones in Quebec comprise some 80 percent of the population and have their own French language school system from kindergarten to the most advanced professional institutions, learning English might also be thought of as additive. From a North American perspective, however, Quebec is a small French-speaking enclave that is continuously bombarded by English language media, with pressures on its children to prepare themselves for life in an otherwise English-speaking semicontinent. For francophone Canadians outside Quebec, the chances of keeping French alive as a home, school, and work language are slim. This fear of a subtractive loss of Frenchness is real for many francophones in Quebec as well; a too ardent move toward Englishness might well subtract out an individual's Frenchness. The research of Taylor, Meynard, and Rheault (1977), for example, indicates how sensitive certain French-speaking Canadian subgroups are to a possible loss of ethnic identity when they are either forced or enticed to use English instead of French as a language of work and/or a language of thought.

It is clear then that learning the other group's language through immersion schooling means one thing for ethnically and linguistically comfortable anglophone Canadians but a quite different thing for the ethnically and linguistically insecure francophone Canadians. Immersion in French offers numerous advantages to anglophones through an additive process. Immersion in English, however, would be a menacing reversal of the process for francophones because it would, through subtraction, place their language and their cultural identity in jeopardy. Examples of this sort, so apparent in the francophone as compared to the anglophone communities in Canada, led Lambert and Tucker to propose the following general guideline principle: "In any community where a widespread desire or need for a bilingual or multilingual citizenry exists, priority in early years of schooling should be given to the language (or languages) least likely to be developed otherwise, in other words, the languages most likely to be neglected" (Lambert and Tucker, 1972, p. 216).

In Canada this principle would mean having *both* French- and English-speaking Canadian children start their schooling in French, clearly the language more likely to be neglected or bypassed by both ethnolinguistic groups. Such a plan would provide an additive immersion program for anglophone children while protecting francophone children from the subtractive drift to English. Once the home language of the francophone children is established as an active language of thought and expression, but not before, they could gradually start a part-time component of English language arts to ensure them an eventual bilingualism, comparable to that of the young anglophones learning French through immersion.

Lambert and Tucker believe that this principle holds for any setting where the value of bilingualism is recognized and where there is an anticipated neglect or bypass of the use of the less dominant, less prestigious, less useful language. In those instances it is a straightforward case of determining which languages have the greater and lesser status and utility and of substituting these new languages for English and French in the Canadian example.

What intrigues many are the differences among minority groups in North America in their modes of counteracting language neglect. Some groups take language attrition and loss as inevitable and as part of the price one has to pay for assimilation into the life of the English-dominant new world. Other groups develop fascinating networks within the home and the community to keep home languages alive and productive. For instance, in an ongoing study of parents' attitudes toward home language maintenance in the Hamtramck area of Detroit, Wallace Lambert and Donald Taylor are finding some Arab-American, Albanian-American, and Polish-American parents who consider these language and cultural backgrounds to be as important

as, and in some cases more important than, the English language/American cultural alternative. Thus, for some parents, having their children learn Arabic is an essential first step in helping them to adjust to American life, just as Polish, Chinese, and Japanese are essential for other groups of Americans. Equal stress, of course, is placed by parents on learning English simultaneously outside the home. In such cases the informal training in home languages and home cultures starts in infancy and forms the basis of natural and comfortable bilingualism and biculturalism. In contrast, other minority language groups apologetically start the shift from their home language to English as soon as possible in the lives of their children, as though shifting to English were a norm they had to adhere to completely. Research on this important issue is clearly called for.



Transformation of Subtractive Bilingualism into Additive Bilingualism

The guiding principle of promoting the languages that are likely to be neglected can be applied in another manner. One starts with the reasonable proposition that the major aim of education in North America should be to brighten the outlook of ethnolinguistic minority group children by preparing them to compete on an equal basis with mainstream children in educational and occupational pursuits. As potential bilinguals these children certainly have the cognitive and linguistic potential, as the research already mentioned shows. America should be an exemplary case of a nation that does brighter outlooks. To its great credit, the United States has federal laws requiring educational help—involving teaching via the home language of pupils—for all non-English-speaking ethnic groups, which it is recognized, are placed at tremendous disadvantages in schools and in occupations that presume native competence in English. However, policy-makers in the United States seem to shy away from and repress a recognition and appreciation of the de facto bilingual character of contemporary America, a nation with nearly as many families who maintain Spanish as the home language as there are people in the total population of Canada. The English-Spanish bilingual character of contemporary America is only one strand, for there are various other equally vital ethnolinguistic groups, each contributing to a fascinating multicultural American society.

The best way I can see to release the linguistic and cultural potential of ethnolinguistic minority groups is by transforming their subtractive experiences with bilingualism and biculturalism into additive

ones. A few research-based examples of how this transformation might work already exist. The first is the case of Franco-Americans in northern New England whose children were given a chance to be schooled partly through their home language, French (Dubé and Herbert, 1975a and 1975b; Lambert, Giles, and Picard, 1975; Lambert, Giles, and Albert, 1976). Some 85 percent of the families in the northern regions of Maine have kept French alive as the home language or as one of the two home languages, even though, traditionally, all schooling has been conducted in English. A group of us participated in an experiment wherein a more or less random selection of schools and of classes in mainly Franco-American areas was permitted to offer about a third of the elementary curriculum in French. A second sample of schools, with children of comparable intelligence scores and socioeconomic backgrounds, served as a control or comparison group in that all their instruction was in English, the conventional mode of schooling.

After a five-year trial, the children in the partial French classes clearly outperformed those in the control classes in various aspects of *English* language skills and in academic content such as mathematics, learned partly via French. At the same time French had become for these children something more than an audio-lingual language because of the reading and writing requirements of the French schooling. These results mean that the French-trained Franco-American children were given a chance to be fully bilingual, and this outcome had repercussions on their cognitive abilities and improved their opportunities to compete in occupations or professions that call for high-level educational training. The scholastic achievement scores of these children had pulled away, so to speak, from those of the control group, whose scores reflect the academic difficulties encountered by so many language minority children in mainstream schools. An important element in this transformation was the change in the self-concepts of the French-trained youngsters, who, we found, began to reflect a deep pride in being French and a realization that their other language was as valuable and useful a medium of education as was English (Lambert, Giles, and Picard, 1975). Our interviews with these young people revealed that this group was especially proud to be both American *and* French. Several interviewees indicated that they were happy to be American because the society provides opportunities for them to be French as well.

A similar community-based study is underway in San Diego, except that in this case, native Spanish-speaking and English-speaking pupils are integrated in the same classes (Guzman, 1982). Thus, this project combines home language development for language minority students (whose native language is Spanish) and second or foreign language immersion for language majority students

(whose native language is English). For the first three grades, Spanish is the exclusive language of instruction except for one period a day of English language instruction. As in the Franco-American study, the scholastic and linguistic progress for both ethnic groups is very impressive in this project as well. The goal of both the Hispanic-American and the Franco-American groups is proficient bilingualism, but both groups realize that ethnolinguistic minorities need a strong educational experience in their own languages and traditions before they can cope in an "all-American" society or before they will want to cope in such a society.

The Maine and San Diego studies touch on the delicate matter of the sentiments of language minority group members and their political and social implications. It is undemocratic and socially disruptive to have ethnic subgroups feel that they are unfairly treated, neglected, handicapped, and poorly prepared to compete. Americans are often confused about the Canadian political scene, reasoning that all the attention given to bilingualism in Canada may have provoked a move toward separatism on the part of certain French-speaking residents of Quebec. That is not the reality. One has to realize first that separatism is a legitimate option for either of the two founding groups in Canada—the English-speaking and the French-speaking Canadians. They could vote to dissolve the union at any time. It should be clear, however, from this paper and that of Genesee in this publication that the separatist sentiments in Canada are derived from societal neglect of the presence of the French-speaking subgroup and from a tradition in Canada that bilingualism goes one way only—French Canadians have to learn English or else be ignored. Immersion schooling and federally sponsored programs of two-way bilingualism are possible correctives that hopefully will have beneficial effects on Canadian society. These programs may have started too late, however, and Quebec may still vote itself out of confederation and become a separate state.

Much can be learned from this tense Canadian situation. No other nation can be complacent on the issue of separatism, because separatist sentiments are predictable accompaniments of feelings of neglect and unfair treatment among ethnic minorities everywhere. Although less openly expressed, such sentiments certainly circulate in sectors of most ethnically plural nations. It is not too late to prevent the growth and propagation of these feelings in the United States, and preventions are always easier and better than attempted cures.

Another interesting example of a transformation of subtractive to additive bilingualism is provided by Carolyn Kessler and Mary Quinn (1980). In their study Spanish-speaking sixth grade students in Texas were given the opportunity in elementary school to learn subject matters via Spanish while learning English; that is, like the Franco-

Americans in the first example, to use their home language—the language through which their basic conceptual thinking developed in infancy—as one of the linguistic media for further conceptual growth. The Hispanic-American students were compared with a much more privileged sample of middle class, white monolingual English-speaking American pupils of the same age. Both groups were given an extensive training program in science inquiry through films and discussion of physical science problems. In tests given after the training, it was found that the Spanish-English bilinguals generated hypotheses of a much higher quality and complexity than did the monolinguals. The quality and complexity of the problem-solving abilities of these students were also reflected in the complexity of the language used, as indexed by a syntactic complexity measure, meaning that the bilinguals were clearly using more complex linguistic structures as well. Substantial correlations also occurred between the measures of hypothesis quality and syntactic complexity, providing thereby an important statistical link between problem-solving capacity and linguistic skills.

The research by Kessler and Quinn jibes nicely with other findings. An early example comes from Padilla and Long (1969) (see also Long and Padilla, 1970), who found that Spanish-American children and adolescents can acquire English better and adjust more effectively to the educational and occupational demands of American society if their linguistic and cultural ties with the Spanish-speaking world are kept alive and active from infancy on. There are, in fact, numerous recent examples where the home or primary language is used as a medium for education (Hanson, 1979; McConnell, 1980; Rosier and Holm, 1980; Troike, 1978), and they all point in the same direction. In a summary of this important set of research-based studies, G. R. Tucker concluded that there is “a cumulative and positive impact of bilingual education on all youngsters when they are allowed to remain in bilingual programs for a period of time greater than two or three or even five years and when there is an active attempt to provide nurturance and sustenance of their mother tongue in addition to introducing teaching via the language of wider communication” (Tucker, 1980, pp. 5–6). Clearly, effective ways exist of transforming subtractive bilingualism to a more socially desirable additive format.



Conclusions

A new form of education is developing around immersion programs, already well-known in anglophone communities across Can-

ada and now being scrutinized carefully for possible adoption by parents, educators, and researchers in the United States. Careful evaluations of these programs have shown that solid education and better-than-normal cognitive development can take place in classes where a second or totally foreign language is used as the major or the only medium of instruction and learning during the early school grades and where conventional English language instruction is only gradually introduced into a program that keeps the foreign language as an active alternative medium of instruction and learning through high school. Majority language young people in immersion programs can keep up with or surpass control children in conventional classes on achievement tests of curriculum content, with no detrimental effects on their English language development, cognitive development, general educational attainment, or sociopolitical attitudes. In fact, the English skills and cognitive growth of these students are strengthened, relatively, and their ethnic identity is not only left intact, but is more secure and more open to other ethnicities. All of these advantages are seen as a form of enrichment derived from the addition of highly advanced skills with a new language and a deeper understanding of a different ethnolinguistic group. The enrichment is additive in the sense that mainstream anglophone children have no fear or worry in North America of losing English as their basic language of thinking, expressing, and problem solving. Nor need these children have worries that they will lose their American identity in the process.

The story is completely different for language minority young people. Immersion programs were not designed or meant for ethnolinguistic groups in North America that have some language other than English as the main language used in the home. To place such children in an initially all-English instructional program would be to misapply the immersion process in a harmful, subtractive way. Their personal identities, their early conceptual development, their chances of competing or succeeding in schools or in occupations, and their interest in trying to succeed would all be hampered by an immersion-in-English program. Fortunately, practical and valuable alternatives are now available to help these children transform a potentially subtractive form of bilingual development to an additive one, thereby extending to them the same advantages of proficient bilingualism as those enjoyed by mainstream anglophones in normal immersion programs. These transformations are not based on typical compensatory education or catch-up-in-English models, but rather on a dual-track educational paradigm that emphasizes the use of the non-English home language as the major instructional language in the early grades and eventually introduces a separate English language instructional component when it is certain that the child's home language has taken

root and is a secure base for starting the build-up of English, a stage that may not be reached until a child enters the second or third grade.

This alternative brings two traditionally disparate social groupings—anglophone mainstreamers and ethnolinguistic minorities—together around a new form of bilingualism and biculturalism. The benefits to both majority and minority groups are now well established, and as has been mentioned previously, the involvement of the majority group in immersion programs can hearten and lift the self-concepts of minorities. The majority group benefits as well from the success of minorities. Not only is the general productivity of minorities enhanced and the expense of remedial schooling and social services reduced, but intergroup relations are also basically improved, especially when the majority group realizes that its values of fair play for the less fortunate are satisfied, as would be the case if ethnolinguistic minorities were permitted to be themselves as well as American.

Of course, all groups benefit in a pluralistic society that is smoothly integrated. Nevertheless, for some, such an emphasis on bilingual or multilingual, multicultural development may still seem un-American, socially disfunctional, or impractical. For others, especially the young in spirit, this emphasis may represent the emergence of a new coping style that is taking shape in contemporary North America, where sizable subgroups of young people are not only inquisitive about the rich multiethnic societies they find themselves in, whether in Canada or in the United States, but are also anxious to become actively involved in this ethnic richness and its subsequent social and personal benefits.

Selected References

- Barik, H. C., and M. Swain. "A Longitudinal Study of Bilingual and Cognitive Development," *International Journal of Psychology*, Vol. 11 (1976), 251–63.
- Blake, L., and others. "Students' Views of Intergroup Tensions in Quebec: The Effects of Language Immersion Experience," *Canadian Journal of Behavioural Science*, Vol. 13 (1981), 144–60.
- Cohen, A. "The Case for Partial or Total Immersion Education," in *The Bilingual Child*. Edited by A. Simoes, Jr. New York: Academic Press, 1976, pp. 65–89.
- Cummins, J. "Cognitive Factors Associated with Intermediate Levels of Bilingual Skills." Dublin: St. Patrick's College, Educational Research Centre, 1975 (unpublished manuscript).
- Cummins, J. "The Influence of Bilingualism on Cognitive Growth: A Synthesis of Research Findings and Explanatory Hypotheses," *Working Papers on Bilingualism*, Vol. 9, 1976, 1–43.

- Cziko, G. A., and others. "Graduates of Early Immersion: Retrospective Views of Grade II Students and Their Parents," in *The Social and Psychological Contexts of Language*. Edited by R. St. Clair and H. Giles. Hillsdale, N.J.: Erlbaum, Lawrence, Assoc., Inc., 1980, pp. 131-92.
- Dubé, N. C., and G. Herbert. "Evaluation of the St. John Valley Title VII Bilingual Education Program, 1970-1975." Madawaska, Maine, 1975b. Mimeo.
- Dubé, N. C., and G. Herbert. *The St. John Valley Bilingual Education Project*. Washington, D.C.: U.S. Department of Health, Education, and Welfare, 1975a.
- Education for a Global Perspective*. Albany: New York State Education Department, September 3, 1982.
- End of the Second Year Report on the French Language Immersion Program at Four Corners*. Rockville: Montgomery County Public Schools, Maryland, 1976.
- Genesee, F. "Bilingual Education of Majority Language Children: The Immersion Experiment in Review," *Applied Psycholinguistics*, Vol. 4 (1983), 1-46.
- Genesee, F. "Scholastic Effects of French Immersion: An Overview After Ten Years," *Interchange*, Vol. 9 (1978-79), 20-29.
- Genesee, F., and W. E. Lambert. "Trilingual Education for Majority Language Children," *Child Development*, Vol. 54 (1983), 105-14.
- Getzels, J. W., and P. W. Jackson. *Creativity and Intelligence*. New York: Wiley and Sons, 1962.
- Guilford, J. P. "Creativity," *American Psychologist*, Vol. 5 (1950), 444-54.
- Guilford, J. P. "The Structure of Intellect," *Psychological Bulletin*, Vol. 53 (1956), 267-93.
- Guzman, G. *An Exemplary Approach to Bilingual Education*. San Diego, Calif.: San Diego Unified School District, ESEA Title VII Bilingual Demonstration Project, 1982.
- Hanson, G. *The Position of the Second Generation of Finnish Immigrants in Sweden: The Importance of Education in the Home Language*. Symposium Report. Spit, Sweden, 1979.
- Kessler, C., and M. Quinn. "Bilingualism and Science Problem-Solving Ability." Unpublished paper presented at the 14th Annual International Convention of Teachers of English to Speakers of Other Languages, San Francisco, 1980.
- Lambert, W. E. "An Alternative to the Foreign Language Teaching Profession," *Interchange*, Vol. 9 (1978b), 95-108.
- Lambert, W. E. "Bilingualism and Language Acquisition," in *Native Language and Foreign Language Acquisition*. Edited by H. Winits. New York: The New York Academy of Sciences, Vol. 379 (1981), pp. 9-22.

- Lambert, W. E. "A Canadian Experiment in the Development of Bilingual Competence: The Home-to-School Language Switch Program." Montreal: McGill University, Psychology Department, 1979. Mimeo.
- Lambert, W. E. "The Effects of Bilingual-Bicultural Experience on Children's Attitudes and Social Perceptions," in *Childhood Bilingualism: Aspects of Cognitive, Social and Emotional Development*. Edited by P. Homel and M. Paliz. Hillsdale, N.J.: Erlbaum, Lawrence, Assocs., Inc., 1984. In press.
- Lambert, W. E. "The Social Psychology of Bilingualism," *Journal of Social Issues*, Vol. 23 (1967), 91-109.
- Lambert, W. E. "Some Cognitive and Sociocultural Consequences of Being Bilingual," in *International Dimensions of Bilingual Education*. Edited by J. E. Alatis. Washington, D.C.: Georgetown Univ. Press, 1978a.
- Lambert, W. E.; H. Giles; and A. Albert. "Language Attitudes in a Rural City in Northern Maine." Montreal: McGill University, Psychology Department, 1976. Mimeo.
- Lambert, W. E.; H. Giles; and O. Picard. "Language Attitudes in a French-American Community," *International Journal of the Sociology of Language*, Vol. 4 (1975), 127-52.
- Lambert, W. E., and D. M. Taylor. "Language in the Education of Ethnic Minority Immigrants," in *Perspectives in Immigrant and Minority Education*. Edited by R. J. Samuda and S. L. Woods. Washington, D.C.: University Press of America, 1983, pp. 267-80.
- Lambert, W. E., and G. R. Tucker. "Bilingual Education of Children: The St. Lambert Experiment." Rowley, Mass.: Newbury House Pubs., 1972.
- Long, K. K., and A. M. Padilla. "Evidence for Bilingual Antecedents of Academic Success in a Group of Spanish-American College Students." Bellingham, Wash.: Western Washington State College, 1970 (unpublished research report).
- McConnell, B. B. "Effectiveness of Individualized Bilingual Instruction for Migrant Students," Ph.D. diss. Washington State University, Pullman, 1980.
- Padilla, A. M., and K. K. Long. "An Assessment of Successful Spanish-American Students at the University of New Mexico." Paper presented to the annual meeting of the AAAS, Rocky Mountain Division, Colorado Springs, 1969.
- Popper, K. R. *The Open Society and Its Enemies*. In two volumes. Princeton, N.J.: Princeton Univ. Press, 1967.
- Rosier, P., and W. Holm. *Saad Naaki Bee Na'nitin: Teaching by Means of Two Languages—Navajo and English—at Rock Point Community School*. Washington, D.C.: Center for Applied Linguistics, 1980.

- Samuels, D. D., and R. J. Griffore. "The Plattsburgh French Language Immersion Program: Its Influence on Intelligence and Self-Esteem," *Language Learning*, Vol. 29 (1979), 45-52.
- Scott, S. *The Relation of Divergent Thinking to Bilingualism: Cause or Effect?* Montreal: McGill University, 1973 (unpublished research report).
- Sidoti, N. *Foreign Language Development Program*. New York: Native Intelligence Corporation, 1982.
- Skutnabb-Kangas, R., and P. Toukomaa. *Teaching Migrant Children's Mother Tongue and Learning the Language of the Host Country in the Context of the Socio-Cultural Situation of the Migrant Family*. Helsinki: The Finnish National Commission for UNESCO, 1976.
- Strength Through Wisdom: A Critique of U.S. Capability: A Report to the President from the President's Commission on Foreign Language and International Studies*. Washington, D.C.: U.S. Government Printing Office, 1979.
- Sue, S. "Ethnic Minority Issues in Psychology: A Reexamination," *American Psychologist*, Vol. 38 (1983), 583-92.
- Swain, M. "French Immersion Programs Across Canada: Research Findings," *The Canadian Modern Language Review*, Vol. 31 (November, 1974), 117-29.
- Taylor, D. M.; R. Meynard; and E. Rheault. "Threat to Ethnic Identity and Second-Language Learning," in *Language, Ethnicity and Intergroup Relations*. Edited by H. Giles. New York: Academic Press, Inc., 1977, pp. 99-117.
- Thomas, S. *A Language to Share*. Newton, Mass.: Educational Development Center, Inc., 1980.
- Troike, R. C. "Research Evidence for the Effectiveness of Bilingual Education," *NABE Journal*, Vol. 3 (1978), 13-24.
- Tucker, G. R. *Comments on Proposed Rules for Nondiscrimination Under Programs Receiving Federal Financial Assistance Through the Education Department*. Washington, D.C.: Center for Applied Linguistics, 1980.

Part Two

Immersion Education in Canada

Historical and Theoretical Foundations of Immersion Education

*Fred Genesee
McGill University
Montreal, Quebec*

Immersion education is a type of bilingual education in which a second language (or second languages) is used along with the students' first language for curriculum instruction during some part of the students' elementary and/or secondary schooling. In immersion programs the same curriculum material is never taught in the child's native language and second language during the same academic year. Thus, the concurrent method of instruction that is practiced in some American bilingual education programs for minority language children precludes these programs from being considered immersion. Also excluded are programs in which a language other than the students' native one is used as the exclusive medium of all curriculum instruction and in which the native language is used to teach only language arts (e.g., Spanish-speaking children attending schools where English is the language of instruction and Spanish is taught as a subject).

The major goals of immersion programs are:

- To provide the participating students with functional competence in the second language
- To promote and maintain normal levels of first language development
- To ensure achievement in academic subjects commensurate with the students' academic ability and grade level
- To instill in the students an understanding and appreciation for the target language group and their language and culture without detracting in any way from the students' identity with and appreciation for the home language and culture

Students are expected to attain these goals on completion of the program and not necessarily before.

Immersion programs were first instituted in the province of Quebec, Canada, in the mid 1960s. They were developed in response to particular sociocultural events in the province at the time, and they were designed to meet the needs and characteristics of a specific group of children. Since the inception of immersion, this program has

become a relatively widespread and commonplace alternative form of education within the Canadian school system. The historical and theoretical foundations of immersion are described in this chapter to provide a better understanding of immersion education within the Canadian context and, thereby, to assess its implications for educational policies in the United States.

In the first part of this paper, a brief description of the history of Canada appears, and the relationship between the French and English languages is discussed.

In the second part of this paper, the immediate social circumstances and events that led to the creation of the first immersion program will be described in some detail. While generally regarded as an experiment in bilingual education, immersion may also be viewed fundamentally as a community-based experiment in social change and adaptation. In this part, the focus is on the reactions of a group of parents in the community of St. Lambert to important sociolinguistic changes that were taking place around them.

In the third part, the psycholinguistic, neuropsychological, and social psychological underpinnings of immersion education are outlined and explained. Here attention focuses on the "experiment in bilingual education" part of immersion. This section is intended to provide the reader with a general understanding of how and why immersion programs work. A more detailed account of the day-to-day workings of immersion is presented by Lapkin and Cummins in this publication.

In the fourth section of this paper, this historical and theoretical overview is brought up-to-date with a description of how immersion programs have been extended. Immersion education has expanded both in the locations and in the kinds of programs offered. School districts in other Canadian provinces and in several American states provide immersion education, and diverse forms of immersion programs and different languages are available.

The last section contains an overview of the concepts presented in this paper.



A Brief Sociopolitical History of Language Relations in Canada

Like many parts of the New World, Canada was settled and governed by different European groups during its early development. The first colonization of Canada was undertaken by the French, beginning with the discovery of Canada in 1534 by Jacques Cartier.

French control gave way to British control in 1763, when the British defeated the French at the Battle of the Plains of Abraham near Quebec City (Cook, Saywell, and Ricker, 1977). French-Canadian culture was so deeply rooted in North America at the time of the British conquest that the French people resisted the assimilationist effects of the British legislation and immigration policy that would have eroded the vitality of less entrenched ethnolinguistic groups.

The British North America (BNA) Act of 1867 legally constituted the "Canadian confederation," which at the time consisted of Ontario, Quebec, New Brunswick, and Nova Scotia. Analogous to the American Declaration of Independence, the BNA Act, as it is usually referred to, affirmed Canada's linguistic duality only in Quebec, where the use of both the French and English languages was required in the parliament and courts of the province.

Not until 1969, with the passage of the Official Languages Act, were both languages actually accorded status as official languages nationwide. According to Canadian bilingual policy, certain federal governmental services in certain areas of the country must be made available in both French and English. French-speaking and English-speaking Canadians, therefore, may receive federal services in their preferred language. This kind of bilingualism is referred to as institutional bilingualism. Contrary to the conceptions of many Canadians, this policy does not require all Canadian citizens to be bilingual. Only those individuals who dispense designated federal governmental services are required to have bilingual competence.

This bilingual policy does not apply to services provided by Canada's ten provincial governments or two territories, the Yukon and Northwest Territories. In fact, at the provincial level only one province, New Brunswick, also recognizes French and English as official languages. The remaining nine provinces are monolingual, with eight recognizing English and one, the province of Quebec, recognizing French as the official language. Despite the lack of official status for both English and French in most of the provinces, certain governmental services in both languages are available in most parts of the country, where appropriate. An increasing move in this direction is occurring. The language policies of the provincial governments tend to reflect their respective constituencies. Thus, the one officially bilingual province, New Brunswick, has a sizable percentage of both French-speaking and English-speaking residents. Quebec, which recognizes French as the only official language, is inhabited predominantly by French-speaking residents. The remaining eight provinces, which all recognize English as the official provincial language, have predominantly English-speaking residents.

Notwithstanding regional differences in the manifestations of bilingualism, in general the English and French groups represent signifi-

cant parts of the Canadian ethnolinguistic mosaic. Consequently, bilingual competence in English and French is an important means of communication in Canadian political, cultural, and economic affairs. This bilingualism often brings tangible and intangible rewards. The reward value associated with English-French bilingualism is enhanced by the international status and utility of English and French, be it in diplomatic, economic, or cultural spheres.

In summary, Canada was colonized by two European groups, the French and the British. The historical presence of these two ethnolinguistic groups, referred to as "the two founding nations," has given present-day Canada a bilingual character. Officially, bilingualism has been entrenched in Canadian federal legislation, which requires the availability of certain federal governmental services in both official languages. For the most part provincial governmental policies are independent of those of the federal government, and, in fact, little official recognition is accorded both languages in provincial affairs. Despite the historical importance of the French and English cultures in the early development of Canada, the federal government recognizes neither as official cultures. Instead, Canada has adopted an official policy of multiculturalism, which recognizes the legitimacy and value of all cultures represented among its citizenry.

The Quiet Revolution¹

Until recently the French language has had a secondary role in the Canadian confederation in spite of (1) the historical importance of French during the early colonization and subsequent development of Canada; (2) the status of French as an official national language; (3) the demographic significance of French as the native language of approximately 25 percent of the Canadian population; and (4) even the international role of French as one of the major world languages. This secondary role of the French language has occurred to a large extent even in the province of Quebec, where the vast majority of the population speaks French as a native language (some 80 percent in a total population of 6,000,000). Indeed, many Quebeckers speak only French. Evidence of the lesser status of French can be found in at least three areas: (1) legislation; (2) patterns of language use; and (3) language attitudes.

Legislation and the French Language

As has already been noted, French is recognized as an official language by only two of Canada's ten provinces (namely, Quebec and

¹Discussion of the social and political events that preceded the emergence of French immersion in 1965 focuses on issues pertaining to language and English-French relations. This coverage is necessarily simplified and is not intended to reflect a complete or unbiased interpretation of history.

New Brunswick) and by neither territorial government (i.e., the Yukon, the Northwest Territories). While the eight "English provinces" presently do not recognize French as an official provincial language, they do not forbid its use. The legislative picture was not always so tolerant. In fact, the use of French, particularly in public schools, has actually been forbidden by law in certain provinces at certain periods during the 115 years since confederation. For example, in 1890 the government of the Province of Manitoba revoked an earlier law requiring the use of French in the provincial parliament and permitting its use in public schools. Students caught using French in school by the authorities could be physically punished. The 1890 law has since been repealed, restoring French to its original status. In fact, according to the new Canadian Charter of Rights and Freedoms, public education will be available in all provinces in both official languages where the number of students warrants it.

Patterns of Language Use

Widespread daily use of French, except in communication with official federal government agencies, is limited to the provinces of Quebec and New Brunswick, to areas bordering these provinces (e.g., the Ontario-Quebec border, Northern Alberta, and parts of Ontario), and to other isolated regions where there are sizable French-speaking communities. Even in these areas, however, English often predominates over French as the *lingua franca*. This situation is particularly true in public settings and in business and commerce. In an extensive study of the language of work in Quebec, Gendron (1972) notes that:

In the province of Quebec itself, French remains basically a marginal language, since non-French-speaking persons have little need of it, and many French-speaking people use English as much as and sometimes more than their mother tongue for important work. This situation applies even though Quebec's French-speaking people constitute a vast majority both in the labor force and in the overall population. (p. 108)

This situation means that "in interrelationships in mixed conversation groups, English-speaking persons concede much less to French than do French-speaking persons to English" (p. 93). Thus, "the burden of bilingualism is unequally distributed between French- and English-speaking people, both as regards the degree of competence in the other language and the language demands on a worker during the course of his [or her] career" (p. 94).

Language Attitudes

Finally, perhaps no other single piece of evidence attests to the disadvantaged or inferior status that the French language has had relative to the English language than the results of a study carried out.

by Lambert and others (1960). In what has become a classic study in the social psychology of language, Lambert and his colleagues asked groups of English and French Canadians in Montreal to listen to and give their impressions of people speaking either French or English. Unknown to the listeners, they were actually hearing the same perfectly bilingual individuals on separate occasions, sometimes speaking French and sometimes English. Analyses of the listeners' reactions to the speakers indicated that they were much more favorable toward the English guises than toward the French guises. In other words, a significant difference in the listeners' perceptions of the same speakers occurred when the listeners heard them using each of their two languages—it is as if each speaker were two different people. Furthermore, results indicated that, not only did the English-Canadian listeners form more favorable impressions of the English guises than of the French guises, evidence of in-group favoritism, but so did the French-Canadian listeners. That is to say, even the French-Canadian subjects perceived the speakers more favorably when they spoke in English than when they spoke in French, although this favorable perception meant that the French Canadians were denigrating members of their own ethnolinguistic group.

Subsequent research has substantiated these findings (D'Anglejan and Tucker, 1973) and indicated further that the tendency for French Canadians to denigrate members of their own group is not manifest by children before the age of twelve but emerges around adolescence (Anisfeld and Lambert, 1964) and, thus, appears to be a socially learned phenomenon (see Day, 1982, for a recent review of similar research). Lambert has interpreted these results to mean that language can act as an important symbol of ethnolinguistic group membership and that members of ethnic minority groups may internalize the negative stereotypes of their group that members of the majority group often have.

Discontent over this state of affairs had been developing for some time. Early attempts by the French-speaking community to negotiate a more equitable relationship with the English community through cooperative discussion had resulted in relatively unsatisfactory outcomes. Repeatedly faced with an apparent lack of responsiveness on the part of the English community to their request, French-speaking Quebecers began to make vocal and public demands for change. These demands culminated in the early 1960s with concerted political, social, and, in some cases, militant actions to bring about change. There were, for example, mass demonstrations against public institutions whose personnel would or could not communicate with French-speaking citizens in French. The social unrest manifested during this period has come to be called the Quiet Revolution.

Calls from Quebec politicians for separation from the rest of Canada during the last 20 years probably can be attributed in large measure to the earlier intransigencies of the English community to recognize and respect language rights of the French community (Arnopoulos and Clift, 1980). That is to say, separatism has emerged as a final solution to a sociolinguistic problem that was unable to be resolved through social cooperation. One of the most important pieces of legislation to be passed by the "separatist" Parti Québécois government after coming to power in 1976 was a bill (Bill 101) which defined and ensured in law the linguistic rights of the French-speaking citizens of Quebec. Some analysts think that the 1978 Quebec referendum, which sought support for the separation of the province of Quebec from Canada, failed because of Bill 101. Passage of this bill made the French population feel reassured that their language would be respected. Thus, contrary to some interpretations of political events in Quebec, much of the separatist sentiment presently expressed in this province could have been alleviated had the English community previously shown more willingness to accommodate the special linguistic and cultural characteristics of the French community.



The St. Lambert Experiment: A Community Experiment in Social Change

The French community was dissatisfied because it perceived that the English were unresponsive to the inequities between the two languages. Some English-speaking Quebecers as well were concerned about French-English relations. In particular the English community was becoming increasingly aware, precipitated by the events of the Quiet Revolution, that French was becoming a more important language of communication in most spheres of life in Quebec and, concomitantly, that English alone would no longer ensure one's successful and satisfying participation in the affairs of the province. Canadian author Hugh MacLennan described the coexistence of French and English Canadians, and especially Quebecers, in his novel *Two Solitudes* (1945), an apt metaphor in this and many other communities inhabited by people of different linguistic and cultural backgrounds.

Faced with the evolving importance of the French language in Quebec and with an increasing dissatisfaction in both the English and French communities with the two solitudes characteristic of their mutual coexistence, a concerned group of English-speaking Quebecers in the small suburban community of St. Lambert, outside of Mon-

trear, began to meet informally to discuss the situation (Lambert and Tucker, 1972). Their incompetence in French, they felt, contributed to, and indeed was partly caused by, the two solitudes which prevented them from learning French informally from their French-speaking neighbors. Their inability to communicate in French, they felt, was also attributable to inadequate methods of second language instruction in the English schools.

At that time French was taught for relatively short periods each day (20 to 30 minutes) by teachers who were usually native English-speakers with competence in French as a second language that varied from excellent to poor. Teaching vocabulary and grammar rules and using pattern practice drills based on then popular audio-lingual techniques were emphasized. This approach was common to many second language programs throughout North America, which retain some of the same characteristics even to this day. Unlike second language instruction in other parts of North America, however, second language instruction in Quebec began in elementary school and continued systematically until the end of secondary school. This approach, which is still used, has become customary to varying degrees in the other provinces.

Despite 12 years of second language instruction, however, students graduating from the public schools of Quebec were inadequately prepared to deal with the demands of using a second language in diverse real-life situations. As Olga Melikoff, one of the group of 12 St. Lambert parents who spearheaded interest in alternative methods of second language instruction points out:

Children were graduating from English protestant schools in this province with little more knowledge of French than their parents had had, despite claims that the programs had been considerably improved over the years. Their knowledge was not perceptibly superior to that of graduates from the English provinces of Canada and was not sufficient to enable the students to communicate with their French-Canadian neighbors. The parents felt their children were being shortchanged and should have the opportunity to become "bilingual" within the school system, since it was so difficult to achieve the skill outside of school (in Lambert and Tucker, 1972, p. 220).

Most of the St. Lambert parents who participated in these discussions could attest to the failure of second language instruction, using their own experiences as evidence.

In their search for alternative improved methods of second language instruction for their children, this group of concerned parents (the St. Lambert Bilingual School Study Group), as they came to call themselves, sought the assistance and advice of experts within their community. In particular, they consulted with Wallace Lambert of

the Psychology Department, McGill University, who had conducted research on social-psychological and cognitive aspects of bilingualism, and with Wilder Penfield of the Montreal Neurological Institute, McGill University, who had conducted research on brain mechanisms underlying language functions. The involvement of these two scholars was indeed fortunate because they not only gave their overall support to the parents' project but shaped the new program in some important ways through their professional advice.

The efforts of the St. Lambert group succeeded finally, with the administrators from the school district agreeing to set up an experimental kindergarten immersion class in September, 1965, some two years after the first meetings. Melikoff notes in her description of events leading up to 1965 that school officials accepted the experimental class not because of any conviction that it was a worthwhile educational experiment but rather because public pressure on them was too great to ignore. She describes the attitude of the school district's officials as follows (Lambert and Tucker, 1972): "You asked for it; if it doesn't work, it's not our fault" (p. 227). "At no time would the board undertake to accept the experiment for more than a year at a time. . . ." (p. 233). Despite a lack of official support from the school authorities, parents were surprisingly enthusiastic. Registration for the experimental kindergarten class "opened one spring day at 1 p.m., and by 1:05 p.m. the quota of 26 children was reached" (p. 226).

The process of community involvement that has just been described has been repeated many times since the first immersion class was opened in St. Lambert. The introduction of French immersion programs in most school districts elsewhere in Canada and the United States² has been instigated and promoted by local community groups, along with the assistance of individual school district officials and researchers. Official support customarily has been lukewarm at the outset. The best evidence of the important role that parents have played in the evolution of immersion programs is Canadian Parents for French, a voluntary, nonprofit association of English-speaking parents who seek to improve the quality of second-language instruction in public schools across Canada.

To summarize this section, one needs to emphasize that it was through the educational system, and especially through French immersion programs, that these concerned parents sought a response to important sociolinguistic changes that were taking place around them. Moreover, it was through educational innovation that these parents also sought to bring about social change within their own communities. Improved French-second-language learning was not

²Immersion programs in Spanish, French, German, and other languages are available in the United States. For additional information about these programs see Campbell, this publication.

intended to be the only goal of immersion. Rather, it was to be an intermediate goal, leading to improved relationships between English and French Quebecers and, ultimately, to a breaking down of the two solitudes that had become unacceptable.



St. Lambert—An Experiment in Bilingual Education

The St. Lambert French immersion program, which began in September, 1965, was designed to achieve the following primary goals:

- To provide the participating children with functional competence in both written and spoken aspects of French
- To promote and maintain normal levels of English language development
- To ensure achievement in academic subjects commensurate with students' academic ability and grade level
- To instill in the students an understanding and appreciation of French Canadians, their language, and culture without detracting in any way from the students' identity with and appreciation for English-Canadian culture

The program in St. Lambert was an *early total* immersion program. That is to say, *all* curriculum instruction, beginning in *kindergarten* and continuing through the primary grades, was taught through French (see Figure 1 in Lapkin and Cummins, [this publication] for a schematic summary of the early total immersion program). At first, French was to be used as the only medium of instruction until the end of the third grade; this time was later altered so that only kindergarten and first grade children were taught entirely in French. When English was introduced into the curriculum, it was used to teach English language arts for approximately one hour per day. Instruction through English was subsequently expanded in successive grades to include other subjects, such as mathematics or science. By the sixth grade, or the end of elementary school, 60 percent of the curriculum was taught in English and 40 percent in French. This was usually accomplished by teaching through English during the morning and through French during the afternoon of each day. This basic pattern is characteristic of many current early total immersion programs, although there are, of course, variations among programs. For example, early immersion programs offered elsewhere delay the introduction of English until the third grade (see Genesee, 1978a) or even the fourth grade (Genesee and Lambert, 1983; Gray, 1981) or limit the amount of exposure to English once it is introduced (see

Morrison, 1981). Some of the important variations will be discussed in a later section of this chapter and by Swain (this publication).

Follow-up to the early immersion years is often provided at the secondary school level by offering a number of selected courses in French. These courses may be either language arts or other subject courses, such as geography or history. The particular courses and number of such courses that students take at this level are a matter of individual student choice.

Theoretical Considerations: The Question of Age

The decision to offer intensive second language instruction during the early elementary grades in contrast to later grades was based on neuropsychological, psycholinguistic, and social-psychological theories and research. The work of Wilder Penfield at the Montreal Neurological Institute indicated that children who suffered brain damage during infancy or childhood were much less likely to have permanent language impairments than those who had brain damage during adolescence or adulthood. These findings were substantiated by Lenneberg (1967), who, along with Penfield and Roberts (1959), had argued that the human brain is more "plastic" and, consequently, better able to acquire languages prior to puberty. Beyond this state of development, it was argued, the physiological structures and cognitive processes of the brain become fixed and are less effective at learning new skills, including language. This evidence, and thus this argument, have since been called into question (Krashen, 1974).

From a psycholinguistic perspective, as well, it is clear, even from everyday observation, that most children appear to acquire their first language apparently effortlessly and without systematic instruction during the first six or seven years of life. Some linguists (Chomsky, 1972) and psycholinguists (McNeill, 1970) have explained the child's apparent facility at first language learning in terms of a specialized language learning capacity that is innate. Others have argued that this facility is not due to a language-specific ability but rather to general cognitive capacities that can be used in first language learning (Lenneberg, 1967; Slobin, 1973). Whatever the precise explanation, both types of theorists believed that this capacity diminishes with age, thereby making language learning, first or second, increasingly difficult. Much anecdotal evidence indicates that indeed adults have considerable difficulty acquiring a second language and, in fact, often never achieve native-like competence. Thus, it was argued that early immersion in a second language would facilitate a child's second language learning by taking advantage of his or her special neurolinguistic, psycholinguistic, and cognitive capacities to learn language.

The neuropsychological and psycholinguistic justifications for early immersion received support from quite a different perspective,

namely, social psychology. Young children are generally thought to be better second language learners because they have fewer affective dispositions that can interfere with learning. Older students, in contrast, may have had experiences or may have formed attitudes that might jeopardize learning, especially second language learning. This situation is socially and politically significant. Indeed, research by Lambert using the matched-guise technique, as discussed earlier, found that young French-Canadian children initially have positive attitudes toward their language and only later learn the negative stereotypes that are prevalent among adults. It was thought, therefore, that young English-Canadian children would be more open to other languages and language groups in general and, thus, be more open to learning French in particular. (For a review of the development of racial attitudes in children, see Katz, 1976). This line of argument figured prominently in the thinking of the St. Lambert Study Group because of its long-range goal of effecting some degree of cross-cultural communication with French Canadians through improved second language competence. Taken together, these three perspectives favored early intensive exposure to a second language, and so it was that the St. Lambert Study Group decided on early immersion beginning in kindergarten.

The question of an optimal age for second language learning has continued to be the topic of enthusiastic discussion (see Genesee, 1978b, 1981a; and Krashen, Long, and Scarcella, 1979, for reviews). Notwithstanding the previous theoretical arguments, empirical evidence indicates that adolescents and adults can achieve the same levels of proficiency as, or higher levels of proficiency than, children who receive the same amount of, or even more, second language exposure. Indeed, results from comparative evaluations of late versus early immersion programs have shown late immersion students to be effective language learners (see Swain, this publication, for a complete discussion of these findings). It has been suggested that the apparently efficient second language learning abilities of older learners is due to their more mature level of general cognitive development (Genesee, 1981a; Ervin-Tripp, 1974) and/or to positive transfer from a fully developed first language system (Keller-Cohen, 1981). At the same time other long-term research indicates that individuals who begin second language learning early, in infancy or childhood, are more likely than those who begin later to achieve native-like levels of proficiency in their second language, particularly if given exposure to the language in extracurricular settings. Genesee and Lambert (1983) have argued that the question of an optimal age for second language learning in a school setting cannot be dissociated from the question of optimal methods of second language instruction for learners at different age levels. In other words, programmatic as well as learner vari-

ables must be considered in discussions of different starting points for learning a second language.

Theoretical Considerations: Classroom Practices

The most distinctive feature of the St. Lambert immersion program was its use of the second language to teach regular academic subjects, such as mathematics, science, and social studies, in addition to language arts. This approach, in fact, is one of the distinctive characteristics of all immersion programs. Immersion teachers teach regular school subjects in French much as they would if their pupils were native speakers of the language. Formal instruction in the rules and structures of French is presented in the French language arts class, which constitutes a large part of the primary grades, as does English in the case of a regular English program. Clearly, however, the children are not native speakers. Therefore, the teachers emphasize oral-aural communication skills during kindergarten and the first half of the first grade. The children are not required to use French with the teacher or with one another until the second half of the first grade. And in fact the children commonly use English among themselves and with the teacher during this stage. This strategy has been adopted to reflect the stages that characterize first language acquisition whereby children's comprehension of language generally comes before their production skills. Moreover, immersion teachers do not want to force the students to use French before they are ready for fear of inhibiting their initial attempts. Similarly, reading, writing, and other literacy skills are introduced slowly and only when it is felt that the children have acquired the corresponding oral-aural language skills.

Attempts by the children to use French in the school setting are encouraged by the teacher. Moreover, the teachers are discouraged from overcorrecting the children's use of the language. Research on first language acquisition has indicated that parents are not likely to correct their children's language for linguistic inaccuracies, although they do correct factual inaccuracies (Brown, Cazden, and Bellugi, 1970). Besides, excessive correction of second language errors is likely simply to inhibit the learner from using the language. By January of the school year, most first grade children begin to use French in the classroom. At this time the teacher begins to insist gently that all the children should use French in the classroom whenever they speak. Since most children have acquired considerable competence in the language by this time, this rule is not difficult to enforce.

Generally speaking, the immersion program is designed to create the same kinds of conditions that occur during a child's first language learning; namely, there is an emphasis on creating a desire in the student to learn the language to engage in meaningful and interesting communication (Macnamara, 1973; Terrell, 1981). Thus, language

learning in immersion is incidental to students' learning about mathematics, the sciences, the community, and one another. This situation contrasts sharply with more traditional methods of second language instruction in which emphasis is on the conscious learning of the elements and rules of language for their own sake. Moreover, the immersion program is designed to allow the student to apply his or her "natural language learning" or cognitive abilities as a means to learning the language.

It is now generally accepted that first language acquisition in children is a systematic process that reflects the child's active cognitive attempts to formulate linguistic rules that correspond to adult competence in the language—a process referred to as creative construction (Dulay and Burt, 1978; Slobin, 1973). According to this conceptualization, opportunities to communicate in the language are advantageous for learning, and errors are a normal and important part of the learning process. Immersion is based on the premise that much language learning can occur during nonlanguage classes, such as mathematics, in much the same way that first language acquisition occurs when children are communicating with others about nonlanguage issues. The immersion approach also permits the learner to progress according to his or her own rate and style, again in much the same way that first language learners do (Bloom, Hood, Lightbown, 1974; Nelson, 1981). The effectiveness of this conceptualization as manifested in the immersion approach is examined in Swain's chapter on program evaluation (this publication).

Another distinctive pedagogical feature of the Canadian immersion programs, and one that differs significantly from many American bilingual education programs, is the use of monolingual language models and "linguistic territories" within the school. The French teachers in the immersion programs present themselves to the students as monolingual French speakers, even though, in most cases, these teachers are very competent in English. The French teachers in kindergarten and the first grade, especially, must know enough English to understand the students whose comments are initially all in English. Many of the students, in fact, learn of their French teachers' bilingual abilities only in the later grades when these students overhear their French teachers using English with an English teacher.

The classrooms in which French and English instruction are presented are kept as distinct as possible. This means that the children usually change classrooms for the French and English parts of the school day once English is introduced into the curriculum. An explicit rule that students must use French in the French classroom and with the French teachers is established. Rules requiring the use of English with the English teacher in the English classrooms are not

required, since the children are naturally prepared to use English whenever possible.

These two strategies—the use of monolingual second language teacher models and the establishment of French territories within the school—have been adopted and are observed conscientiously to facilitate the students' second language learning by encouraging, indeed requiring, the students to use the second language. Otherwise, a natural tendency would occur for the students to use English, their stronger language. The use of monolingual French models is recommended also to satisfy some of the sociocultural goals of the program. Monolingual teacher models provide English children in immersion with extended experiences with French-speaking Quebecers, with whom they might otherwise have little contact. Language usage surveys have found that even immersion students in Montreal have very little day-to-day contact with French-speaking people outside school (Genesee, 1978c, 1981b). Thus, it is through school experiences that immersion students are expected to come to respect and appreciate French Canadians and their culture. French culture is also part of the immersion experience because of the French-Canadian cultural content in some of the textbooks used in the program.

The potentially negative implications that these policies might have on the participating children's attitudes toward and knowledge of English-Canadian culture and language are effectively eliminated in a number of ways. As previously mentioned, the children are not forced to use French or to set aside English during the first year and a half of the program or during extra-class activities, such as recess. The use of English-speaking teaching personnel during a substantial part of the later elementary school grades ensures a positive and significant presence for English. The overall administrative structure within which immersion takes place is English, including many English-speaking administrators (e.g., principals) and support staff (e.g., secretaries), thereby ensuring a respect for English. The children are exposed to many positive English-Canadian models in their homes, in the community, and in the media. Consequently, the support for the French language and culture that characterizes immersion is never achieved at the expense of the children's home language and culture (see Cohen, 1975). Lambert (1980) has referred to this type of bilingual-bicultural experience as *additive*.

Proponents of second language immersion programs for majority English-speaking children have generally doubted the applicability of these programs for children from minority ethnolinguistic groups that do not enjoy the same individual or social respect that English speakers in North America command (Lambert, 1980; Tucker, 1980). In fact, in Canada English-immersion programs for French-speaking Canadians has been advised against because of the threat that such a

form of education poses to their home language and culture. Lambert has referred to this type of bilingual experience as *subtractive*. This threat exists even though French is spoken by the majority of Quebecers (80 percent), because French-speaking people are in a minority status demographically with respect to the rest of Canada and North America, and the French language suffers some of the social-psychological stigma associated with many minority languages, as indicated in the earlier discussion of language attitudes. The important point here is that those who design and implement bilingual education programs, including immersion programs, must consider the sociocultural context in which schooling takes place.

The importance of sociocultural contact or the effect that one group can have on another when second language training is involved is underlined in recent research by Genesee, Rogers, and Holobow (1983). They found that the second language achievement of English-Canadian students in Quebec schools was related not only to the students' own motivations toward learning French but also to their expectations that the target language group supported their efforts to learn French. For example, English-Canadian high school students who were highly motivated to learn French to get a job once they completed school and who thought that French Canadians similarly wanted them to learn French to get jobs in Quebec achieved higher levels of proficiency in French than did students who did not share these expectations. This example indicates that the success of any bilingual program will depend not only on the learners themselves but also on the influence of the target language group. A setting in which the majority group is supportive of minority language speakers will facilitate second language learning, but a climate in which such support is missing may impede learning. Educators working with minority language children need (1) to understand the particular social context within which these children live and learn; and (2) to then transform potentially subtractive bilingual educational experiences into additive ones, to use Lambert's terminology.

In summary, early immersion programs are divided into three phases: (1) a monolingual phase (usually kindergarten to the second or third grade), when all curriculum instruction is presented in the second language; (2) a bilingual phase (usually from the second and third grade to the sixth grade), when both the first and the second languages are jointly used for curriculum instruction; and (3) a follow-up, or maintenance, phase (usually from the seventh grade to the end of secondary school), when selected courses are offered in the second language to maintain and further promote students' second language competence. Immersion programs are designed to create the social and psycholinguistic conditions that accompany first language acquisition. More specifically, there is an emphasis on meaningful

and creative use of the target language in a social atmosphere which encourages active experimentation with and use of the language along with respect for the child's native language and culture.



The Spread of Immersion Education: The Present Situation

Since the St. Lambert experiment began, immersion has expanded to reflect alternative conceptions of what constitutes effective immersion and different community needs, aspirations, and resources. Immersion programs are now available in several different forms, in a variety of languages, and in all Canadian provinces and in several American states. The alternative forms of immersion currently available differ primarily with respect to the grade level during which the second language is used as a major medium of curriculum instruction. Differentiations are often made among early, delayed, and late immersion programs. A secondary basis of differentiation is made according to the amount of instruction provided in the second language (namely, total versus partial instruction) or the number of years during which the second language is used as a major medium of instruction. Excluded from this rough taxonomy are (1) second language programs in which the second language is used for teaching language arts only and one nonlanguage subject; and (2) programs in which the second language is never used to teach at least 50 percent of the curriculum during any school year. These latter types of programs would generally be regarded as *enriched* second language programs.

Early Immersion Programs

Two main kinds of early immersion programs are total and partial. The *early total* immersion program has already been described in the section on the St. Lambert experiment and is schematically represented in Lapkin and Cummins (see Figure 1 in this publication). The *early partial* immersion program differs in that less than 100 percent of curriculum instruction during the primary grades is presented through the second language. The most common formula is 50 percent French and 50 percent English (see Genesee 1981c; and Swain, 1978, for examples). The amount of French instruction in early partial immersion programs tends to remain constant throughout the elementary grades, in contrast to total immersion programs in which the French component decreases. Another difference in these two programs is the time when students begin literacy training in their native language. In the total immersion program, literacy training in the students' native language occurs after students have been given

initial literacy training in their second language. In the partial immersion program, literacy training tends to occur in both languages simultaneously from the first grade on.

Among early total immersion program alternatives, the main variation involves the grade level at which English instruction is introduced. It may be in the second grade, as in St. Lambert (Lambert and Tucker, 1972); in the third grade (see Genesee, 1978a); or in the fourth grade (Genesee and Lambert, 1983; Gray, 1981). Another variation among early total immersion options is the amount of instruction presented through English once it is introduced into the curriculum. In some cases English exposure increases quickly (for example, from 20 percent in the third grade to 60 percent in the fifth grade; see Genesee, 1978a), and in other cases it increases very slowly (for example, remaining stable at 20 percent during the third, fourth, and fifth grades; Morrison, 1981).

Delayed Immersion Programs

Immersion programs which postpone use of the second language as a major medium of instruction until the middle elementary grades (fourth or fifth grades) are classified here as delayed. Usually, these programs offer a core second language course in the primary grades prior to the immersion component, which may be of one or two years' duration (see Cziko, Holobow, and Lambert, 1977, for an example). This approach may then be followed by partial immersion education until the end of elementary school during which language arts and other subject material are taught through the second language. In the delayed immersion option, training in first language literacy precedes training in second language literacy.

Late Immersion Programs

Late immersion programs postpone intensive use of the second language until the end of elementary school or the beginning of secondary school. In *one-year* late immersion programs, all or most of the curriculum, except English language arts, is taught through the second language for one year (see for example, Genesee, Polich, and Stanley, 1977; and Swain, 1978). In *two-year* late immersion programs, this schedule is repeated for two consecutive years (see Genesee, 1981a; and Morrison, 1981, for examples). Late immersion programs may be preceded by core second language instruction throughout the elementary grades (see Genesee, Polich, and Stanley, 1977), or they may be preceded by special preparatory second language courses one or two years immediately prior to immersion (see Swain, 1978). Most late immersion options—one-year or two-year and with or without prior core second language instruction—are usually followed in the higher grades by advanced second language arts

courses, and in some cases by selected nonlanguage courses, such as geography, that are taught through the second language.

Double Immersion Programs

By far the most common alternative forms of immersion, as just described, involve the use of a single second language. Genesee, Lambert, and Tucker have investigated variations of immersion for majority English-speaking children in which two nonnative languages (French and Hebrew) are used as major media of curriculum instruction during the elementary grades (see Genesee and Lambert, 1983; an English-French-Spanish trilingual program is offered in Washington, D.C.). French and Hebrew were selected as immersion languages in the programs in question because both have sociocultural significance for the participants, but for different reasons. On the one hand French, being one of the official languages of Canada, has social and economic relevance to these children and their families on a day-to-day basis. In this regard the Hebrew-French double immersion programs are the same as the St. Lambert program and other French immersion programs for majority language children in Canada. On the other hand Hebrew is valued because of its religious and cultural significance and because of its increasing nonsectarian importance as a national language of Israel. In this respect the Hebrew-French double immersion programs differ from French-only immersion programs in being heritage language or language revitalization programs. The underlying educational principles of both are nevertheless the same. In particular, their success is predicated on the participation of children who are members of the majority language group.

In one type of double immersion program studied by Genesee and his colleagues, English-speaking children from Montreal received all of their curriculum instruction during the primary grades in French and Hebrew. The French curriculum comprised language arts, mathematics, science, and social studies. Language arts, history, and religious and cultural studies comprised the Hebrew curriculum. Native French- and Hebrew-speaking teachers were used to teach each curriculum. English was not introduced until the third grade in the case of one school and the fourth grade in the case of another. We have referred to this alternative as *early double immersion*.

In contrast, in another double immersion program, English along with French and Hebrew was used as a language of instruction from kindergarten on. This program alternative has been referred to as *delayed double immersion* because the amount of exposure to French increased systematically from five hours per week in the first grade to 12 hours per week in the fifth and sixth grades. Instruction through English decreased somewhat from 12 hours per week in the first grade

to nine hours per week in the sixth grade as a result. Exposure to Hebrew changed insignificantly.

These programs are described in some detail here because they represent effective and feasible models of multilingual/multicultural education of possible interest to ethnolinguistic groups that are interested in revitalizing heritage languages and at the same time wish to acquire competence in an additional second language of some local or national relevance. Examples other than Hebrew-French immersion for English children come to mind. For example, Ukrainian Canadians in Western Canada might wish to have their children, who in most cases have become anglicized, acquire competence in Ukrainian while also learning Canada's other official language, French.

The extension of immersion programs to all the Canadian provinces and some American states and the evolution of these programs to include alternative forms is attributable in no small measure to the research component that has accompanied the development of immersion from the beginning in St. Lambert. Several large-scale longitudinal evaluations have been set up in a number of Canadian centers to monitor the effectiveness of immersion programs in these locations. These centers include the Protestant School Board of Greater Montreal (see Genesee, 1983); the Bilingual Education Project, Ontario Institute for Studies in Education (see Swain and Lapkin, 1982); the Ottawa Board of Education Project (see Harley, 1976); and the British Columbia French Project (see Shapson and Day, 1980), as well as the St. Lambert Experiment (Lambert and Tucker, 1972).

In addition to providing educators and researchers with valuable data concerning the effectiveness of the respective programs, the results of these evaluations have provided essential feedback to parent and community groups that were the instigators of the programs. Researchers have often been able to act as liaisons between the school system and the community and thereby have offered both groups a valuable service. In this way the research has served to reinforce the long-term social change goals of the communities involved.



Significant Concepts About Immersion Education

In the beginning of this chapter, immersion education was defined as a form of bilingual education in which a second language (or second languages) is used along with the students' first language for curriculum instruction during some part of the students' elementary and/or secondary schooling. It was also pointed out that the defini-

tion of immersion education must include reference to its linguistic, academic, and sociocultural goals. The main goals of immersion education were identified as (1) functional competence in all aspects (reading, writing, speaking, and listening) of the second language; (2) normal levels of development in all aspects of the students' home language; (3) age-appropriate levels of academic achievement; and (4) positive attitudes toward the students' home language and culture as well as toward the target language and culture.

The detailed description of immersion that was subsequently presented indicates that the sociocultural conditions and pedagogical approaches embodied in immersion programs also constitute an integral part of their definition. Although all of these conditions and approaches have been reviewed in the preceding pages, the most important ones warrant repeating here.

The defining sociocultural conditions of immersion include the following:

- The participating children speak the majority group language, which in the case of North America is English.
- Educational, teaching, and administrative personnel working in immersion programs value and support, directly or indirectly, the children's home language and culture.
- The participating children similarly value their home language and culture and do not wish to forsake either.
- The children and school personnel regard the acquisition of the second language as a positive addition to the child's repertoire of skills.
- A point related to the previous two items is that the children's parents wish to maintain the home language and culture while valuing their children's acquisition of the second language.

Although these conditions were recognized as important for second language learning some 20 years ago during the formulation of immersion programs, recent theories of second language acquisition have reconfirmed their significance. In particular, Krashen's affective filter hypothesis is consistent with these sociocultural premises of immersion education (see Krashen [1981] for a more detailed discussion of this point).

The defining pedagogical approaches of immersion education include the following:

- The students are permitted to use their home language in school and in the classroom at least during the initial part of the program.
- Teachers strongly encourage students who attempt to communicate in the second language. Conversely, teachers do not overtly

correct the grammatical or structural errors students make in the second language.

- Each language is used for regular curriculum instruction in addition to language arts instruction. The same curriculum material is never taught concurrently in both languages.
- Related to the preceding point, second language teachers in immersion programs act as monolingual models (i.e., the French teachers use only French). This approach is important so that the socioculturally weaker language will be strengthened.

Parallels exist between these pedagogical conditions articulated some time ago on the basis of first language acquisition theory and current theories of second language learning. The emphasis that is placed on meaningful and communicative use of the second language in immersion is reflected in Krashen's input hypothesis, according to which "we acquire structure by understanding messages and not focusing on the form of the input or analyzing it" (Krashen, 1981). Immersion teachers' concern for communicating clearly to their students is perhaps best illustrated by the comments of the French consultant for one of the largest French immersion programs in Quebec (Tafler, personal communication). According to Tafler, her observations had indicated that, when teaching in native language classes, teachers tend to attribute student misunderstandings to the students but that when teaching in immersion classes, teachers are likely to attribute such misunderstandings to their own poorly expressed communications. As a result, she noted, immersion teachers tend to reformulate, repeat, or otherwise clarify their messages until student comprehension is achieved.

In conclusion, successful implementation of an immersion program for a particular group of children requires more than knowing when to teach students using a second language. More important, it involves knowing which sociocultural conditions and educational approaches will facilitate their learning. To recreate these conditions and implement these approaches to facilitate academic and language learning among minority language children will require more than changing the names of the languages involved. Indeed, this task may require changing the basic structure of immersion education as it is known to apply to majority language children.

Selected References

- Anisfeld, E., and W. E. Lambert. "Evaluational Reactions of Bilingual and Monolingual Children to Spoken Languages," *Journal of Abnormal and Social Psychology*, Vol. 69 (1964), 89--97.
- Arnopoulos, S. M., and D. Clift. *The English Fact in Quebec*. Montreal: McGill-Queen's University Press, 1980.
- Bloom, L. M.; L. Hood; and P. Lightbown. "Imitation in Language Development: If, When, and Why," *Cognitive Psychology*, Vol. 6 (1974), 380--420.
- Brown, R.; C. Cazden; and U. Bellugi. "The Child's Grammar from I to III," in *Psycholinguistics*. Edited by R. Brown. New York: Free Press, 1970, pp. 100--54.
- Chomsky, N. *Language and Mind*. New York: Harcourt Brace Jovanovich, Inc., 1972.
- Cohen, A. "Successful Immersion Education in North America," *Working Papers on Bilingualism*, Vol. 5 (1975), pp. 39--46.
- Cook, R.; J. Saywell; and J. Ricker. *Canada: A Modern Study*. Toronto: Clarke, Irwin and Co., 1977.
- Cziko, G. A.; N. Holobow; and W. E. Lambert. *A Comparison of Three Elementary School Alternatives for Learning French: Children at Grades Four and Five*. Montreal: Department of Psychology, McGill University, March, 1977.
- D'Anglejan, A., and G. R. Tucker. "Sociolinguistic Correlates of Speech Style in Quebec," in *Language Attitudes: Current Trends and Prospects*. Edited by R. W. Shuy and R. W. Fasold. Washington, D.C.: Georgetown Univ. Press, 1973, pp. 1--27.
- Day, R. R. "Children's Attitudes Toward Language," in *Attitudes Toward Language Variation: Social and Applied Contexts*. Edited by E. B. Ryan and H. Giles. London: Edward Arnold, 1982, pp. 116--31.
- Dulay, H., and M. Burt. "Some Remarks on Creativity in Language Acquisition," in *Second Language Acquisition Research: Issues and Implications*. Edited by W. C. Ritchie. New York: Academic Press, Inc., 1978, pp. 65--89.
- Ervin-Tripp, S. "Is Second Language Learning Like the First?" *TESOL Quarterly*, Vol. 8 (1974), 111--27.
- Gendron, J. D. *Commission of Inquiry on the Position of the French Language and on Language Rights in Quebec: Language of Work*. Quebec: L'editeur officiel du Quebec, 1972.
- Genesee, F. "Bilingualism and Biliteracy: A Study of Cross-Cultural Contact in a Bilingual Community," in *The Social Psychology of Reading*. Edited by J. R. Edwards. Silver Spring, Md.: Institute of Modern Languages, 1981b, 147--72.

- Genesee, F. "Bilingual Education of Majority Language Children: The Immersion Experiment in Review," *Applied Psycholinguistics*, Vol. 4 (1983), 1-46.
- Genesee, F. "A Comparison of Early and Late Second Language Learning," *Canadian Journal of Behavioral Sciences*, Vol. 13 (1981a), 115-25.
- Genesee, F. *Evaluation of the Laurenval Early Partial and Early Total Immersion Programs*. Montreal: Psychology Department, McGill University, 1981e.
- Genesee, F. "Is There an Optimal Age for Starting Second Language Instruction?" *McGill Journal of Education*, Vol. 13 (1978b), 145-54.
- Genesee, F. "A Longitudinal Evaluation of an Early Immersion School Program," *Canadian Journal of Education*, Vol. 3 (1978a), 31-50.
- Genesee, F. "Second Language Learning and Language Attitudes," *Working Papers on Bilingualism*, Vol. 16 (1978c), 19-42.
- Genesee, F., and W. E. Lambert. "Trilingual Education for Majority Language Children," *Child Development*, Vol. 54 (1983), 105-14.
- Genesee, F.; E. Polieh; and M. H. Stanley. "An Experimental French Immersion Program at the Secondary School Level--1969 to 1974," *The Canadian Modern Language Review*, Vol. 33 (1977), 318-32.
- Genesee, F.; R. Rogers; and N. Holobow. "The Social Psychology of Second Language Learning: Another Point of View," *Language Learning*, Vol. 33 (1983), 209-24.
- Gray, V. *Evaluation of the Grade 6 French Immersion Program in Fredericton, New Brunswick*. Fredericton, N.B.: Psychology Department, University of New Brunswick, 1981.
- Harley, B. "Alternative Programs for Teaching French as a Second Language in the Schools of the Carleton and Ottawa School Boards," *Canadian Modern Language Review*, Vol. 33 (1976), 208-15.
- Katz, P. A. *Towards the Elimination of Racism*. New York: Pergamon Press, Inc., 1976.
- Keller-Cohen, D. "Input from the Inside: The Role of a Child's Prior Linguistic Experience in Second Language Learning," in *New Dimensions in Second Language Acquisition Research*. Edited by Roger W. Andersen. Rowley, Mass.: Newbury House, 1981, pp. 95-103.
- Krashen, S. D. "Bilingual Education and Second Language Acquisition Theory," in *Schooling and Language Minority Students: A Theoretical Framework*. Developed by the California State Department of Education, Office of Bilingual Bicultural Education. Los

- Angeles: California State University, Evaluation, Dissemination, and Assessment Center, 1981, 51-79.
- Krashen, S. D. "The Critical Period for Language Acquisition and Its Possible Bases," *Annals of the New York Academy of Sciences*, Vol. 263 (1974), 211-24.
- Krashen, S. D.; M. Long; and R. Scarcella. "Age, Rate, and Eventual Attainment in Second Language Acquisition," *TESOL Quarterly*, Vol. 13 (1979), 573-82.
- Lambert, W. E. "The Social Psychology of Language: A Perspective for the 1980s," in *Language: Social-Psychological Perspectives*. Edited by H. Giles, W. P. Robinson, and P. M. Smith. Oxford: Pergamon Press, Inc., 1980, pp. 415-24.
- Lambert, W. E., and others. "Evaluational Reactions to Spoken Languages," *Journal of Abnormal and Social Psychology*, Vol. 60 (1960), 44-51.
- Lambert, W. E., and G. R. Tucker. *The Bilingual Education of Children: The St. Lambert Experiment*. Rowley, Mass.: Newbury House Pubs., 1972.
- Lenneberg, E. *Biological Foundations of Language*. New York: John Wiley & Sons, Inc., 1967.
- MacLennan, H. *Two Solitudes*. Montreal: Duell, Sloan, and Pearce, 1945.
- Maenamara, J. "Nurseries, Streets, and Classrooms," *Modern Language Journal*, Vol. 57 (1973), 250-54.
- McNeill, D. *The Acquisition of Language: The Study of Developmental Psycholinguistics*. New York: Harper & Row Pubs., Inc., 1970.
- Morrison F. *Evaluation of the Second Language Learning (French) Programs in Schools of the Ottawa and Carleton Boards of Education: Eighth Annual Report*. Ottawa, Ontario: Ottawa Board of Education, 1981.
- Nelson, K. "Individual Differences in Language Development: Implications for Development and Language," *Developmental Psychology*, Vol. 17, No. 2 (1981), 170-87.
- Penfield, W., and L. Roberts. *Speech and Brain Mechanisms*. New York: Atheneum Pubs., 1959.
- Shapson, S. M., and E. Day. *Longitudinal Evaluation of the Early Entry Immersion Program in Coquitlam School District: Report to the End of Year 6*. Burnaby, B.C.: Faculty of Education, Simon Fraser University, 1980.
- Slobin, D. I. "Cognitive Prerequisites for the Development of Grammar," in *Studies in Child Language and Development*. Edited by C. A. Ferguson and D. I. Slobin. New York: Holt, Rinehart, & Winston, Inc., 1973, pp. 175-280.

- Swain, M. "French Immersion: Early, Late or Partial?" *The Canadian Modern Language Review*, Vol. 34 (1978), 577-85.
- Swain M., and S. Lapkin. *Evaluating Bilingual Education: A Canadian Case Study*. Clevedon, Avon, England: Multilingual Matters, 1982.
- Ferrell, T. D. "The Natural Approach in Bilingual Education," in *Schooling and Language Minority Students: A Theoretical Framework*. Developed by the California State Department of Education, Office of Bilingual Bicultural Education, Los Angeles: California State University, Evaluation, Dissemination, and Assessment Center, 1981, pp. 117-46.
- Fueker, G. R. "Comments on Proposed Rules for Nondiscrimination Under Programs Receiving Federal Financial Assistance Through the Education Department." Washington, D.C.: Center for Applied Linguistics, 1980. Mimeo.

Canadian French Immersion Education

Current Administrative Arrangements and Instructional Practices

*Sharon Lapkin and Jim Cummins
Ontario Institute for Studies in Education
Toronto, Ontario¹*

The purpose of this paper is to describe the French immersion program alternatives found in Canada in terms of their administrative and instructional characteristics. Salient features of immersion programs that distinguish them from other forms of bilingual education found, for example, in the United States, are as follows:

- The programs are optional.
- They serve a primarily unilingual English-speaking population.²
- From one-half to an entire school day is devoted to instruction through the medium of the second language, French, in the initial years of the program (which may begin at various grade levels). Most or all subjects are taught in French, including French language arts.
- Immersion students study the same curriculum content as their peers in the regular program.

Each of these features has administrative and/or instructional implications. The optional nature of immersion education means that school boards electing to establish such programs must operate parallel systems, a regular English program for the majority of its students, and one or more immersion alternatives. The organization of schools, staffing, and other administrative matters are more complex than they would be in a single-program system.

The establishment of immersion programs as a result of pressure from parents is directly related to the majority group membership of these unilingual English speakers. As secure, relatively well-educated members of the majority culture, these parents were equipped to seek information about bilingual education, insist on the implementation of immersion programs, and monitor their effects through keeping

¹The authors would like to acknowledge with thanks the helpful comments made on an earlier draft of this paper by Adrienne Game, Merrill Swain, and Wendy Wright.

²In some urban boards (e.g., Ottawa Roman Catholic Separate School Board), there are relatively large third language populations.

abreast of accompanying research projects. This situation has resulted in an unusually high degree of accountability on the part of school boards, which must respond to demands for evaluation results, for reports on the allocation of resources to immersion programs, and the like.

The fact that instruction in the initial years of the programs occurs through the second language underlines the need to hire native French-speaking teachers. This need may create tensions within a school or a community because of the perception that regular program teachers may be displaced by the expansion of the immersion program. Teachers' federations are particularly concerned about the possible displacement of their members.

Even though the immersion program curriculum parallels that of the regular English program, there is still pressure on provincial ministries of education to provide program guidelines, on school boards to purchase adequate resource materials in French, on consultants and teachers to develop an appropriate curriculum for a variety of school subjects in the second language, and so on.

These instances of administrative and instructional concerns are cited to exemplify the range of topics that are central to this paper. Their importance is underlined by the rapid expansion of immersion programs across Canada. The enrollment figures of 1981-82, compiled by Canadian Parents for French,³ show that more than 75,000 students were enrolled in some form of an immersion program. This number represents an increase of approximately 10,000, or 15 percent over figures for 1980-81. In some provinces, the increase in enrollment from 1980 to 1981 was as high as 37 percent (Manitoba) and 39 percent (British Columbia). A recent article in a national newspaper states dramatically: "If growth in demand for bilingual and French immersion classes continues at the rate of recent years, every student in Calgary (Alberta) will be in one of these programs within five years" (Nelson, 1982).

To respond to this demand, school boards in all ten provinces and the two territories (the Yukon and Northwest Territories) have established several immersion program alternatives during the past 15 years or so. Some of these alternatives are listed in Figure 1. For ease of presentation, only one example of each of the four programs illustrated has been depicted graphically (figures 2 through 5); however, there is considerable variation in the percentage of instructional time through the second language across provinces, school boards, and even schools within one board of education. Results from a national

³Formed in 1977, Canadian Parents for French is a national association of parents interested in promoting increased opportunities for Canadian students to learn French. This organization publishes a quarterly newsletter as a channel of communication between parents, educators, and provincial and federal government staff.

survey of French immersion and other bilingual education programs conducted by the authors in the 1979-80 academic year show that the most common type of immersion program is the early total model (found in 77 out of 126 responding boards of education), followed by late immersion (23 boards).

Figure 1

A Description of Some Immersion Program Alternatives

<i>Kind of immersion program</i>	<i>Starting grade</i>	<i>Percentage of time in French language in first year</i>
Early Total	Kindergarten or first grade	100
Early Partial	Kindergarten or first grade	50
Delayed or Middle	Fourth or fifth grade	50 to 100
Late	Sixth, seventh, or eighth grades	50 to 100

In the sections that follow, the focus will be on early total French immersion because it is the most common variant and because other immersion alternatives tend to adopt a similar philosophy and approach. In a recent report on "French Middle Immersion," for example, the Toronto Board of Education writing team states ("French" . . . , 1981a, p. 7): "It would seem that the most appropriate model to emulate is that found in the most successful kindergarten and primary classes. . . ."



What Is the General Instructional Approach Which Characterizes Immersion Education?

The following statement from "French Middle Immersion" (1981a) deals with this question:

There are many more similarities than differences between a child's learning needs in a regular class where English is the vehicle for learning and in an immersion class where French is the language of learning and instruction. (p. 7)

⁴Only the first major word of a title is given to their titles. The complete titles appear in

the references that are cited in the text according to the cited references section at the end of this paper.

As suggested in the preceding quotation, immersion education is based on the principle that the same content is taught as in the regular English program. Second language acquisition takes place, as naturally as possible, on the model of first language learning in the home. That is, by being exposed to communication in the second language about topics that are both relevant (e.g., subject matter) and/or interesting (e.g., field trips), students are provided with the extended exposure (Krashen's "comprehensible input" [Krashen, 1981, pp. 66—67]) that they need for language acquisition.

It would be unnatural and frustrating for early immersion education students to be prevented from using their first language in the initial months of schooling. The use of English is therefore permitted among the students. This approach is understood and accepted by the teacher, who, however, speaks only French to the students, using mime and body language to get the message across as required. Building from the existing language, interests, and skills of the students, the teacher initially introduces French vocabulary items and simple phrases for comprehension. The focus is on conveying content and responding to the substance of what the students are saying, regardless of the fact that students' early communication is in their home language, English. This approach results in meaningful verbal interaction based on the realities of the child's life and the relatively concrete, context-embedded activities that occur in a kindergarten or first grade classroom. (Face-to-face conversation between the teacher and students about objects or situations found in kindergarten classrooms is one example of context-embedded communication.)

The success of this approach is described in a study of classroom interactions in first and second grade immersion and nonimmersion classrooms (Richards, 1981). The classroom climate was found to be similar in the two program settings, and Richards suggests in her conclusions (p. 223) that immersion education encourages the types of interaction that are considered desirable.

The encouragement of pupil initiations, use of personal experiences to enrich children's language use, and use of teaching strategies such as games and singing were all typical of the immersion teachers. These activities were participated in eagerly by the children and seemed to contribute to a positive classroom climate.

These principles—tolerance and appreciation of the child's home language, using the child's experience as a starting point for instruction, focusing on children's comprehension skills as teaching in the second language begins, engaging in meaningful and verbally rich conversations—are echoed in documents on immersion produced by the board and ministry of education. A good summary of the peda-

gical approach is found in the Toronto Board document cited earlier ("French . . .," 1981a, p. 7):

In general, this model involves considerable emphasis on oral language and listening; many opportunities for children to experience real activities; to work with concrete materials; to develop many ways of self-expression; to feel the support of teachers in their independent learning efforts. Children are organized in a variety of groups, small and large. They also have opportunities to work independently.

The learning activities are related to the children's level of development. Information collected through the teacher's observation of the children in their learning efforts forms the basis of further program development.

Language learning is based on real experiences. The emphasis is on whole units of language that are attached to real experiences. This avoids an emphasis on small bits of language and the study of grammar as a basis of language learning.



Do Teachers Use a Special Register⁵ When Talking to Students?

The major pedagogical assumption on which French immersion programs are based is that children will learn a second language (L₂) most effectively by what the Montreal neurosurgeon Wilder Penfield (1965) called "the mother's method." By this he means using the L₂ as a medium of instruction to communicate something meaningful to the child, rather than teaching L₂ as a separate and isolated subject. Thus, the focus of immersion teachers is:

on conveying the content to their students and on responding to the content of what their students are saying, no matter how they are saying it, or in which language it is being said. Here the importance of being able to understand the child's home language is clear. Were the teachers not able to understand English, they would be unable to respond relevantly to the child's questions or statements. There would then be no meaningful conversations, which are of crucial importance in language acquisition. (Swain and Lapkin, 1982, p. 6)

The initial focus, then, in early immersion methodology is on developing French language *comprehension* skills. Students are allowed a silent period (Terrell, 1981) of about one and one-half years (kindergarten and the first semester of the first grade) before they are

⁵In this context *register* refers to modifying one's speech (or writing) to be socially appropriate to the situation, the topic of conversation, and one's relationship to the person being addressed.

expected to use French consistently in the classroom. However, more than just the teacher's talking to students is required to develop their comprehension of French. In a study by Swain and Lapkin, other ways of teaching French are described:

Specific instructional techniques are used. Key lexical items are taught in the context of conveying real messages through the use of pictures, gestures, and other body language cues. The initial emphasis is on teaching relevant vocabulary so that, when it is used in the natural flow of speech, the general content of what is being expressed can be understood. (1982, p. 6)

Grammar is similarly taught in context through the use of:

... implicit correction by teachers during student-teacher interaction in a way similar to that which occurs when native speakers interact with non-native speakers (see, for example, Hatch, 1979; Krashen, 1981) or adults with children (see, for example, Snow and Ferguson, 1977). The explicit teaching of grammar and structures, however, is gradually also incorporated into the curriculum. (Swain and Lapkin, 1982, p. 7-8)

One study of language teaching strategies and techniques used in French immersion classrooms from kindergarten to the sixth grade shows an increasing emphasis on grammar instruction in the upper elementary grades (Ireland, Gunnell, and Santerre, 1980). Based on observations conducted in 71 visits to immersion program classrooms and the analysis of tape recordings made during those visits, the study indicates that little explicit teaching of grammar occurs during the first two or three years of an early immersion program. From about the third grade on, the curriculum includes language arts periods devoted to explicit instruction about grammatical and structural points. The time allocated to grammar explanations and exercises increases in the third through sixth grades, although such instruction is usually dealt with in specific grammar lessons rather than during periods of subject matter instruction (when the focus is on teaching academic content). Chaudron (1977) also found that teachers in late immersion programs focused primarily on content during periods of geography or history instruction, for example, leaving the correction of French language errors to be dealt with in the French language arts period.

A central feature of the instructional approach in immersion classrooms, then, is that language learning occurs through interaction with meaningful content (Wells, 1981). In this respect this instructional approach is as similar to first language acquisition as is possible in a school setting.



What Curriculum Guidelines and Special Methodologies Have Been Developed for Teaching French Language Arts and for Presenting Subject Matter Instruction in Immersion Programs?

In accordance with the general approach described previously, the objective of the French language arts component of the early immersion program is to develop the four skill areas of listening, speaking, reading, and writing. Although staff from provincial ministries of education and boards⁶ themselves differ in the way they articulate and develop this objective, documents available from across Canada indicate a consensus on the importance of the four skill areas and their sequence (e.g., *Early . . .*, 1981c; *Guide . . .*, 1977; *Grade-One . . .*, 1978).

Listening and Speaking

During the children's early years in an immersion program, a number of listening skills are stressed: (1) increasing a child's attention span; (2) improving comprehension skills so that children can grasp the meaning of increasingly complex utterances; (3) developing auditory memory so that children can recall or retell a sequence of events in a story or the instructions for a game; (4) developing the ability to discriminate among sounds; and (5) enabling children to become familiar with characteristic rhythms and intonation patterns of the language. Finally, children are encouraged to interpret the meaning of what has been said by identifying an emotion conveyed by a particular intonation pattern, preparing questions based on what has been presented orally, or identifying the theme of a story read aloud to the class.

This specification of subskills in the area of developing listening comprehension is based on the presentation of program goals and instructional objectives found in *Early French Immersion: Français I* (1981c) and generally reflects objectives cited in similar documents produced by other provinces and boards of education.

The ability to speak French is to be fostered by providing opportunities for students' self-expression and mastery of sounds, words, and basic structures of the language. The foundation for reading (begun in kindergarten and the first grade) should be established through verbal activities based on the experience and interests of the six-year-old child. In most available guidelines the usefulness of the show and tell session is presented. In *Early French Immersion:*

⁶Canadian school boards are the equivalent of school districts in the United States.

Teacher's Resource Book (1981b), ways to initiate students' communication are suggested:

Starting each day with an informal warm-up session is an excellent idea. Topics can be varied: For example, the student can tell the class what she or he had for breakfast and what went on before school and about an event that occurred the previous evening, etc. Teachers should try to make this interesting and informative so that children look forward to this period of conversation.

Using the child's experience as a basis for introducing orally the vocabulary and sentence patterns of language to be *read* is a basic principle of prereading instruction.

Reading and Writing

Both the analytic and synthetic approaches to reading instruction are endorsed, with most official statements advocating some eclecticism. Analytic approaches to reading instruction are methods in which the whole is first presented and then is broken down into smaller parts. With synthetic approaches students master progressively larger and more complex units, beginning with letters of the alphabet and building from syllables to monosyllabic and polysyllabic words, to phrases and whole sentences. (See Thonis [1981] for an extended description and discussion of these approaches.)

In one of the two reading methods used widely in Canadian French immersion programs (*La Méthode Dynamique*)⁷, the pedagogical approach is compared to the construction of a pyramid (Plante, Fortin, and Granger, 1977). The base, or first phase, is the verbal communication phase when students in kindergarten and the first grade are encouraged to express themselves orally and to become more proficient speakers of the language. The second phase, language experience, takes advantage of oral language which the students have understood and mastered by introducing the reading of sentences based on familiar utterances. Students' ability to recognize sentences and to comprehend the overall meaning of the sentence are stressed, followed by a more analytic procedure involving having the students break the sentence into functional groups and learn to recognize these second level units. In the third phase, the focus is on the syllable. The student becomes aware of the regularity of syllabic structure in French with its consonant-vowel construction and begins to relate oral syllables to their graphic representation. Finally, in the fourth phase, the syllable is broken down into its components; that is, the phoneme-grapheme relationships of the language are studied. The

⁷Both *La Méthode Dynamique* and *Le Sablier* (the other major "method" in wide use) were developed for French mother tongue reading instruction. The first is used as an illustration here because it has been adapted explicitly for use in immersion classrooms.

student recognizes the distinctive function of the phoneme and that the phoneme may be realized by a simple letter or a more complex grapheme (e.g., French [u] is written *ou*).

Thus, this method involves both synthetic and analytic approaches to reading. The primary emphasis is on language experience for students, followed by subsequent attention to phonic skills. Once the students have learned how to decode written French, other aspects of the reading skill receive greater attention. These aspects include research techniques such as the use of a dictionary and some literature appreciation activities. The mechanics of writing are introduced in the first grade French language arts curriculum. The most advanced activity required of first grade students is the composition of simple sentences based on vocabulary items provided by the teacher or the completion of a short text based on reading materials familiar to the students.

In the article on reading instruction for minority language students in the United States, Thonis (1981, 153—154) lists skills that transfer from first language (L_1) reading to L_2 . The previous discussion of the approach to reading in French immersion classes implies that proponents of immersion education believe that the skills taught in L_2 in this majority group context are equally transferable to the students' L_1 . The degree of successful transfer is documented in Swain's presentation (this publication) of results from evaluations of immersion program students' L_1 achievement. Positive transfer from French to English may be enhanced by any reading activities carried out in the home where parents of immersion students often read to their children in English.

Studies of the relative effectiveness of the language experience and phonic approaches in promoting transfer of L_2 reading skills to L_1 are rare. In one such study, however, Pycock (1977) compared English comprehension results and English compositions written by students in four third grade bilingual program classes (two tested in 1975 and two in 1976). In this program, reading in French is introduced in the first grade, and reading in English is introduced in the second grade. French and English teachers who were involved in the program felt that the existing phonic approach used to introduce English reading in the second grade was creating confusion for students who were also attempting to master French phonics. The study was undertaken to investigate whether greater progress would be made in English reading if phonics were deemphasized and a language experience approach were adopted.

When English was introduced in the second grade, the phonic approach to reading was used in two classes, and two classes were exposed to a language experience approach. The language experience

group had higher reading comprehension scores and wrote longer compositions with more adjective clauses and fewer spelling errors than the phonically trained students.

Subject-Matter Instruction

Instruction in subjects such as mathematics or science is conducted through the medium of the second language. In accordance with guidelines from the ministry of education in each province, these subjects are introduced into the immersion program at times which parallel their introduction in the regular English school curriculum. Few difficulties occur during this process in early French immersion programs because relevant vocabulary and concepts can be introduced slowly with the aid of concrete objects in a highly context-embedded manner. When immersion begins in later grades, the teacher must spend time during the initial weeks introducing specialized vocabulary so that students have the skills necessary to understand subjects, such as science, at an appropriate level. (We shall return to this topic later.)

Figure 2

Percentage of Instructional Time in French in Immersion Programs: Some Examples

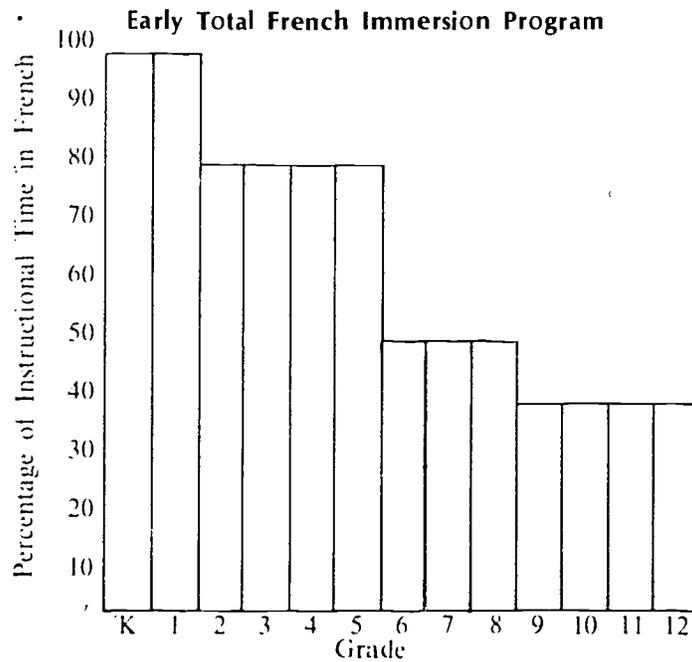


Figure 3

Early Partial French Immersion Program

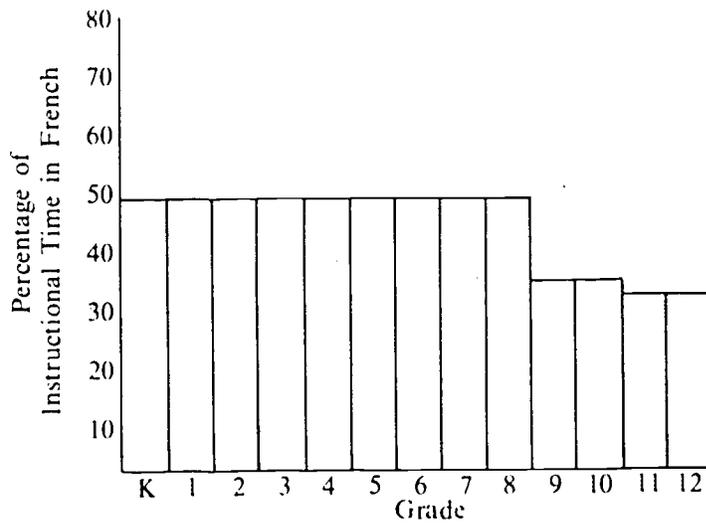


Figure 4

Delayed or Middle Immersion Program

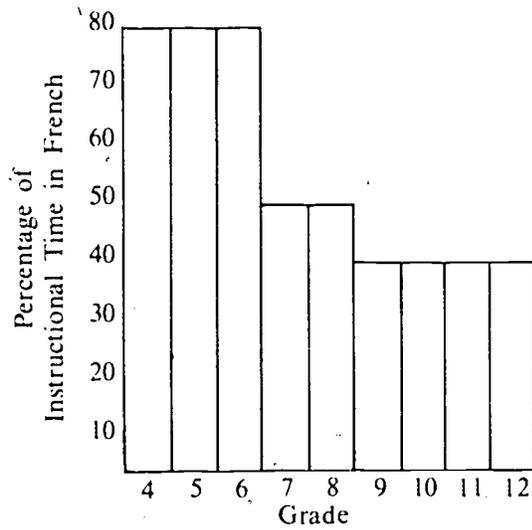
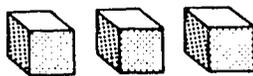
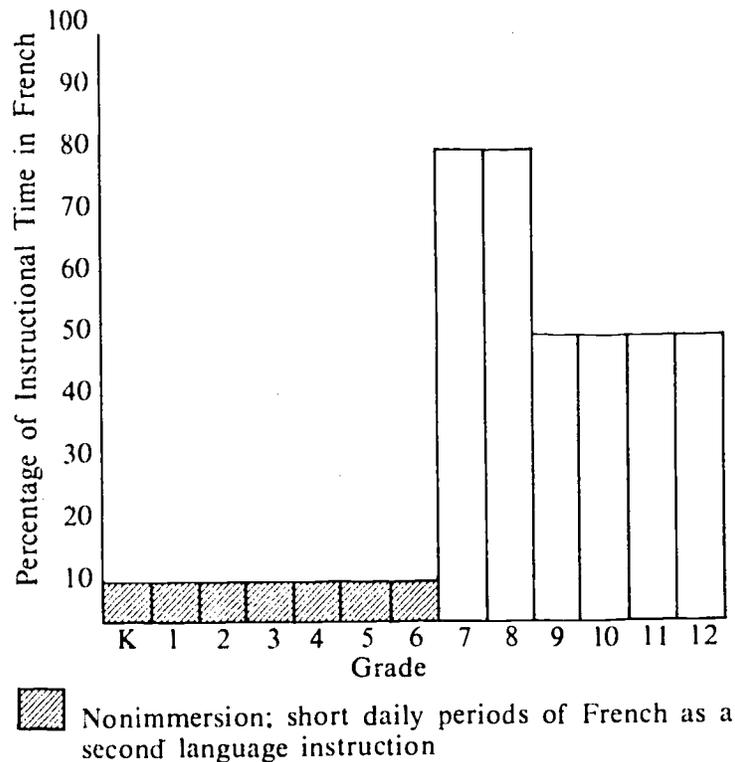


Figure 5

Late Immersion Program



How Is the Instructional Time Divided Between French and English?

In the *Early French Immersion: Administrator's Resource Book*, (1981a), published by the British Columbia Ministry of Education, one finds the following response to this question:

Although there is no general agreement as to which choice of subjects to be taught in French is more effective, it is felt that continuity from one grade to another within specific subjects is of prime importance. Teacher availability and specific subject knowledge is another factor to be considered in the selection of subjects to be taught in French. (p. 3)

The allocation of instructional time to English and French is shown in figures 2 through 5. In early total immersion programs (Figure 2), English or L₁ language arts are not usually introduced until about the third grade. Before then, subjects such as mathematics, science, or music are introduced in as context-embedded a manner as possible so that the vocabulary items needed for specific subjects are mastered before students are expected to grasp the new concepts involved. The *Early French Immersion: Teacher's Resource Book* (British Columbia, 1981b, p. 11) presents the following approach for children beginning an early total French immersion program:

... we must limit our explanations and start from very concrete situations that children can identify with. The material should not be elaborate but come from the child's surroundings. Since children learn best when they are "doing," they need the opportunity to manipulate and experiment.

The mathematical or scientific concepts learned in French in the early years transfer to students studying these subjects in L₁ in later grades (Swain, this publication). When the proportion of instructional time allocated to English increases (in the fourth, fifth, or sixth grades of early immersion; see Figure 2), any subject area can be chosen for either language. However, the instruction in each language should be done by a native or native-like speaker of that language; that is, there should be *two* teachers for immersion students once English has been introduced into the curriculum. The *Early French Immersion: Administrator's Resource Book* (1981a, p. 3) contains the following suggestion:

whenever possible it is advantageous to team teachers from years four through seven so that one teacher handles the French component and one teacher handles the English component. In this way the students are able to identify one teacher with one language.

In later grades it becomes increasingly important to have subject specialists—teachers possessing appropriate qualifications to teach senior elementary and secondary school mathematics, biology, history, and other subjects. The decision about which subjects are to be taught in each language is best made in the light of the availability of qualified teachers rather than by other criteria. Intuitively, one may believe that subjects such as history or science offer greater possibilities for L₂ development (more varied vocabulary and range of structures) than does mathematics, for example. In fact, little research on this topic exists. One study, conducted in Montreal (Adiv and Walsh, 1981), examined student achievement in French at the tenth grade. The students were in five different classes, studying different core subjects through French: history, geography, biology, and mathematics (two classes). The students' results on a pretest and a post-test of

French proficiency were compared with those of a class of native French-speaking students taking all of their subjects in French. This study addressed two main questions (1982, p. 2):

1. Over the course of a school year, does overall performance in the second language improve equally when students take different core subjects in French?
2. Is the level of French proficiency attained by students taking history and geography courses higher than that attained by students taking mathematics and biology courses?

Based on a limited sample of students, the results indicate that the answer to the first question is yes; to the second, no. The level of French proficiency did not appear to be directly associated with the content of any of the subjects examined. The French proficiency of students studying each of the subjects in question improved during the school year. Moreover, no evidence exists to suggest that history and geography provided a linguistically richer content than did mathematics and biology.



Are There Curriculum Materials Specifically Designed for the Immersion Program?

The reading method outlined in the last section (*La Méthode Dynamique*) serves as a rare example of a series of materials explicitly designed for the immersion education context. Some simplification was involved in the adaptation of the original method designed for francophone students studying in French L₁ schools. An examination of the first reading passages of the two editions (Figure 6), however, shows that few differences are apparent.

By the end of the first readers, the greater complexity of the L₁ text is more evident. As one example, in the last passage of the L₁ reader, present, simple future, and past verb tenses are all used. These are not introduced in the L₂ reader until the latter part of the second grade, when they are used minimally.

The adaptation of existing materials and the creation of new ones constitute perhaps the most problematic aspect of implementing an immersion program. Only three surveys of materials in use have been conducted ("Recueil . . .," 1979, 1982; *A Survey . . .*, 1977).

We know of no systematic accounts of what modifications should be made to adapt francophone materials for use in teaching mathematics, for example, in immersion.

The problem is more pronounced in programs with a later starting grade (middle or later immersion). In the case of early immersion, the conceptual level of materials designed for francophones is appropriate to the students aged five or six years. The language in which any given materials are written may be too complex, but it can be simplified (as illustrated in the previous discussion of reading). A later immersion student, aged eleven, may be used as an example. This student requires material that will be stimulating and conceptually appropriate, with the content paralleling what is taught in the regular English program; yet, if the materials have been written for French L₁ students, the language used is inevitably too complex to permit students to grasp the substance of what is being presented. This dilemma has been recognized, but few organized attempts to produce suitable materials have been made.

Figure 6

Comparison of Sample Passages Taken from a French L₁ Reader and a French L₂ Reader

<i>L₁ Example</i>	<i>L₂ Example</i>
Guy joue avec son ballon.	Luc sort de sa maison.
René court avec Alice.	Fido sort de la maison.
René court vite.	Luc marche, marche, marche.
Alice ne court pas vite.	Fido trotte, trotte, trotte.
Guy rit avec René et Alice.	Fido traverse la rue.
Linguistic Similarities and Differences	
Use of three different verbs	Use of four different verbs
Use of 12 different vocabulary items (<i>ne...pas</i> counted as one)	Use of 11 different vocabulary items
All verbs are intransitive.	Three intransitive verbs and one transitive verb
All complements are adverbial.	Two types of complement; greater variety of sentence structures are presented.
Use of semantic variety in verbs	All verbs relate to movement and direction of movement.
Use of negative mood.	All sentences are affirmative.

The following statement in a board-produced document reflects the state of the art ("Report . . .," 1981b, p. 9):

Presently, the program relies heavily on teacher-made materials. Although this is to be expected in the pilot stages of the project, every effort should be made to identify commercially available material which could be used in the program with slight adaptations.



How Are Students Grouped in French Immersion Classrooms?

In the following section the way in which the schools are organized to accommodate immersion programs is described. As a preamble to any discussion of grouping practices, it is important to emphasize that immersion students are generally from a homogeneous population (usually from English-speaking home backgrounds). These students attend a program housed in a separate school or in a distinct stream within a school divided between French immersion and the regular English program. When students enter the early immersion program, they have had no previous exposure to French. When students enter the late immersion program, whatever previous instruction in French as a second language they may have had has been quite limited. Thus, one salient characteristic of immersion program students is that, on entry into the program, they are linguistically in the same situation.

Given the policy of following the curriculum of the regular program, one finds that classroom grouping strategies in French immersion programs appear to be similar to those in English classrooms. Few formal studies have been carried out to assess grouping strategies in immersion programs, but informal observation suggests that children are grouped most commonly for purposes of reading instruction. Groups generally consist of about four to six children, with similar levels of reading skills within the groups.

In a study comparing teacher-centered and activity-centered approaches to immersion teaching, Stevens (1976) demonstrated that the second language skills of students in an activity-centered program were comparable to those of students in a more traditional teacher-centered program, although the latter group of students had almost double the exposure to French in longer class periods. The essential characteristics of the activity-centered approach can be summarized as follows (Stevens, 1982, pp. 1--2):

1. There is no attempt to structure linguistic content.
2. Students choose their own area of study within the theme suggested by the teacher.
3. Students do whatever is necessary to find the information required; i.e., go out and look for it, ask someone for information, or check reference books.

4. Students present their findings in a form which they have selected; i.e., by means of a model, a picture, a written handout, or whatever means they consider appropriate.
5. Students use each other as well as the teacher as resource persons.

The opportunity for students to use French in more authentic situations and in direct interaction with their peers enhanced their motivation to learn. Similarly, their role in making decisions about the content and form of their activities led to a higher level of commitment to learning the second language.

The language background of students on entry into the immersion program may affect grouping practices. For example, in some school systems in western Canada, students from French language backgrounds and English language backgrounds attend the same French language school program. The general objectives for both groups are the same, namely, to develop full bilingual skills in French and English. In most cases, however, segregating the linguistic groups in the early elementary grades is considered advisable to avoid a submersion situation for the anglophones and also to shield the francophone students as much as possible from peer exposure to English, increasing the pressures to replace French with English. This concern is a very real one because research has shown that fifth and sixth grade francophone students who speak French at home and whose school program is 80 percent French (kindergarten through the sixth grade) still preferred to use English with friends outside the classroom (Carey and Cummins, 1978) and rated themselves as being somewhat more comfortable in English than in French (Cummins and Gulutian, 1974). After the second grade, students in the French and English streams are partially integrated, but it is likely that grouping practices within classrooms may reflect language background differences to a certain extent, although this issue has not been investigated. In the provinces of Manitoba, Ontario, and New Brunswick, this issue does not arise to the same extent, since most francophone students attend the separate francophone school systems in these provinces. However, in Nova Scotia, Newfoundland, and the western provinces of Saskatchewan, Alberta, and British Columbia, the provision of French language programs for francophones usually requires the inclusion of a substantial number of anglophone students because of smaller concentrations of francophones.

Students from third (i.e., non-French, non-English) language backgrounds generally have not been represented in large numbers in French immersion programs. Statistics from the Toronto Board of Education, for example, show that in schools which had an immersion program, 27 percent of the students had a father who was born outside of Canada (an indirect index of students' language back-

ground). These students, however, were more than twice as likely to be in the English rather than in the French immersion program in these schools. The only board that has a substantial number of third language background children in French immersion programs is the Ottawa Roman Catholic School Board, which operates a team-teaching 50 percent French, 50 percent English program that is attended by over 90 percent of the students in the system.

No special grouping arrangements are made for students from third language backgrounds in immersion programs. The criteria for grouping students are based on their classroom performance rather than background characteristics. Thus, a possibility exists that in the Ottawa program mentioned previously, third language background students may be overrepresented in some grouping categories; but this issue has not been formally investigated.

Thus, in general, grouping practices in French immersion programs are similar to those in regular English programs. Whole-group instruction, small-group instruction, and individual student work occur in virtually all classrooms every day. However, it is possible that more effective use could be made of grouping strategies to achieve objectives of immersion programs that are not shared with the English program. One such objective is the development of immersion students' fluent French-speaking skills, since these students' speech commonly has nonnative-like qualities. Swain (1983) suggests that this difference may occur because these students have relatively little opportunity to use French in the classroom except in response to teachers' questions. Small-group project work or discussions are obvious ways of encouraging students to use French functionally in the classroom and thereby to approximate native-speaker norms more rapidly. In schools where francophone classes are housed, some small-group activities or projects could be jointly organized, with francophone and immersion students distributed throughout the groups.



Are There Different Types of School-Level Organizations Appropriate for Immersion Programs?

Having examined some features of the instructional approach used in immersion programs, we now turn to a consideration of the administrative arrangements characterizing this form of bilingual education.

A superintendent from a large Ontario board that had offered an immersion program for nine years wrote: "The main source of

[administrative] problems arising from early immersion is, paradoxically, its almost certain success (McGillivray, 1979, p. 106).

Among the administrative concerns in developing an immersion program, one of the more difficult ones is the decision about where to locate an immersion program. A balance must be struck among factors that are not always compatible: (1) the degree of parental support and pressure in a given community; (2) the enrollment statistics and history of a particular school; and (3) the possible need to provide transportation to make the program widely available. For example, if a community school is suffering from severely declining enrollments, it may have the space to house the immersion program. However, regular English program parents as well as English-speaking staff may fear that, with the establishment of an immersion program, the status of the English program as part of the mainstream will be threatened and that teaching positions filled by monolingual English speakers will gradually disappear. That school would then become what has been labeled an immersion "centre." The solution may be to transport the English program students out of their community school to another school where the English program is stronger. In communities where this approach has been tried (McGillivray, 1979), it has often caused hostility among those who believe in the concept of the community school and who understandably resent that their children can no longer walk a short distance to school but must take a bus.

To avoid resentment and accommodate both programs equitably, administrators across Canada have chosen dual-track schools where both the regular English and French immersion programs operate side by side. In such cases the ideal condition is that an equal number of students entering kindergarten (in the case of early immersion) opt for each program every year. Sometimes this situation happens quite naturally; in other instances boards may choose to establish an upper limit for immersion program kindergarten enrollment and draw lots, if necessary, for the available spaces.

The decision to house the immersion program in a centre, as opposed to a dual-track arrangement, has many administrative implications. Before considering these implications, administrators should review other possibilities for school-level organization. In some provinces, for example, immersion programs are located in French mother tongue schools (Downie, 1981; Cummins and Lapkin, 1982; Olson and Burns, 1981). The French achievement of these students in immersion programs in these schools is often superior to that of immersion program students who do not have the advantage of a French environment at school beyond the immersion classroom itself. Locating the program in a French L₁ school, however, may prove a sensitive issue in view of francophone parents' fears that doing so may

act as a catalyst in hastening the increasing assimilation to English which they perceive. (This concern is prevalent mainly in provinces outside Quebec.)

It is undoubtedly more cost-effective to locate the immersion program in a French L₁ school where libraries are well stocked with French books and where staff are French speaking and usually bilingual. Similarly, the immersion centre offers advantages: (1) greater likelihood of bilingual principals; (2) more resources for subjects taught in French; (3) possible greater team spirit among the staff; and (4) the possible greater availability of coordinated in-service training for teachers. Olson and Burns (1981, 171-72) also mention such factors as the potential for long-range planning and the greater incentive to monitor the budget closely, an incentive which diminishes in schools where two or more programs compete for resources.

In a study of the relationship between two types of school-level organization (immersion centres or dual-track schools), questionnaires were administered to school staff to supplement the achievement results recorded for students in both settings (Lapkin and others, 1981). No statistical analysis of the questionnaire data was carried out, but the information gathered pointed to two salient differences between the two school settings. First, the proportion of French material on display in immersion classrooms and in the school corridors was greater in the immersion centres than in the dual-track schools. Second, a greater number of school assemblies, announcements, and special school events were carried out in French in the immersion centres.

Staff characteristics also varied in the two school settings. Immersion centre teachers had, on the average, slightly more experience teaching in an immersion program than did their dual-track counterparts. In general, staff from the immersion centre had the more favorable attitudes toward the immersion programs.

Across both settings, teachers remarked on the need for more resource materials in French. Immersion centre teachers, however, assessed the availability of suitable materials in their schools more favorably than did dual-track immersion teachers.

The relative merits of immersion centres and dual-track schools should always be considered in relation to social variables, as well as educational outcomes. Thus, one principal who was asked to write an appendix for *Early French Immersion: Administrator's Resource Book* (1981a, p. 9) points out several advantages of the dual-track arrangement:

It helps to extinguish the notion that to learn another language one must attend an exclusive institution for all of one's schooling. And, it demonstrates how one might cope in a community where two cultures must coexist. A surprising number of exchanges are made possible at the pupil

staff, and parents. Perhaps from a Canadian point of view, this kind of experience will better equip our pupils to deal with the bilingual-bicultural situation in our country.



What Special Staffing Arrangements Characterize Immersion Education?

It is still rare in Canada to find teachers trained specifically for the immersion education context. Some boards, searching for qualified personnel from among currently employed staff, encourage teachers of French as a second language (FSL) (in the usual core program of 20- to 40-minute daily instructional periods) to teach in immersion programs, although these teachers have never been regular classroom teachers. Thus, specialists in FSL may be required to become generalists overnight. The opposite also holds. Francophone teachers employed in French L₁ schools may be asked to move into immersion teaching without ever having been trained in second language pedagogy.

The need to train teachers for immersion programs is generally acknowledged, but few organized attempts to do so have been made. Reporting on results of a survey of 51 immersion teachers in eight boards of education in Northern Ontario, Olson and Burns (1981, p. 13) suggest that:

For French immersion to be successfully implemented in a school, teachers should have French immersion expertise. The majority of immersion teachers whom we have interviewed indicated that they were hired and left to their own resources in the development of a classroom curriculum. In most instances they were urged to translate and then teach the regular curriculum in French and to utilize whatever materials they could get their hands on.

The Ontario Ministry of Education requires that the immersion teacher hold an Ontario teaching certificate (or equivalent) and that this person take the first part of a three-part program offered through faculties of education (teacher training institutions) in the province, resulting in what is known as additional qualifications. The first part deals generally with methodology for teaching French as a second language. Components dealing with French immersion education are usually relegated to part two (which is not compulsory). No survey has been conducted to assess whether the certificated teachers who have taken part two of the FSL in-service training perceived the program as relevant and meaningful to French immersion education.

No statistics are available on what proportion of immersion teachers in Ontario actually possess the additional qualifications.

Responses from boards of education across Canada to the question of criteria in teacher selection for immersion programs indicate that possession of a provincial teaching certificate and knowledge of French are the two most important. Other priorities cited include knowledge of English, previous relevant experience, and specialist training. Boards do report some difficulty in locating qualified teachers. Of the 100 boards that responded in this Canadian survey, exactly one-half reported that the supply of qualified teachers was inadequate.



What Special Support Services are Necessary for Immersion Programs?

As French immersion programs have continued to expand across Canada, school system staff members increasingly have accepted the necessity to provide support services *in French* equivalent to those provided to regular program students. Special education constitutes the most significant of these support services. In the initial years of immersion programs, students who experienced learning difficulties in the early grades would often be transferred to the English program because no remediation was available in French. Because this practice is considered to have many undesirable features (e.g., damage to child's self-esteem, loss of French skills, and so forth) (Bruck, 1978-79), some of the larger systems have implemented diagnostic and remediation services in French which are specifically designed to meet the needs of immersion students.

Despite this provision of support services in French, teachers in immersion programs often tend to assume (erroneously, according to Bruck's [1978] research) that students who experience difficulty ought to be removed (Olson and Burns, 1981). This assumption indicates the need for another form of support service for immersion teachers, namely, better preservice and in-service training. For example, Olson and Burns (1981) report that in their Northern Ontario sample, 68 percent of the immersion teachers indicated that they did not have any training specifically designed for teaching French immersion. Seventy-five percent of the teachers indicated that they did not have any preservice training, and 88 percent indicated that they were not enrolled in an ongoing in-service training program. Despite the enormous amount of research that has been conducted, many French immersion teachers are unaware of all but the most general finding



What Are the Administrative Difficulties Associated with the Implementation of French Immersion Programs?

One administrative problem has been the attrition of students from kindergarten through the sixth grade. Data provided by the Toronto Board ("Report . . ." 1981b) show a decline in the number of students in immersion programs of about 5 percent per year across the elementary grades. This attrition is caused largely by students leaving the area. Because the potential for students' late entry into the program is very much reduced as a result of the necessity to know French, this attrition can lead to very small class sizes by the later grades. Several school systems (e.g., Edmonton, Regina) have implemented programs to prepare students for late entry into the first or second grade of early immersion. In recent years the attrition rate at higher grade levels has been offset by the phenomenon of "drop-ins," students whose families have moved from one jurisdiction with an immersion program to another.

The Edmonton model involved a six-week intensive summer program, which was evaluated as being generally effective in helping to integrate students who missed the kindergarten starting point. Late-entry students tended to perform worse than others after one year in the immersion program, but by the second year, the differences had disappeared. However, teachers tended to resent the extra work involved in helping late-entry students catch up.

The Regina model consists of a transition program that takes place during the regular school term for first and second grade students. The transition students spend most mornings with a separate transition teacher; then they join their respective first or second grade immersion program peers in the afternoons. An aide is also available to assist the regular immersion teachers so that transition students can continue to receive extra help when needed (*CPF Newsletter*, No. 15, November, 1981).

The provision for such special catch-up programs is relatively rare, although, according to the Cummins and Lapkin survey (1982) of bilingual programs across Canada, the majority (70 percent) of the boards do allow students to enter the bilingual programs after the initial grade. The most common criteria for permitting late entry are that the students (1) have a francophone background; (2) are transferring from a bilingual program in another location, and (3) are in specified grade levels (normally the first two grade levels of a program).

As with most forms of alternative school programs, transportation of students to the school often involves administrative difficulties and cost. In the Cummins and Lapkin survey, approximately two-thirds of the boards surveyed took full financial responsibility for transporting students to the immersion program; and in the remainder parents either fully assumed or shared the responsibility. In about half the cases where parents assumed financial responsibility, the board provided administrative assistance, usually in the form of help in organizing car pools.

Provision of transportation by the board can have a dramatic effect on student enrollment in immersion programs. For example, the Toronto Board of Education ("Report . . .," 1981b) states that:

In 1980 the 40 percent increase in enrollment and establishment of four new schools may be attributed largely to the implementation of transportation policy for those students residing beyond the immediate attendance area of the designated school (p. 12).

The same report (p. 16) also reveals the following concerns among staff and parents in schools where extensive use of transportation is made:

- The need to provide more extensive lunchtime supervision and programs
- Growing concern among nonimmersion local parents that the outsiders have too much influence in the running of the school
- Some immersion students using transportation provided are putting in ten-hour days
- Transportation precludes for many participation in after school programs and field trips

The combination of overall declining enrollments and the influx into immersion programs of students from outside the immersion school district has both positive and negative implications for the English program. On the one hand, as already noted, parents of children in English programs may fear that immersion education will take over their neighborhood school and community and that parents may produce pressure on the school staff. On the other hand, the Toronto Board report ("Report . . .," 1981b) notes that, because total student enrollment in a school determines the allocation of administration (e.g., vice-principal, librarian, and so forth) and subject specialist (e.g., music) staffing, the English program in the school benefits from the extra resources which are allocated as a result of the immersion program.

Finally, it is obvious that all extra services provided for immersion programs have cost implications. However, as has been emphasized throughout this paper, the curriculum and services provided for immersion education are designed to match those of the regular pro-

gram, and thus, once implemented, should not cost appreciably more than equivalent services in the regular program. Thus, in most discussions of the cost factor in immersion education, a distinction is made between implementation, or start-up costs, and operational costs once the program has been fully implemented.

Clearly, the implementation costs of immersion programs (e.g., for curriculum development, adaptation, library resources, staff training, and so forth) are as significant as for any large-scale innovative program. These costs have been largely offset at the local level by federal and provincial incentive grants. However, from the point of view of operational costs, a general consensus exists that immersion education is *cheaper* in absolute terms and enormously more cost-effective than traditional French-as-a-second-language (FSL) programs. The cheaper absolute cost in comparison to FSL occurs because there is little add-on teacher cost in immersion programs. The greater cost-effectiveness of immersion programs is due to the success these students have in learning French in comparison to the unimpressive results achieved in FSL. In terms of cost, traditional FSL is the most costly, followed by extended French (approximately 75 minutes per day of French instruction), early total immersion programs, and partial immersion programs, which consist of 50 percent French and 50 percent English, with the morning or afternoon devoted to each language. Thus, paradoxical though it seems, the two elementary programs with the greatest amount of French are less costly and much more cost-effective than those with less time devoted to French⁸.



Conclusions

It is clear that, judged by almost any criterion (rapid increase in popularity, parental support, academic results), French immersion education for majority language students has been a highly successful form of bilingual education. Fundamental to its pedagogical success are the principles of comprehensible input and the common underlying proficiency. This paper contains a review of the general pedagogical approach and of the specific instructional strategies and materials whereby teachers make comprehensible to students not only the target language (French) but also the underlying academic skills relevant to students' progress in English language arts. A remarkable aspect of the research findings is that the general pedagogical

⁸We are indebted to Adrienne Game of the Ottawa Roman Catholic Separate School Board for bringing these comparisons to our attention.

approach and the underlying theoretical principles appear equally applicable at a variety of different initial grade levels.

However, although bilingualism may be without tears (Swain, 1983) for French immersion students, it is certainly not without administrative problems and political ramifications which affect its implementation. Problems of a lack of qualified teachers, student attrition, lack of transportation, and local community divisiveness must be faced by administrators and school board members. These problems are very similar to those often faced by administrators and communities in the United States attempting to implement bilingual education programs for minority students. However, in contrast to bilingual education programs in the United States, the administrative and political factors operating against the spread of immersion in Canada have not greatly slowed this program's momentum. This momentum can be attributed to the program's research support and to parents' and community members' seeing the educational effectiveness of immersion. Local community pressure, backed by federal and provincial financial support, has made it very difficult for school districts to resist implementation of French immersion. This articulate community involvement has played a vital role in facilitating the resolution of administrative and political difficulties and, consequently, in ensuring the continued rapid spread of French immersion.

An important implication for bilingual education in the United States is that successful programs depend not only on a sound basis in research, theory, and pedagogic principles, which bilingual education in the United States has, but also on active and articulate community involvement. Unfortunately, this community involvement is currently often lacking in bilingual programs in the United States for reasons related to the subordinate or caste (Ogbu, 1978) status of many minority communities.

Selected References

- Adiv, E., and S. Walsh. "Learning French Through Different Core Subjects: The Effects of Linguistic Content on Second Language Proficiency." Montreal: The Protestant School Board of Greater Montreal, 1981. Mimeo.
- Bruck, M. "The Suitability of Early French Immersion Programs for the Language Disabled Child." *Canadian Journal of Education*, Vol. 3 (1978), 51-72.
- Bruck, M. "Switching Out of French Immersion." *Interchange*, Vol. 9 (1978-79), 86-94.
- CPF Newsletter*, No. 15, November, 1981.
- Carey, S. T., and J. Cummins. *English and French Achievement of Grade 5 Children from English, French and Mixed French-English*

- Home Backgrounds Attending the Edmonton Separate School System English-French Immersion Program: Report Submitted to the Edmonton Separate School System*. Edmonton: Separate School System, 1978.
- Chaudron C. "Teachers' Priorities in Correcting Learners' Errors in French Immersion Classes." *Working Papers on Bilingualism*, Vol. 12 (1977), 21-44.
- Cummins, J., and M. Gulutsan. "Bilingual Education and Cognition." *Alberta Journal of Educational Research*, Vol. 20 (1974), 259-69.
- Cummins, J., and S. Lapkin. "Evaluation of the 1981-82 Bilingual Program. Report Presented to the Frontenac-Lennox and Addington County Roman Catholic Separate School Board." Toronto: Ontario Institute for Studies in Education, 1982. Mimeo.
- Downie, D. A. "Selected Highlights from French Immersion Programs in Manitoba An Evaluation." Winnipeg, Manitoba: Bureau de l'Éducation Française, 1981. Mimeo.
- Early French Immersion: Administrator's Resource Book*. Vancouver, British Columbia: Ministry of Education, 1981a.
- Early French Immersion: Teacher's Resource Book*. Vancouver, British Columbia: Ministry of Education, 1981b.
- Early French Immersion: Français I*. Vancouver British Columbia: Ministry of Education, 1981c.
- "French Middle Immersion" (Draft Two). Toronto: Toronto Board of Education, Modern Languages Department, Curriculum Division, December, 1981a. Mimeo.
- Grade-One Immersion: French-Second Language* (Revised edition). Ottawa: The Carleton Board of Education, August, 1978.
- Guide: Programme d'Immersion, Maternelle et Première Année*. Manitoba: Ministère de l'Éducation, 1977.
- Hatch, E. "Simplified Input and Second Language Acquisition." Paper presented to the annual meeting of the Second Language Acquisition Symposium Linguistic Society of America, Los Angeles, 1979. Mimeo.
- Ireland, K.; K. Gunz; I. Santerre. "A Study of the Teaching and Learning of Aural Oral French in Immersion Classes." Ottawa: Ontario Institute for Studies in Education, 1980. Mimeo.
- Krashen, S. D. "Bilingual Education and Second Language Acquisition Theory." in *Schooling and Language Minority Students: A Theoretical Framework*. Developed by the California State Department of Education, Office of Bilingual Bicultural Education, Los Angeles: California State University, Evaluation, Dissemination, and Assessment Center, 1981. 51-79.
- Lapkin, S., and others. "The Immersion Centre and the Dual-Track School: A Study of the Relationship Between School Environment

- and Achievement in a French Immersion Program," *Canadian Journal of Education*, Vol. 6, No. 3 (1981), 68-69.
- MacNab, G. E. "The Effect of French Immersion on the Core (English) Program." Research Report 78-10. Ottawa, Ontario: Ottawa Board of Education, Research Centre, 1978. Mimeo.
- McGillivray, W. R. "Administrative Problems of Early French Immersion," in *So You Want Your Child to Learn French!* Edited by B. Mlacak and E. Isabelle, Ottawa, Ontario: Canadian Parents for French, 1979, pp. 106-110.
- Nelson, B. "Calgary's Craze Is for French," *The Globe and Mail*, March 26, 1982.
- Ogbu, J. *Minority Education and Caste*. New York: Academic Press, Inc., 1978.
- Olson, C. P., and G. Burns. "Immersed for Change: Politics and Planning in French Immersion," *Orbit*, Vol. 12, No. 5 (December, 1981), 14.
- Penfield, W. "Conditioning the Uncommitted Cortex for Language Learning," *Brain*, Vol. 58 (1965), 787-98.
- Plante, Y; N. Fortin; and P. Granger. *Le Guide 1: Une Pédagogie de la Lecture Française Pour les Enfants des Milieux Bilingues et des Classes d'Immersion*. Montreal: Editions Projects, 1977.
- Pycocck, C. J. "The Effectiveness of Two Approaches Used to Introduce English in Grade Two Bilingual Classes." Montreal: South Shore Protestant Regional School Board, 1977. Mimeo.
- "Recueil de Documents Pédagogiques Préparés pour les Classes d'Immersion Française." Ottawa, Ontario: Canadian Association of Immersion Teachers, 1979 and 1982. Mimeo.
- "Report on the Implications of French Immersion for the Toronto School System." Toronto: Toronto Board of Education, 1981b. Mimeo.
- Richards, M. K. "A Comparison of Classroom Climate in Regular and French Immersion Classes," Ph.D. diss., University of Toronto, 1981.
- Snow, C., and C. Ferguson. *Talking to Children: Language Input and Acquisition*. New York: Cambridge University Press, 1977.
- So You Want Your Child to Learn French!* Edited by B. Mlacak, and E. Isabelle. Ottawa, Ontario: Canadian Parents for French, 1979.
- Stevens, F. "Activity-Centre Approaches to Second Language Learning." Montreal: Concordia University, Montreal, 1982. Mimeo.
- Stevens, F. "Second Language Learning in an Activity-Centred Programme." Ph.D. diss., Concordia University, Montreal, 1976.
- "Suggested Materials for the French Immersion Program in Ottawa: Early Immersion K--8." Ottawa: Ottawa Board of Education, 1976. Mimeo.

- A Survey of French Immersion Materials (K-6)*. Edited by S. Lapkin and J. Kamin. Toronto: Ontario Institute for Studies in Education, 1977.
- Swain, M. "Bilingualism Without Tears," in *On TESOL '82 Pacific Perspectives on Language Learning and Teaching*. Edited by N. A. Clarke and J. Handcombe. Washington, D.C.: TESOL, 1983, pp. 35-46.
- Swain, M., and S. Lapkin. *Bilingual Education in Ontario: A Decade of Research*. Toronto: Ministry of Education Ontario, 1981.
- Swain, M., and S. Lapkin. *Evaluating Bilingual Education: A Canadian Case Study*. Clevedon, Avon, England: Multilingual Matters, 1982.
- Terrell, T. D. "The Natural Approach in Bilingual Education." in *Schooling and Language Minority Students: A Theoretical Framework*. Developed by the California State Department of Education, Office of Bilingual Bicultural Education. Los Angeles: California State University, Evaluation, Dissemination, and Assessment Center, 1981, pp. 117-46.
- Thonis, E. W. "Reading Instruction for Language Minority Students," in *Schooling and Language Minority Students: A Theoretical Framework*. Developed by the California State Department of Education, Office of Bilingual Bicultural Education. Los Angeles: California State University, Evaluation, Dissemination, and Assessment Center, 1981, pp. 147-81.
- Wells, G. *Learning Through Interaction: The Study of Language Development*. New York: Cambridge University Press, 1981.

A Review of Immersion Education in Canada: **Research and Evaluation Studies**

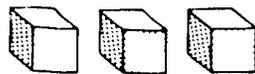
Merrill Swain
Ontario Institute for Studies
in Education, Toronto, Ontario

At the time of the introduction of immersion education in 1965 in St. Lambert and continuing to the present, this program has appeared as a somewhat radical means of teaching French to anglophone students. It was uncertain at the beginning how well students would learn French when it was being used as a medium of communication to teach curriculum content areas. It was also uncertain whether students would learn the curriculum content adequately and would be able to maintain and develop their first language. Parents and educators alike expressed these concerns, which formed the basis of the many research and evaluation studies that have been undertaken across Canada. The extensive bibliography in Swain and Lapkin (1982) listing reports, published articles, and books dealing with immersion education attests to these concerns.

This paper contains a review of the results of the research and evaluation studies associated with immersion education in Canada. The results will be reviewed in line with the goals of immersion programs (Genesee, this publication). The following will be examined:

- The achievement attained by participating students in academic subjects such as mathematics and science
- The promotion and maintenance of students' first language development
- The results pertaining to second language proficiency
- The effectiveness of immersion education for children with below average IQs or with learning disabilities
- The social and psychological impact of immersion education on the participating students and on the communities involved

Before reviewing the results, however, one needs to examine the issue of the quality of the studies associated with immersion education in Canada. Thus, in the next section this issue is considered.



Design of Immersion Education Studies

For the most part this section will be concerned with a description of the design of the studies. However, one should note that most

researchers involved in the major studies of immersion programs were university-based individuals rather than employees of the school boards. When immersion programs began, school administrators did not particularly view them kindly; but parents strongly supported these programs (Genesee, this publication). An objective outside evaluator was less likely to succumb to the pressures of either group in reporting the results or to be obligated contractually to keep results confidential until they were released by the funding agency.

The design of the major evaluations of immersion programs will be examined in terms of the students tested, the tests used, the data analysis procedures employed, and the generalization of results.

Students Tested

The typical evaluation of an immersion program involved a comparison of the performance of all (Lambert and Tucker, 1972) or a sample of all of the immersion students in a program (e.g., Barik and Swain, 1975) with that of anglophone students in a regular English program (e.g., Barik and Swain, 1975) and sometimes with that of francophone students in a francophone school (e.g., Lambert and Tucker, 1972; Swain, Lapkin, and Andrew, 1981). In these studies the first group of students entering the program was tested on an annual basis near the end of the school year over a number of years. Typically, a follow-up group of students entering the program in a subsequent year was also tested on an annual basis as the students proceeded through the program. In this way, the progress of students in the immersion program could be assessed longitudinally while at the same time the stability of the findings could be monitored through a comparison of different groups of students at the same grade level. Thus, the major studies of immersion programs in Canada have been both longitudinal and replicational in design.

Because immersion programs are optional and the decision to enroll in the program rests with parents and students, random assignment of students to immersion and comparison groups could not occur, except in the case where the school administration limited the enrollment into the program. In this case the English comparison group could be drawn from those who wanted to be in the immersion program but who could not enroll (Lambert and Tucker, 1972). For the most part, however, the comparison groups were drawn either from the same school as the one where the immersion program was housed or from a nearby school where the socioeconomic status of the students and characteristics of the community were similar to those of the immersion group being tested. This situation leaves open the possibility that the students in the immersion program may have characteristics that differentiate them from their comparison groups, such as generally having a greater motivation to learn French. Under

these conditions the only reasonable approach to evaluating immersion programs is to recognize that students possessing these characteristics constitute part of the very nature of the program itself and that the question which the evaluation results can answer is how do students in the immersion program perform relative to students receiving the usual educational program? (Swain, 1978a).

Tests Used

The tests which have been used in the evaluation of immersion programs have included standardized tests of subject achievement, of first and second language achievement, and of cognitive abilities as well as homemade tests to measure specific psycholinguistic or linguistic characteristics of students' first and second language abilities. For the most part, the tests of subject achievement and cognitive abilities were administered in English, the students' first language. I will return to this point in discussing the results of the testing.

Data Analysis Procedures

Most of the studies have compared statistically the performance of immersion groups with that of their comparison groups, using analysis of variance or covariance, with students' IQ levels being used as the covariant. Thus, differences in the students' IQs which might have existed between the groups were controlled statistically. This procedure has been used to compensate for the nonrandom assignment of students to their educational programs that was noted previously.

Generalization of Results

The results from any one study of immersion education can be generalized for the program as a whole in the particular school board (school district). Programmatic factors internal to the school system, such as the amount of time devoted to instruction in the second language, and community factors external to the school system, such as the degree to which French is used in the community, would suggest that the results should not be generalized beyond the particular program. At least, however, in the case of early total immersion programs, the pattern of results has been so consistent across programs from the different Canadian provinces that the consistency of the collective evidence outweighs the limited generalization of the results of each individual study. To a lesser degree this outcome is also the case with respect to the results from immersion programs which begin at later grade levels. Inconsistencies in the results across programs will be noted in the appropriate sections that follow.

The overall conclusion concerning the quality of the immersion research and evaluation studies which have been undertaken in Canada is that, given the practical realities of nonrandom assignment of students to programs, the design and analysis are acceptable and

appropriate for the questions being asked. Furthermore, the general consistency of results from the studies carried out across Canada by a number of different researchers provides an argument for the application of these results to other English-speaking students learning a second language through immersion programs.



Academic Achievement

As noted in earlier chapters, one principle of immersion education is that the same academic content will be covered as in the regular English program, the only difference between the two programs being the language of instruction. In an immersion program in which the language of instruction is the students' second language, the concern that the immersion students will be able to keep up in their academic achievement with students taught in their first language is of considerable importance. This concern has largely been allayed as a result of the research evidence.

Immersion students have been tested with standardized tests in mathematics (at all grade levels) and science (from about the fifth grade on), and their performance has been compared to that of students in English-only programs. As mentioned previously, the tests were typically administered in English, even though students were taught the subjects in French. The reason for this approach was straightforward. Although parents wanted their children to learn French, they wanted to be assured that their children would be able to deal with mathematical and scientific concepts in English, the dominant language in North American society. Testing the students in English seemed the best way to gauge their ability to do so. It was thought at the time, however, that not testing the students in the language of instruction might seriously handicap their performance.

The results associated with early total immersion programs consistently show that, whether demonstrating skills in science or mathematics, the immersion students performed as well as the members of English-instructed comparison groups. For example, in summarizing the results of nine years of testing early total immersion students in Ontario, Swain and Lapkin (1982) report that in 38 separate administrations of standardized mathematics achievement tests from the first to eighth grades, the immersion students performed as well as or better than the members of English-taught comparison groups in 35 instances. In three instances an English-instructed group scored significantly higher than an immersion group on one or two of the subtests but never on the test as a whole. The results with respect to science achievement were similar in that the average scores of the

immersion and comparison groups were equivalent in 14 separate administrations of the test from the fifth to the eighth grades.

The results associated with early partial and late immersion programs do not consistently provide evidence for the equivalence of performance between the immersion and comparison groups. In mathematics inferior student performance has occasionally been measured among some groups of early partial immersion students from the third grade on (Barik and Swain, 1977; Barik, Swain, and Nwanunobi, 1977; "Implementation*" 1980) and in science from the fifth grade on (Barik and Swain, 1978).

In the late immersion programs, when instruction in French as a second language (FSL) had been limited to one or two grades prior to the students' entry into the immersion program, the immersion group's performance was occasionally inferior to that of its comparison group in science (Barik and Swain, 1976a) and mathematics (Barik, Swain, and Gaudino, 1976). However, when late immersion students had FSL instruction each year through to the immersion year, the level of mastery of content taught in French was comparable to that attained by their English-instructed comparison groups (Genesee, Polich, and Stanley, 1977; Stern and others, 1976). The results from the early partial and late immersion programs suggest that the second language skills of the students may at times be insufficient to deal with the complexities of the subject material taught to them in French. In general and over the long run, however, the results suggest that immersion students are able to maintain standards of academic achievement compatible with those of their English-educated peers (see also Tucker, 1975).

The issue of the language of testing is relevant here. As has been noted, the students were usually tested in their first language although taught mathematics and science in their second language. This approach does not seem to have hindered the students as was suspected, adding credence to Cummins' (1981) "interdependence hypothesis." This concept suggests that students' cognitive academic knowledge is held in common storage and can be understood or expressed in either language, given a student's adequate levels of linguistic proficiency in both languages. In this case, the immersion program students gained the knowledge in one language but made full use of it in the other language context, both activities being dependent on a threshold level of linguistic competence in each language.

Would the results have been different had the language of the tests been French? The evidence which exists suggests that they would not have been different for the early total immersion students (e.g., Barik

*Only the first major word of a title is given for references in the text that are cited according to their titles. The complete titles appear in the selected references section at the end of this paper.

and Swain, 1975) or for the late immersion students who had had sufficient prior FSL instruction (Genesee, 1976a).

The impact of the second language proficiency level on test performance is a serious issue and one which has not been well attended to in the testing of academic achievement among minority students. An example from the immersion data illustrates this point: The performance on a social studies test of fourth grade early immersion students and students studying only social studies in French (60 minutes a day of instruction in French since these students began school) were compared. Two different versions of the same test were given, one in English and one in French. Results from the English version of the test revealed no differences in social studies achievement between the groups. Results from the French version of the test, however, revealed a significant difference between the two groups in favor of the immersion program students. Furthermore, the immersion group performed in French as it had in English. When the other group was tested in French, these students' scores were much lower than when the group was tested in English, even though these students had been taught social studies in French. These results indicate quite clearly that testing students in a second language in which they are not highly proficient may not accurately reflect their level of knowledge related to the content of the test. In other words, testing in a second language is a risky business if one wishes to measure accurately students' knowledge of subject content.



First Language Development

Because immersion programs emphasize curricular instruction in French, a concern arose that the development of first language skills might be negatively affected. This lack of development was thought to be potentially most serious at the primary level, when literacy skills in the first language would normally be taught. Indeed, one of the reasons for early partial immersion programs is the fear of some parents and educators that the negative consequences of the early total immersion program on the development of first language literacy skills in the child's formative years would be irreparable. These parents and educators wanted English literacy training to be introduced from the beginning.

To what extent were these fears well-founded? The research evidence on this issue suggests that, for these children, such fears have no basis in fact. In part, this result occurs because these children are members of the dominant linguistic and cultural majority of Canada. As a consequence, English pervades all of their out-of-school life.

On the one hand, the results for students in the early total immersion program indicate that this group is initially behind students in unilingual English programs in literacy skills. Within a year of the introduction of an English language arts component into the curriculum, however, the immersion students perform as well on standardized tests of English achievement as do students in the English-only program (Genesee, 1973a; Swain, 1978b). This is the case even if English is not introduced until the third grade (Edwards and Caserly, 1976) or fourth grade ("Report . . .," 1972; Genesee and Lambert, in press). Furthermore, in some instances the initial gap is not only closed but the immersion students outperform their English-only program peers in some aspects of measured English language skills (Swain, Lapkin, and Andrew, 1981).

On the other hand, the results of tests given to early partial immersion students, in the second and third grade, who had approximately half of their program devoted to instruction in and about English indicate that this group did less well than their comparison groups on some aspects of measured English language skills. Results from this group of students were compared with (1) those from students in a regular English program in the second or third grade; and (2) with immersion students at the same grade levels whose English reading instruction began in the second or third grade (Barik, Swain, and Nwanunobi, 1977; Swain, 1974). One interpretation of these results is that when literacy skills are taught in both languages at the same time, the interfering and competing surface linguistic features cause confusion; and students require a period of time to resolve this confusion.

The implication for bilingual education is that it is preferable to *teach initially literacy-related skills in only one language, whether it be the first or second language*. This statement does not imply that children should not be exposed to literacy in the other language and encouraged to work out (i.e., spontaneously transfer) the code for themselves. Once the students establish literacy-related skills in one language, they will be able to transfer these skills readily and rapidly to the other language (provided it is mastered), even, possibly, without the students' receiving explicit instruction. The results of immersion programs which begin at later grade levels strongly support this finding. For example, Cziko (1976) compared the performance on tests of reading comprehension in English and French of a group of early total immersion students with the test performance of a group of children who began their immersion program at the fourth grade level. The scores of the two groups were equivalent in both English and French. The students who had begun their immersion experience at the fourth grade had apparently reached the same degree of skill as the early partial immersion students but without the intervening con-

fusion. The results from immersion programs which begin at the seventh or eighth grade level, and which are discussed later with respect to second language skills, also support this view (e.g., Genesee, 1981; Lapkin and others, 1982). However, in a community or social context where the first language may be less strongly supported, as is the case for many language minority children, teaching initially in the first language is likely to compensate for the possible limited use of the language in its full range of functions and skills. Teaching in the first language first is more likely to lead to full bilingualism among minority language students instead of leaving the first language in second place (Cummins, 1981; Swain, 1983).

Results from other studies of early total French immersion students' English language skills are in line with those from standardized achievement tests, indicating that an initial discrepancy exists in literacy-based skills between students from immersion and English programs. Students from English programs initially do better than those from immersion programs. In later grades, however, equivalent performance occurs for both groups. For example, the writing skills of third, fourth, and fifth grade immersion students have been examined. Short stories written by third grade children were analyzed for, among other things, vocabulary use, technical skills (punctuation, spelling, and capitalization), and grammatical skills and the ability to write in a logical, chronological sequence. Small differences were noted between immersion and nonimmersion students in each of these areas (Swain, 1975a). Genesee (1974) reports on a study of the writing skills of fourth grade immersion students. Based on teacher ratings, one finds that the immersion group lagged behind English program students in spelling; but the stories of these students were considered more original. Ratings were similar for sentence accuracy, vocabulary choice, sentence complexity and variety, and overall organization.

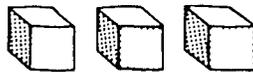
Lapkin and others (1982) had elementary teachers globally assess compositions written by fifth grade students in both programs. The teachers did not know which program the students were in (also the case in Genesee, 1974); they knew only that the compositions were written by fifth grade students. The compositions of the two groups were judged to be equivalent. A further analysis of the variety in vocabulary use and the length of the compositions revealed no differences between the groups.

The type of tasks involved in these studies of English writing and achievement represent the context-reduced, cognitively demanding quadrant of Cummins' (1981) language proficiency model. (See pages 11, 12, and 215 of *Schooling and Language Minority Students: A Theoretical Framework*.) But what about tasks that are at the context-embedded end of the contextual support continuum? One

group of people to ask this question of are the children's own parents. In a survey of parents conducted in British Columbia, McEachern (1980) asked whether they thought children in primary French immersion programs suffer in their English language development. Of parents who had a child in a French immersion program, an overwhelming 80 percent answered with an unqualified no. Interestingly, of parents who did not have a child in the immersion program, only 40 percent responded in this way. In Ontario a questionnaire distributed to parents of children in immersion programs included a question about their children's ability to express their thoughts in English. Over 90 percent of the parents indicated that they had perceived no negative effects.

With the same question in mind, Genesee, Tucker, and Lambert (1975) undertook a study which examined the communicative effectiveness of total immersion students in kindergarten and in the first and second grades. They found that the children in immersion programs were more communicatively effective and suggested that this facility occurred because their experience in the second language classroom had made them more sensitive to the communication needs of the listener. (See also Lambert and Tucker, 1972.)

Thus, substantial evidence exists that children in early total immersion programs, although initially behind their English-educated comparison groups in literacy-related skills, catch up to and may even surpass their comparison groups once English is introduced into the curriculum. However, the evidence also suggests that no benefit occurs from introducing English and French literacy training at the same time. It would appear preferable to teach these skills explicitly in one language first. The choice of language must be compatible with community and societal factors external to the school program. As has been shown, the immersion children at no time show retardation in their oral communicative skills, a fact due in large part to the overwhelming use of English in their environment, including school (see Lapkin and Cummins, this publication, concerning the use of English in school).



Second Language Development

In this section the results of studies in which researchers have examined the second language development of students in immersion programs will be reviewed. This section begins with a discussion of the results associated with students in early total immersion programs, and within this context, a discussion is presented of the double standard that seems apparent for second language learners from majority

and minority language situations. A brief review of the early partial and late immersion results follows. This section concludes with a comparison of the second language abilities of early and late immersion program students.

When early immersion programs began, the belief was that using the second language to communicate with the children would enable them to acquire the language as children learning a first language do. Although the theoretical rationales (see Genesee, this publication) seemed sound and were strongly reinforced by commonly held views that second language learning is relatively easy for children, there was no guarantee that the program would work. Indeed, some educators were skeptical that learning through a language could be more effective than being taught a language. But the desire to experiment with finding ways to improve students' second language skills prevailed. And with good reason, as the research evidence has demonstrated.

Each study in which a comparison has been made of the second language performance of students in early total immersion programs with that of students in core French as a second language (FSL) programs (20 to 40 minutes of daily FSL instruction which focuses on teaching specified vocabulary and grammatical structures) has revealed a significant difference in favor of the immersion students (e.g., Barik and Swain, 1975; Edwards and Casserly, 1976). In fact, it soon became clear that giving the same test to immersion students and to core FSL students was ill-advised for the following reasons: First, if the level of difficulty was appropriate for immersion students, then the core FSL students would become frustrated, some even to the point of tears at being unable to do any part of the test. Second, if the level of difficulty of the test was appropriate for the core FSL students, then the immersion students became bored and quickly lost interest in the task. It can safely be concluded, therefore, that the combination of the increased time in French and the communicative methodology employed in immersion programs vastly improves the second language proficiency of the students.

But what about the second language performance of the early total immersion students relative to native speakers of French? To answer this question, we look first at the receptive (listening and reading) skills of these students and then at their productive (speaking and writing) skills.

Using a variety of listening and reading comprehension tests, researchers have measured the receptive skills of the immersion program students over the years. The tests have included standardized tests of French achievement, as well as more communicatively oriented tests. In the latter category, for example, are such tests as the *Test de Compréhension Auditive (TCA)* (1978, 1979) and the *Test de Compréhension de l'Écrit (TCE)* (1978, 1979) developed by the Bilin-

gual Education Project of the Ontario Institute for Studies in Education. In these tests authentic texts from a variety of communicative domains are heard or read, and the students respond to questions about them. In the *TCA*, students listen, for example, to a news report over the radio, a portion of a soap opera, an advertisement, and an interview. In the *TCE*, students read, for example, a comic strip, a clipping from a newspaper, a recipe, and a poem.

On the standardized tests of French achievement, the results from Ontario (Swain and Lapkin, 1982) show that, after six or seven years in a primary immersion program (that is, by the fifth or sixth grade), students perform on the average at about the 50th percentile. It took these children of middle class background, of parents supportive of their program, and with positive attitudes toward learning French until the fifth or sixth grade to attain an average level of performance. It is appropriate to ask, given these data (see also Cummins, 1981), whether it is somewhat unrealistic to expect children in bilingual education programs from minority language backgrounds in the United States to reach grade norms after a year or two in the program.

On some of the locally developed comprehension tests, equivalence between immersion and francophone students has been noted as early as the second grade (Lambert and Tucker, 1972). In Ontario comparisons with francophones were not made until the fifth grade level. Where comparisons have been made, immersion students compare favorably to francophones (e.g., Swain, Lapkin, and Andrew, 1981). From these data, therefore, it appears that early immersion students develop native-like skills in their ability to understand spoken and written texts.

Researchers, using a variety of techniques, have also examined the productive skills of the students in early immersion programs over the years. The results show that these students do not attain native-like proficiency in their spoken or written French (e.g., Adiv, 1981; Genesee, 1978a; Harley, 1979, 1982; Harley and Swain, 1977, 1978; Spilka, 1976).

For example, Harley and Swain (1977) undertook a study designed to provide a description of the verb system used in the speech of fifth grade children in immersion programs. Bilingual and monolingual francophones, also in the fifth grade, were the comparison groups. These researchers concluded that, in general, the children in immersion programs may be said to be operating with simpler and grammatically less redundant verb systems. These children tend to lack forms for which grammatically less complex alternative means of conveying the appropriate meaning exist. The forms and rules that they have mastered appear to be those that are the most generalized in the target verb system (for example, the first conjugation *-er* verb pattern). In the area of verb syntax, it appears that where French has a

more complex system than English, as in the placement of object pronouns, the immersion children tend to opt for a simpler pattern that approximates the one they are already familiar with in their first language.

Numerous other examples could be given of differences between the immersion and francophone students. However, the point here is that the immersion students' communicative abilities (Szamosi, Swain, and Lapkin, 1979; Adiv, 1981) outstrip their abilities to express themselves in grammatically accurate ways. One might ask to what extent this outcome affects native speakers' judgments about immersion students or why the productive capacity of these students is grammatically limited. These questions are dealt with elsewhere (Lepicq, 1980; Harley, 1982; Swain, 1978c) and will not be considered further here.

What is important to consider is the comparison between the second language productive performance of the immersion students in Canada and that of minority students in the United States. Such a comparison provides an excellent example of what might be labeled the linguistic double standard. By this standard majority language children are praised for learning a second language even if it is non-native-like in its characteristics, whereas minority language children must demonstrate full native-like competence in the second language to receive the same praise. Recognition that a double standard exists should surely make us reappraise our expectations for one, if not both groups.

Given the fact that proficiency in a second language for majority group students depends, in part, on the amount of time spent in studying that language, early partial immersion students are not as proficient as total immersion students (Carroll, 1975). Indeed, the second language scores of the early partial immersion students tend to fall between those of early total immersion students and core FSL students (e.g., Barik and Swain, 1976b; Edwards, McCarrey, and Fu, 1980). Although partial immersion students do not perform as well as total immersion students at the same grade level, they tend to perform as well as total immersion students in lower grade levels who have had similar amounts of instructional time in French. For example, a fifth grade partial immersion student and a second grade total immersion student who have each accumulated two and one-half years of French instructional time tend to demonstrate equivalent performance levels. By the eighth grade, the partial immersion students tend to perform as well as total immersion students who are one grade level below them (Andrew, Lapkin, and Swain, 1979). The lower level of linguistic proficiency exhibited by the partial immersion students in the earlier grades may account for their poorer academic achievement in some instances, as noted previously.

For example, the sixth grade partial immersion students in one study (Barik and Swain, 1978) did not perform as well as their English-educated peers in science or mathematics. It was also the case that their level of French performance most closely approximated third and fourth grade total immersion students. It may therefore be the case that the level of French of these partial immersion students was not adequate to deal with the more sophisticated level of mathematical and scientific concepts being presented to them in French.

As with the early total and partial immersion students, the late immersion students' second language performance is higher than that of core ESL students at the same grade level. However, it has been noted that the second language skills of students in late immersion programs may dissipate unless there is a strong follow-up program to the one or two years of immersion that constitute these programs. (Cziko and others, 1977; Lapkin and others, 1982) Indeed, the question of the maintenance of second language skills of both early and late immersion students in their follow-up programs at the secondary school level is one that needs to be investigated.

Now that early immersion students are entering and beginning to graduate from high school in the Ontario and Quebec programs, it is possible to compare the performance of early and late immersion students. The results of the comparisons emanating from Quebec differ somewhat from those in Ontario. It would appear that the differences can in part be accounted for in terms of programmatic variations, most obviously with respect to the overall amount of time students have been studying in French. These differences in program structures, their associated second language outcomes, and the implications for second language immersion programs will be discussed next.

In Ontario the lead groups of early total immersion students were tested at the eighth grade level, and the performance of these students has been compared with late immersion students also in the eighth grade who had been in a one-, two-, or three-year immersion program (beginning at the eighth, seventh, or sixth grade level, respectively). The results indicate that the early immersion students outperform the late immersion groups on tests of French listening comprehension, reading comprehension, general French achievement, and proficiency (Lapkin and others, 1982; Morrison and others, 1979).

In Montréal comparisons of the early and late immersion program students from the seventh through eleventh grades have been made (Adiv, 1980; Adiv and Moreos, 1979; Genevieve, 1981). The results indicate that the early total immersion students outperform the late immersion students after one year (seventh grade) of immersion education. However, in general, from the end of the second year of the

late immersion experience, the performance of early and late immersion students on a variety of second language tests, including all four skills of reading, writing, listening, and speaking, appears to be equivalent. This finding is somewhat unexpected, given the results from Ontario and the presumed advantage of early second language learning.

The differences in results between the Ontario and Montreal programs are an indication of the impact that program design can have on the second language performance of majority language students. In the case of the Ontario programs, the early immersion program maintained a French to English ratio of 80:20 in the third to fifth grades and 50:50 in the sixth to eighth grades, whereas the corresponding figures for the Montreal program were 60:40 in the third grade and 40:60 in the fourth to eighth grades. These figures show that the Ontario early immersion students had considerably more in-school contact time in French than did the Montreal students. This increased time could account for the Ontario students' superior second language performance relative to late immersion students. These results indicate a need for the maximum allotment of time to the second language for majority language students to maintain and further develop their second language skills. This maximum time allotment is essential for majority language children because of the limited use they may make of the second language in out-of-school contexts (Genesee, 1978b; Swain and Lapkin, 1982).

The comparison of early and late immersion students raises the issue of the relative ease of second language learning by younger and older learners. Even in the case of the Ontario programs where the late immersion students remain behind the early immersion students, it is clear that late immersion students have made considerable progress toward the proficiency levels exhibited by the early immersion students. The issue of age and second language learning is a much-debated topic (see, for example, Cummins, 1980; Genesee, 1978c; Krashen, Long, and Scarcella, 1979 for reviews) and will not be dealt with in this paper. Suffice it to say that the immersion results suggest that the older learners may be more effective than younger ones in some aspects of second language learning, most notably in those associated with literacy-related and literacy-supported language skills. It may be, however, that early immersion students feel more comfortable and at ease in the second language and maintain to a greater extent their facility in the second language over the long run. Furthermore, in the case of late immersion programs for majority language children, some students will choose not to learn a second language, because learning a second language is only one of many competing interests which students recognize will take time and energy to learn. Finally, early immersion programs seem to be able to accommodate a

wider range of student personality types and cognitive styles than do late immersion programs (Swain and Burnaby, 1976; Tucker, Hamayan, and Genesee, 1976).

In summary, the second language results of the immersion research and evaluation studies indicate that immersion students attain levels of performance that far exceed those of students in core FSL programs and that immersion students develop receptive skills in the second language comparable to francophones of the same age. However, for early immersion students, the attainment of average performance on standardized tests of French achievement can take up to six or seven years, raising the issue that unrealistic expectations are being held for minority language children in bilingual education programs in the United States.

Although immersion students appear to attain native-like receptive skills, their productive skills continue to remain nonnative-like. They are, however, quite capable of communicating their ideas in spite of their grammatical weaknesses. It was suggested that the educational community would not consider acceptable this same level of productive skills in the second language among minority students. The achievement of this skill level being praised within the majority culture when attained by majority language students and denigrated when attained by minority language students is indicative of a linguistic double standard.

Finally, comparisons between early and late immersion students suggest that late immersion programs can be as effective in developing some aspects of students' second language skills as early immersion programs. However, the advantages in the second language performance of the early immersion students can be maintained with an adequate allotment of instructional time in French. The apparently more rapid second language learning exhibited by the late immersion student should not be taken as an indication that late immersion is, therefore, the best option. As an option this program must be balanced against potential long-term advantages of early bilingualism and the very likely possibility that early immersion education makes bilingualism an achievable goal for a wider spectrum of the population.



Student IQ Level, Learning Disabilities, and Immersion Education

Many students enrolled in primary immersion education are anglophone students of middle to upper-middle socioeconomic back-

grounds. However, students with other background characteristics have enrolled in immersion programs. Some studies have been undertaken to determine whether these students benefit as much from immersion education as their classmates in immersion programs or as their peers (children with *similar* characteristics) in the regular English program. In this section the results of these studies will be summarized for two groups of children—those with below average IQ and those with learning disabilities.

A commonly held view is that immersion education is only for children of above average intelligence. The research evidence contradicts this view. There are several ways this issue might be examined. One way is to determine how immersion students who obtain above average IQ scores perform relative to immersion students who obtain below average IQ scores. It would be expected that above average students would obtain higher scores on second language measures than would below average students, given the usual relationship between IQ and academic performance. In one study (Genesee, 1976b), fourth grade early immersion and seventh grade late immersion students who were below average, average, and above average in IQ levels were administered a battery of French language tests which included measures of literacy-related language skills, such as reading and language usage, as well as measures of interpersonal communicative skills, such as speaking and listening comprehension. Results showed that, as expected, the above average students scored better than the average students, who in turn scored better than the below average students on the tests of literacy-related language skills. However, there was no similar stratification by IQ of performance on the measures of interpersonal communication skills. In other words, the below average students understood as much spoken French as did the above average students, and they were rated as highly as the above average students on all measures of oral production: grammar, pronunciation, vocabulary, and fluency of communication. Thus, it seems that the below average students were able to benefit from French immersion as much as the average and above average students in terms of acquiring interpersonal communication skills in the second language. Furthermore, from the *English* language and academic achievement testing that was carried out with the same sample of students, no evidence appeared that the below average students in French immersion were further behind in English skills' development or academic achievement than were the below average students in the regular English program.

There is another way of looking at this issue. If a student's IQ level is important for his or her success in an immersion program, more so than in a regular English program, then this IQ level should be more highly related to how well a student performs on achievement

tests in the immersion program than in a regular program. Swain (1975b) found, however, that this was not the case; that is, the relationship between a student's IQ and achievement scores was the same for early immersion children and children in the regular English program. The relationship between a student's IQ level and test results of French listening comprehension and French reading and language usage was also examined. The same pattern was found as in Genesee's study cited above; that is, that the acquisition of second language comprehension skills was not related to IQ level but that the acquisition of second language literacy-related skills was related.

These studies, then, suggest that a student's IQ does not play a more significant role in the immersion program than in the regular English program as far as success in school is concerned. Furthermore, acquiring interpersonal communicative skills in a second language would appear in this context to be unrelated to a student's IQ. Thus, although differences will occur in performance among students, the students with below average IQs are not at any more of a disadvantage in an immersion program than they would be if they were in a regular English program. In addition, these students have an equal opportunity of learning second language communicative skills.

Basically the same conclusion has been reached about children with language learning disabilities. The child with a language learning disability is one who has normal intelligence and no primary emotional, motivational, or physical difficulties and yet has difficulty acquiring specific basic skills such as reading, spelling, and oral or written language (Bruck, 1979). It has been found in an ongoing research project designed to investigate the suitability of early French immersion for children with language learning disabilities that:

When compared to a carefully selected group of language disabled children in English programs, the learning disabled children continue to develop facility in their first language; they learn their basic academic skills at the predicted rate; they exhibit no severe behavioral problems, and perhaps of most importance, they acquire greater competency in French (Bruck, 1979, p. 43).

In her report of this study, Bruck (1978) points out that many learning disabled children who have followed the core FSL program leave school with almost no knowledge of French because the nature of the teaching method seems to exploit their areas of weakness (memory work, repetition of language out of context, explicit teaching of abstract rules). Thus, if learning disabled children are to learn French in school, immersion is the best method by which to do so.

In summary, as with children with below average IQs, no evidence exists which suggests that expectations for learning disabled children

in immersion programs should be any different from those for similar children in regular English programs.



Social and Psychological Effects

In this final section the social and psychological effects of immersion education will be reviewed. First, the immersion students' perceptions of themselves, of English-Canadians, of French-Canadians, and of the broader sociocultural aspects of Canada will be discussed. This discussion of perceptions will be followed by a brief section on the satisfaction with the program as expressed by student participants and members of the community.

A number of studies have been undertaken in Montreal which examine the immersion students' perception of their own ethnolinguistic group, of themselves, and of the French-Canadian ethnolinguistic group. In one study, early immersion and English-educated children were asked to rate themselves, English Canadians, and French Canadians on 13 bipolar adjectives such as friendly-unfriendly (Lambert and Tucker, 1972). The immersion and English comparison groups both made favorable assessments of themselves and of English Canadians. In the earlier grades the immersion students made more favorable assessments of French Canadians than did their English comparison groups. Although this difference in these immersion program students' assessments of French Canadians had disappeared by the fifth grade, these students were clearly more positive when they were asked directly about their feelings and attitudes toward French Canadians. For example, these children were asked: Suppose you happened to be born into a French-Canadian family, would you be just as happy to be a French-Canadian person as an English-Canadian person? Of the fifth grade immersion children, 84 percent responded with "just as happy to be French Canadian," whereas only 48 percent of the English-educated group responded in this way.

In another study (Cziko, Lambert, and Gutter, 1979), fifth and sixth grade immersion and English-educated students were asked to make judgments about the similarity or dissimilarity of pairs of concepts such as themselves as individuals, monolingual English Canadians, monolingual French Canadians, bilingual French Canadians, and bilingual English Canadians. The results indicated that the early immersion students perceived themselves as more similar to bilingual English Canadians and bilingual French Canadians than did the late immersion or English program students. The authors conclude that:

"... the early immersion experience seems to have reduced the social distance perceived between self and French Canadians, especially French Canadians who are bilingual" (p. 26).

It is possible that the educational experience of the immersion students might lead to a more sophisticated understanding of the social and cultural aspects of Canadian life. To investigate this question, researchers asked fifth and sixth grade immersion students to write a composition on the topic "Why I like (or do not like) being Canadian" (Swain, 1980). Each composition was subjected to a content analysis, and the substantive comments that had been written were identified and tabulated. Several interesting findings emerged. First, the immersion students' commentary spanned a much broader perspective in that this group gave on the average two to three times as many reasons for their choice than did the English comparison groups. Second, three times as many immersion students as English program students commented specifically on the rich and varied cultural and/or linguistic composition of Canada. Third, over 20 percent of the immersion children, but none of the English-educated children, commented on the possibility in Canada of being able to speak more than one language. In general most of the compositions written by the English students focused on the natural beauty of Canada as opposed to the beauty of linguistic and cultural diversity which was as likely to be mentioned in the composition of the immersion students.

Whether the views of immersion students are the result of their schooling experience, the influence of their parents, or their experience in the wider community cannot be determined from the studies undertaken. Probably, these students' views reflect the interaction of all three influences. Practically speaking, the source of the students' views is probably less important than their existence.

Immersion and core FSL students were asked to give their opinions about the French programs in which they were enrolled. Lambert and Tucker (1972) found that, relative to core FSL students, fourth and fifth grade immersion program students were much more likely to say that they enjoy studying French the way they do. They thought that their program had just about the right amount of time spent on French (core FSL students tended to say that too much time was spent on French) and that they wanted to continue learning French. This study suggests a general endorsement by immersion students of their program and way of learning French.

In a study in which these same immersion children in the eleventh grade and their parents were interviewed, Cziko and others (1978) concluded that "there is a very clear appreciation for the early immersion experience on the part of the early immersion students and their parents, who, in the vast majority, say that they would choose the immersion option if they had to do it all over" (p. 23).

In a comparison of the early and late immersion students in Ontario at the eighth grade level (Lapkin and others, 1982), it was found that the early immersion students were more likely to respond that they would prefer a bilingual high school program than would late immersion students. Early immersion students also were more likely to say that the amount of time they were currently spending in French was "about right" or "a bit too short," whereas the late immersion students were more likely to respond that they would prefer a program with less French in it and that the amount spent in French was "a bit too long." Thus, in general, immersion students express satisfaction with their program, with early immersion students being the most positive and core FSL students being the least positive.

Although parents who have children enrolled in an immersion program express satisfaction with it, tensions have arisen concerning the growth of these programs. As immersion programs grow in size and number, certain sectors of the community feel threatened (Burns and Olson, 1981). One sector is the English-speaking parents who want their children to attend, or continue to attend, the regular English program in their neighborhood school. They see the space in their neighborhood school being taken up by increasing numbers of immersion students and have formed concerned parents organizations to argue against the growth of immersion programs. The tensions created by the pro-immersion and anti-immersion parents have surfaced in communities across Canada and have recently received extensive nationwide press coverage (e.g., "A Dispute . . ." January 9, 1982).

The problem would probably not be so serious were it not for the declining enrollments that schools across Canada are experiencing. The only area of growth is in the French immersion programs, and the problems of declining enrollment in English-speaking schools are thus being intensified. The most threatened group and, therefore, predictably, the most loudly outspoken group against French immersion programs is monolingual English-speaking teachers (Burns and Olson, 1981). They consider their own job security to be threatened by immersion programs and recognize that they themselves could never, even if they wanted to, make the transition to teaching in an immersion program where native-speaking proficiency in French is essential. Thus, the current rapid expansion of immersion programs (Lapkin and Cummins, this publication) has brought with it concern on the part of English-speaking teachers, which is supported by parents of their students in the local community. The resolution of these tensions is yet to come.

In summary, the psychological and social impact of immersion programs has in no way affected the immersion students' views of themselves or their own ethnolinguistic group while at the same time

it has closed somewhat the social gap between the perceptions of themselves and of French-Canadians. Immersion students and their parents express satisfaction with their program. However, conditions of declining enrollment in the wider society have resulted in a threat to job security for teachers and, for parents, a threat of school closings in their neighborhood, leading to inevitable tensions in the school and community. Immersion education may become a scapegoat for these groups as a result of its unqualified success within the Canadian context in improving the second language proficiency of English-speaking students.



Conclusions

The results of the research and evaluation studies associated with immersion education for majority language children in Canada indicate that the goals of the program (Genesee, this publication) have been met. The students have achieved high levels of proficiency in the second language while developing and maintaining normal levels of first language proficiency. Students have attained this degree of bilingualism with no long-term deficit observed in achievement in academic subjects. The immersion students appreciate the program in which they have participated and express positive attitudes toward the target language group while maintaining a healthy self-identity and appreciation for their own linguistic and cultural membership.

The results also highlight several important principles related to the schooling of majority and minority language children:

- The language of tests is an important consideration when students are being tested for knowledge of subject content. Their knowledge may be underrated if their proficiency in the language of the test has not reached a threshold level. Even though students may have been taught the subject content in one language, this approach does not necessarily imply that testing should occur in that language.
- Initial literacy instruction in two languages at the same time may lead at first to slower rates of student progress than having students first develop literacy-related skills in one language.
- Effective communication in the first or second language does not imply grade level performance on literacy-based academic tasks. It is, however, an important precursor.
- The ability to function in context-reduced cognitively demanding tasks in the second language is a gradual learning process extending over a number of years, as indicated by the fact that

immersion program students take up to six to seven years to demonstrate average levels of achievement in the second language relative to native speakers of the language.

- The development of the students' ability to function in context-reduced cognitively demanding tasks in the first language underlies the students' ability to do the same in the second language. Thus, students who begin their immersion program at a later age than early immersion students make more rapid progress in these literacy-related aspects of the second language.

The results of immersion education for English-speaking Canadians are impressive. For minority language children to achieve similar goals, the first language will need to play as strong a role cognitively, psychologically, and socially during the time when children are acquiring their language skills.

Selected References

- Adiv, E. "An Analysis of Oral Discourse in Two Types of French Immersion Programs." Montreal: Instructional Services Department, Protestant School Board of Greater Montreal, 1981. Mimeo.
- Adiv, E. "A Comparative Evaluation of Three French Immersion Programs: Grades 10 and 11." Paper presented at the Fourth Annual Convention of the Canadian Association of Immersion Teachers, November, 1980. Mimeo.
- Adiv, E., and C. Morcos. "A Comparison of Three Alternative French Immersion Programs at the Grade 9 Level." Montreal: Protestant School Board of Greater Montreal, 1979. Mimeo.
- Andrew, C. M.; S. Lapkin; and M. Swain. "Report to the Elgin County Board of Education on the 1978 Evaluation of the Partial French Immersion Programs in Grades 3, 6, 7, and 8." Toronto: Ontario Institute for Studies in Education, 1979. Mimeo.
- Barik, H. C., and M. Swain. "A Canadian Experiment in Bilingual Education: The Peel Study," *Foreign Language Annals*, Vol. 9 (1976a), 465—79.
- Barik, H. C., and M. Swain. "English-French Bilingual Education in the Early Grades: The Elgin Study Through Grade Four," *Modern Language Journal*, Vol. 60 (1976b), 3—17.
- Barik, H. C., and M. Swain. "Evaluation of a Bilingual Education Program in Canada: The Elgin Study Through Grade Six," *Bulletin CILA*, Vol. 27 (1978), 31—58.
- Barik, H. C., and M. Swain. "Report to the Elgin County Board of Education Re: Evaluation of the 1976-77 Partial French Immersion Program in Grades 5—7." Toronto: Ontario Institute for Studies in Education, 1977. Mimeo.

- Barik, H. C., and M. Swain. "Three-Year Evaluation of a Large-Scale Early Grade French Immersion Program: The Ottawa Study," *Language Learning*, Vol. 25 (1975), 1-30.
- Barik, H. C.; M. Swain; and V. Gaudino. "A Canadian Experiment in Bilingual Education in the Senior Grades: The Peel Study Through Grade 10," *International Review of Applied Psychology*, Vol. 25 (1976), 99-113.
- Barik, H. C.; M. Swain; and E. Nwanunobi. "English-French Bilingual Education: The Elgin Study Through Grade Five," *Canadian Modern Language Review*, Vol. 33 (1977), 459-75.
- Bruck, M. "Problems in Early French Immersion Programs," in *So You Want Your Child to Learn French!* Edited by B. Mlacak and E. Isabelle. Ottawa, Ontario: Canadian Parents for French, 1979, pp. 42-47.
- Bruck, M. "The Suitability of Early French Immersion Programs for the Language Disabled Child," *Canadian Modern Language Review*, Vol. 34 (1978), 884-87.
- Burns, G. E., and P. Olson. *Implementation and Politics in French Immersion*. Toronto: Ontario Institute for Studies in Education, 1981.
- Carroll, J. B. *The Teaching of French as a Foreign Language in Eight Countries*. New York: John Wiley and Sons, 1975.
- Cummins, J. "The Cross-Lingual Dimensions of Language Proficiency: Implications for Bilingual Education and the Optimal Age Issue," *TESOL Quarterly*, Vol. 14 (1980), 175-87.
- Cummins, J. "The Role of Primary Language Development in Promoting Educational Success for Language Minority Students," in *Schooling and Language Minority Students: A Theoretical Framework*. Developed by the California State Department of Education, Office of Bilingual Bicultural Education. Los Angeles: California State University, Evaluation, Dissemination, and Assessment Center, 1981, pp. 3-49.
- Cziko, G. A. "The Effects of Language Sequencing on the Development of Bilingual Reading Skills," *Canadian Modern Language Review*, Vol. 32 (1976), 534-39.
- Cziko, G. A.; W. E. Lambert; and R. Gutter. "French Immersion Programs and Students' Social Attitudes: A Multidimensional Investigation," *Working Papers on Bilingualism*, Vol. 19 (1979), 13-28.
- Cziko, G. A., and others. "A Comparison of Three Elementary School Alternatives for Learning French: Children at Grades 5 and 6." Montreal: McGill University, 1977. Mimeo.
- Cziko, G. A., and others. "Graduates of Early Immersion: Retrospective Views of Grade 11 Students and Their Parents." Montreal: McGill University, 1978. Mimeo.

- "A Dispute Flares Within Suburb on the Trend to French Classes," *Globe and Mail*. Toronto: January 9, 1982.
- Edwards, H. P.; H. A. McCarrey; and L. Fu. "Evaluation of Second Language Program Extensions Offered in Grades 3, 4, and 5: Final Report, 1979-80." Ottawa, Ontario: Ottawa Roman Catholic Separate School Board, 1980. Mimeo.
- Edwards, H. P., and M. C. Casserly. *Research and Evaluation of Second Language (French) Programs in the Schools of the Ottawa Roman Catholic Separate School Board (Annual Reports 1971-72 and 1972-73)*. Toronto: Ministry of Education, Ontario, 1976.
- Genesee, F. "Addendum to the Evaluation of the 1975-76 Grade 11 French Immersion Class." Montreal: Protestant School Board of Greater Montreal, 1976a. Mimeo.
- Genesee, F. "A Comparison of Early and Late Second Language Learning," *Canadian Journal of Behavioral Sciences*, Vol. 13, No. 2 (1981), 115-28.
- ~~Genesee, F. "An Evaluation of the English Writing Skills of Students in French Immersion Programs." Montreal: Protestant School Board of Greater Montreal, 1974. Mimeo.~~
- Genesee, F. "Is There an Optimal Age for Starting Second Language Instruction?" *McGill Journal of Education*, Vol. 13 (1978c), 145-54.
- Genesee, F. "A Longitudinal Evaluation of an Early Immersion School Program," *Canadian Journal of Education*, Vol. 3, No. 4 (1978a), 31-50.
- Genesee, F. "The Role of Intelligence in Second Language Learning," *Language Learning*, Vol. 26 (1976b), 267-80.
- Genesee, F. "Second Language Learning and Language Attitudes," *Working Papers on Bilingualism*, Vol. 16 (1978b), 19-42.
- Genesee, F., and W. E. Lambert. "Trilingual Education for Minority Language Children," *Child Development*. In press.
- Genesee, F.; E. Polich; and M. H. Stanley. "An Experimental French Immersion Program at the Secondary School Level: 1969-1974," *Canadian Modern Language Review*, Vol. 33 (1977), 318-32.
- Genesee, F.; G. R. Tucker; and W. E. Lambert. "Communication Skills of Bilingual Children," *Child Development*, Vol. 46 (1975), 1010-14.
- Harley, B. "Age-Related Differences in the Acquisition of the French Verb System by Anglophone Students in French Immersion Programs." Ph.D. diss., University of Toronto, 1982.
- Harley, B. "French Gender Rules in the Speech of English-Dominant, French-Dominant and Monolingual French-Speaking Children," *Working Papers on Bilingualism*, Vol. 19 (1979), 129-56.
- Harley, B., and M. Swain. "An Analysis of Verb Form and Function in the Speech of French Immersion Pupils," *Working Papers on Bilingualism*, Vol. 14 (1977), 31-46.

- Harley, B., and M. Swain. "An Analysis of the Verb System Used by Young Learners of French," *Interlanguage Studies Bulletin*, Vol. 3 (1978), 35-79.
- "Implementation of Bilingual (English-French) Programs Third Year 1979-80," Edmonton, Alberta.: Curriculum Department, Edmonton Public Schools, 1980. Mimeo.
- Krashen, S. D.; M. A. Long; and R. C. Scarcella. "Age, Rate, and Eventual Attainment in Second Language Acquisition," *TESOL Quarterly*, Vol. 13 (1979), 573-82.
- Lambert, W. E., and G. R. Tucker. *Bilingual Education of Children*. Rowley, Mass.: Newbury House, 1972.
- Lapkin, S., and others. "The English Writing Skills of French Immersion Pupils at Grade Five," *Canadian Modern Language Review*, Vol. 39 (1982), 24-33.
- Lepicq, D. "Aspects Théoriques et Empiriques de l'Acceptabilité Linguistique: Le Cas du Français des Éléves des Classes d'Immersion." Ph.D. diss., University of Toronto, 1980.
- McEachern, W. "Parental Decision for French Immersion: A Look at Some Influencing Factors," *Canadian Modern Language Review*, Vol. 38 (1980), 238-46.
- Morrison, F., and others. *French Proficiency Status of Ottawa and Carleton Students in Alternative Programs: Evaluation of the Second Language Learning (French) Programs in the Schools of the Ottawa and Carleton Board of Education. Sixth Annual Report*. Toronto: Ministry of Education, Ontario, 1979.
- "Report on the 1971-72 Roslyn French Immersion Results." Montreal: Protestant School Board of Greater Montreal, 1972. Mimeo.
- Spilka, I. V. "Assessment of Second Language Performance in Immersion Programs," *Canadian Modern Language Review*, Vol. 32 (1976), 543-61.
- Stern, H. B., and others. *Three Approaches to Teaching French: Evaluation and Overview of Studies Related to the Federally Funded Extensions of the Second Language Learning (French) Programs in the Carleton and Ottawa School Boards*. Toronto: Ministry of Education, Ontario, 1976.
- Swain, M. "Bilingual Education for the English-Canadian," *International Dimensions of Bilingual Education Georgetown University Round Table on Languages and Linguistics 1978*. Edited by J. E. Alatis. Washington, D.C.: Georgetown University Press, 1978b, pp. 141-54.
- Swain, M. "Bilingualism Without Tears," in *On TESOL '82 Pacific Perspectives on Language Learning and Teaching*. Edited by N. A. Clarke and J. Handscombe. Washington, D.C.: TESOL, 1983, pp. 35-46.

- Swain, M. "French Immersion Programs Across Canada: Research Findings," *Canadian Modern Language Review*, Vol. 31 (1974), 117-29.
- Swain, M. "French Immersion Programs in Canada," *Multiculturalism*, Vol. 4, No. 2 (1980), 3-6.
- Swain, M. "Home-School Language Switching," *Understanding Second and Foreign Language Learning: Issues and Approaches*. Edited by J. C. Richards. Rowley, Mass.: Newbury House, 1978c, pp. 238-51.
- Swain, M. "More About Primary French Immersion Classes," *Orbit*, Vol. 27 (1975b), 13-15.
- Swain, M. "School Reform Through Bilingual Education: Problems and Some Solutions in Evaluating Programs," in *Comparative Education Review*. Edited by J. Simmons and R. G. Paulston. October, 1978a, pp. 420-33.
- Swain, M. "Writing Skills of Grade Three French Immersion Pupils," *Working Papers on Bilingualism*, Vol. 7 (1975a), 1-38.
- Swain, M., and B. Burnaby. "Personality Characteristics and Second Language Learning in Young Children: A Pilot Study," *Working Papers on Bilingualism*, Vol. 11 (1976), 115-28.
- Swain, M., and S. Lapkin. *Evaluating Bilingual Education: A Canadian Case Study*. Clevedon, Avon, England: Multilingual Matters, 1982.
- Swain, M.; S. Lapkin; and C. M. Andrew. "Early French Immersion Later On," *Journal of Multilingual and Multicultural Development*, Vol. 2 (1981), 1-23.
- Szamosi, M.; M. Swain; and S. Lapkin. "Do Early Immersion Pupils 'Know' French?" *Orbit*, Vol. 49 (1979), 20-23.
- Test de Compréhension Auditive, Niveaux A and B*. Toronto: Ontario Institute for Studies in Education, 1978 and 1979.
- Test de Compréhension de l'Écrit, Niveaux A and B*. Toronto: Ontario Institute for Studies in Education, 1978 and 1979.
- Tucker, G. R. "The Acquisition of Knowledge by Children Educated Bilingually," *Georgetown Monograph Series on Languages and Linguistics*, 1975, 267-77.
- Tucker, G. R.; E. Hamayan; and F. Genesee. "Affective, Cognitive and Social Factors in Second Language Acquisition," *Canadian Modern Language Review*, Vol. 32 (1976), 214-26.

Part Three

Immersion Education
in the
United States

122

The Immersion Approach to Foreign Language Teaching

Russell N. Campbell
University of California, Los Angeles

Glossary

Trilingual:	Speaks three languages
Bilingual:	Speaks two languages
Monolingual:	American

Characterizing the United States as a monolingual nation is perhaps an exaggeration, but the often-cited report of the Presidential Commission on Foreign Languages and International Studies ("Strength," 1979) confirmed what many observers have known for decades: "Americans' incompetence in foreign languages is nothing short of scandalous, and it is becoming worse." More specifically, the commission stated:

We are profoundly alarmed by what we have found; a serious deterioration in this country's language and research capacity at a time when an increasingly hazardous international military, political, and economic environment is making unprecedented demands on America's resources, intellectual capacity, and public sensitivity.

These sentiments have been echoed again and again by public and private figures. For example, John Elliot, Jr., Chairman of Ogilvy and Mather, International, submitted testimony to Representative Paul Simon, Chairman of the Postsecondary Education Subcommittee of the House Committee on Education and Labor. Mr. Elliot stated:

The ineptitude of Americans (including me) in foreign languages is an embarrassment for our country. It contributes to our image of arrogance.

Secretary of Education Terrell H. Bell has also made his feelings known regarding the importance of foreign language education. He stated that:

We do not, as a country, nor as a people, live in isolation. Learning foreign languages is important. The business of industry and of this country's foreign relations does not occur in just one language; it is conducted in many. . . . As the world grows smaller, tied together via instant communi-

¹Only the first major word of a title is given for references in the text cited according to their titles. The complete titles appear in the selected references section at the end of this paper.

cations, we need to know more about the people and culture of other countries. A knowledge of language can help us achieve this. (Bell, 1981)²

In spite of these somber observations by leaders in our society, little evidence exists of a ground swell of public demand for increased foreign language education opportunities in our schools. There are probably many explanations for this apparent contradiction which juxtaposes a scandalous state of nationwide linguistic ignorance with well-defined national needs and advantages for foreign language study. Among these explanations might well be (1) the current powerful status of English as an international *lingua franca*; (2) the assumed increased costs to taxpayers if additional foreign language programs were added to school curricula; or (3) perhaps the fear that time devoted to foreign language education would decrease the achievement of students in other scholastic areas. All of these reasons may help to account for the current status of foreign language education in this country. However, one reason may loom even larger than all of these explanations; namely, monumental anecdotal evidence exists that investments of time, energy, and money for books, teachers, laboratories, and other equipment for foreign language courses have simply not paid off in terms that parents, school officials, and students can accept. Too few Americans look back on their experience with foreign language study with anything other than disappointment and embarrassment. The overwhelming reaction of people to questions regarding prior participation in foreign language classes in American schools is captured in statements such as, "Oh yes, I studied Spanish for two years, but I can't speak or understand it at all." The cumulative effect of such statements over the past several decades has given Americans little enthusiasm and few expectations for foreign language study.

From this perspective the first reports of the Canadian experience with foreign language immersion programs (as described in this publication and in Lambert and MacNamara, 1969; Tucker and others, 1971) were reviewed by some American applied linguists and foreign language teachers during the late 1960s. The claims that monolingual English-speaking schoolchildren were successfully learning and using a foreign language for authentic academic purposes were indeed remarkable.

In 1971 the author of this chapter, on returning from a visit to the St. Lambert French immersion program and after extended consultation with students, parents, teachers, school officials, and McGill University participants in that program, approached Culver City, California, Unified School District authorities to suggest the possible replication, with only minor modifications, of the St. Lambert project in an

²Reprinted from *Family Weekly*, copyright, 1981, 1515 Broadway, New York, NY 10036.

American setting. After careful review of the then existing literature on the Canadian experience and extensive negotiation with the Culver City School Board, parent groups, a school principal, and others, it was agreed in 1971 that the first American immersion program in a foreign language would begin at the Linwood Howe Elementary School in Culver City. Given the geographical and demographic characteristics of southern California, the program planners decided that the foreign language would be Spanish. An informal agreement was reached between the Culver City Unified School District and the UCLA English as a Second Language Department wherein UCLA faculty and graduate students would collaborate with district teachers and principals in the monitoring and evaluation of the experimental program. This paper is to a large extent based on the investigations completed by UCLA researchers whose names and studies are listed in the bibliography found at the end of this paper.

The remainder of this paper will serve primarily to define and describe the immersion model of foreign language education as seen in one American context. A description of the students, teachers, school administrators, parents, and evaluators involved in the Culver City Spanish Immersion Program (CCSIP) will be presented. The curriculum design, objectives, theoretical underpinnings, and a critical interest, the results obtained from the implementation of immersion education will be examined. The consequence of this review of the CCSIP, added to the comprehensive review of the Canadian experiences presented earlier in this publication, will suggest that strong evidence exists to dispel the pessimism currently held by Americans regarding foreign language education in our public schools.



Students in Immersion

As in Canada (see Genesee, this publication), early immersion students in the CCSIP are admitted at the kindergarten grade level. Typically, upon admission the children are five years old and are nearly always monolingual speakers of English. Only rarely do they have any familiarity or competence in the target language (French in Canada, Spanish in Culver City). They are volunteered into the program by their parents, and no children are refused admission if they are eligible for the regular public school program. That is, children are not excluded on the basis of any psychological, social, intellectual, or physical characteristic except those qualities which would exclude any child from participation in the regular school program.

Each fall since the program began in 1971, approximately 25 students have entered the CCSIP at the kindergarten level. As these

children progress from kindergarten through the sixth grade, normal attrition occurs, primarily as a result of families moving from the school district. On the other hand, a small number of students who can demonstrate some familiarity with Spanish enter the program for the first time at the first, second, or third grade levels. Of a total current student population of approximately 460 children in the La Ballona Elementary School, the present site of CCSIP, about 150 children are participants in the immersion program. (As a result of school closures, CCSIP has moved from the Linwood Howe to the El Marino and finally La Ballona Elementary School.)



Teachers of Immersion

The primary differences between the teachers in the Culver City immersion program and other teachers in the Culver City Unified School District are twofold. First, the teachers must have native-speaker competence in Spanish. Second, they volunteer to teach in the program. During the 11 years of the program's existence, the teachers have represented a number of different Hispanic groups, including Chicano (Texas), Puerto Rican, and Cuban. Some of the teachers are bilingual Anglos. Only one teacher held a special certificate in bilingual education prior to entering the CCSIP. Several, however, have participated in seminars or in-service training programs in bilingual education subsequent to their employment in the CCSIP. For example, in most cases, the UCLA collaborators and the immersion teachers have reviewed together the published research papers based on the St. Lambert project. In subsequent years the St. Lambert research as well as studies based on the Culver City program have been read and discussed by new teachers. These reviews typically have instilled in the teachers a very high degree of positive expectation that their students could and would perform well in all aspects of the immersion model elementary school curriculum.

With only three exceptions since 1971, the teachers, once recruited, have remained with the program. One teacher who left the Culver City program was responsible for the establishment of a new immersion program in Hayward, California, in 1975. The ones that have remained have become enthusiastic advocates of immersion education and are frequently called on to share their experiences with educators from various school districts across the country.

In summary, then, the immersion program teachers can be characterized as volunteer, bilingual (Spanish-English), California-certified elementary school teachers.



School Administrators of Immersion

Only two school principals have participated in the CCSIP during its 11-year history. Neither had had a prior academic interest in Spanish; the current principal, however, is quite fluent in his use of Spanish. Both have demonstrated sustained professional curiosity as to the specific and general potential benefits of the experimental program, but they have been wisely prudent in their administration of the program as it became the source of potential controversy with non-CCSIP students, teachers, parents, and others in the Culver City community.

Two studies that examine this potential for controversy are Campbell, Taylor, and Tucker (1973); and Cleghorn (1981). Briefly, some potential controversies are that schisms may develop between immersion and nonimmersion program teachers; that nonimmersion program parents may worry about the distribution of school resources; that some citizens of the community are opposed to education in a foreign language; and that nonimmersion participants are envious of the extraordinary publicity the immersion programs receive.

The first principal, under whose supervision the CCSIP was inaugurated in 1971, became sufficiently involved in the program to make it the focus of her doctoral dissertation (Jashni, 1976). The daughter of the current principal recently completed the seven-year program. Both principals have been called on frequently to speak to educators and laymen about their administrative roles related to the immersion program.

In summary, the administration of CCSIP at the school level has been and continues to be cautious, involved, demanding, supportive, and optimistic. The principals have come to believe in the immersion approach to foreign language teaching at the elementary school level. Administrators at the level of the superintendent of schools and board of education have also been strongly supportive and have encouraged and facilitated evaluative research throughout the history of the program.



Parents of Children in Immersion

Reflecting the socioeconomic spectrum of families in Culver City, the parents of immersion students represent a wide variety of occupations and professions. In general, the students fall into the middle

socioeconomic class of American society. Most are Anglo, but there are small percentages of black, Asian, and Hispanic families as well. However, even among the Hispanic families, Spanish is rarely used at home among members of the immediate family. (One Chicano parent insisted that her son be admitted into the program, since he had not had the opportunity to learn Spanish at home and therefore could not communicate with his grandparents in New Mexico. Needless to say, her son was admitted.)

In general, the parents of the CCSIP students have been informed, observant, curious, protective, contributing, demanding, and critical participants in the program from its inception.

A description of the parents would not be adequate without some indication of why they have chosen to enroll their children in the CCSIP. The following are typical of the responses collected by Rhodes (1982) in a recent survey to the question: Why did you enroll your child in the Spanish immersion program?

I felt it would give her an added dimension to her education and provide insight into another culture. I think it's important to learn other languages.

The teachers I interviewed were very enthusiastic and dedicated. They were a big factor. [My daughter] knew some Spanish, and I felt in Los Angeles it was a good idea. Unfortunately she came into the program late [end of the third grade].

I wanted my child to learn a foreign language. [I] also felt that she was ready for more challenge than the regular kindergarten provided.

A friend told me that her children were in this program and they were enjoying learning another language. I took Spanish in high school and remembered some of it. I wanted my daughter to learn another language, and this program really helps to teach Spanish at an early age. Where else would she learn another language in kindergarten?

We felt there were many advantages to being bilingual. Fluency in Spanish is increasingly important in Los Angeles. From our own foreign language education, we knew that studying a language a few hours a week as a separate subject is not the way to really learn it.

My husband and I had a deep desire for our daughter to learn of another cultural background and have some fluency in that language.

My background—having come from Japan—and my foreign language training at UCLA, having majored in Spanish language and literature and minored in French...

Spanish being the second language in southern California, in the belief that if you learn one foreign language it is easier to learn others. It is easier to learn when you are young.

I feel that knowledge of Spanish in California is very important. I had heard about the program from friends. After visiting a classroom one

time, I decided this was an excellent opportunity. I believe that immersion in a foreign language is the best way of learning a language.

An interesting by-product of the CCSIP program is that some (not all) parents have initiated, or resumed after many years, the study of Spanish. Many have also modified their eating, travel, and social patterns to provide their children additional exposure to Hispanic language and culture. In many instances parents report that Spanish language television stations are viewed at home; books and magazines in Spanish are purchased; vacations are taken in Mexico; and Spanish-speaking neighbors, workers, acquaintances, and their families have been included in the social activities of many CCSIP families (Lebach, 1974).



Evaluators of Immersion

In addition to the constant informal observational evaluations that parents and classroom teachers impose on the program, formal empirical data on student achievements have been collected by two separate groups. First, staff members from the Culver City Unified School District are required to test all children at prescribed intervals as they progress through the standard elementary school curriculum. A number of tests, specifically identified in this paper, are used for this purpose. Results from immersion students' performance on these tests will be presented and discussed later.

The other group of evaluators is made up of UCLA professors and graduate students. From the onset of CCSIP activities, an unofficial, voluntary, but extremely close and effective working relationship has existed between the Culver City Unified School District and certain faculty and students from the UCLA English as a Second Language and Applied Linguistics departments. The UCLA group is committed to monitoring the CCSIP children's acquisition of Spanish and recording other results and consequences of the program. The results of these studies have been regularly reported to the school officials and to the parents of CCSIP children. In addition, these results have been reported in academic literature. To date some 40 articles, papers, theses, and dissertations have been based on the CCSIP (see the selected references at the end of this paper).

In addition to those directly involved in CCSIP (students, teachers, parents, administrators, and evaluators), other external observers (citizens of Culver City, employees of the Los Angeles news media, and visitors from many school districts across the country) have

played a variety of supportive roles in the development and maintenance of CCSIP and similar projects. One consequence of the research reports and the visits by educators from other school districts is that the model has now been adopted in a number of other school districts in the United States. (See "Immersion and Partial Immersion Language Programs in U.S. Elementary Schools, 1982" at the end of this paper.)

The human element in the Culver City immersion program, as has been the case in Canada, is one of positive, dynamic involvement. Teachers, parents, school officials, and external evaluators have all been extremely impressed by the children's achievements, which, in turn, have fueled their enthusiasm for and their confidence in immersion education.



Curriculum Design of Immersion

In our attempt to define immersion, we turn now from the human elements to the instructional features of CCSIP.

The Lapkin and Cummins paper (this publication) provides a chart which displays the distribution of instructional time in the foreign language, French, and the children's native language, English, during kindergarten through the sixth grade in the St. Lambert early immersion program. The Culver City Spanish Immersion Program adopted this pattern almost in its entirety.

Therefore, in CCSIP, 100 percent of the kindergarten and first grade curricula is taught in Spanish. At this level the teachers present themselves to their students, by their behavior, as monolingual speakers of Spanish. That is, they never intentionally initiate conversations or respond to children's requests or questions in English. They do, however, when of critical importance for the welfare of the children, attend to the children's personal needs even when the children express their concerns in English. Furthermore, the children constantly use English, without fear of reprimand, embarrassment, or punishment, to communicate with each other and with other members of the school community. To reiterate, monolingual English-speaking children receive all of their kindergarten and first grade instruction in Spanish from a teacher who assumes the role of a monolingual speaker of Spanish.

During the second grade Spanish continues to be the language of instruction for all content areas in the curriculum with but one exception. For the first time in the formal school experience of these children, they receive instruction via English in an English language arts

class period. That is, they are taught to read and write their home language. It should be noted that from early in the kindergarten year throughout the first grade, these children have been given instruction in Spanish language arts. By the time they enter the first grade, they have already received considerable instruction in reading Spanish. During the second grade these children learn that their teachers are not, in fact, monolingual Spanish speakers but are equally capable in Spanish and English.

In the third grade instruction in English language arts is expanded. As one CCSIP teacher said, "We teach English, spelling, correct usage, comprehension, reading, et cetera." At this grade level approximately 25 percent of the instruction during a typical school day is taught in English, and the remainder is presented in Spanish.

Instructional time is almost equally divided between English and Spanish for the fourth, fifth, and sixth years of the children's elementary school experience.

It must be emphasized that instruction in subject matter taught in Spanish is never repeated in English; nor is there translation of instructional materials. If fourth grade arithmetic is taught in Spanish, fifth grade arithmetic may be taught in English; and, in succession, sixth grade arithmetic may be taught in Spanish. The children are expected to learn the subject matter, regardless of the language of instruction. They cannot ignore instruction in their weaker language, waiting for the same content to be repeated in English.

In summary, Spanish is used as the language of instruction for approximately 3,800 hours and English for approximately 1,950 hours during the children's elementary school (kindergarten through sixth grade) experience. Slightly over 65 percent of the formal school learning of the children during this seven-year period is gained through a language that was foreign to them when they entered school and to most of their parents. But one should also make special note that approximately 35 percent of the instruction the children received was taught in their home language. There are those (Epstein, 1977; *Bilingual . . .*, 1982; Baker and de Kanter, 1981) who have suggested that the immersion model of foreign language education might be appropriate to teach English to non-English-speaking minority children in our schools. This percentage of instruction in the children's first language is one of many conditions that would need to be considered before one makes that decision (see Hernández-Chávez in this publication for other considerations of the relevance of immersion programs for minority children).



Objectives of Immersion

So far, *immersion* has been defined in terms of the human factors and of the allocations of instructional time in English and Spanish. A third approach toward a definition will be to state the set of assumed or predicted results that would be obtained by the children as a consequence of their participation in the Culver City Spanish Immersion Program. Clearly, the goals that were set in 1971 (Campbell, 1972) were based on the results, as they were understood, that had been reported in the St. Lambert studies by that time. Those developing the CCSIP were aware, however, of the several obvious differences between the French immersion program in St. Lambert and the Spanish immersion program in Culver City. The most striking difference was the role that French plays in the social, political, and economic life of the residents of Quebec as compared to the role of Spanish in those same areas in southern California. Would this apparent difference in the status of each language group have an effect on the relative success of the two immersion programs?

The question posed is obviously not a trivial matter. The different status of each language group marks a fundamental difference in implicit or explicit expectations held by the supporting Anglo communities in the two programs. Parents in the St. Lambert community clearly anticipated a need for their children to acquire French as a second language, one that would serve as a lifetime medium for academic, professional, commercial, and social interaction with the increasingly powerful francophone population in the province of Quebec. Judging from the stated reasons of the parents for enrolling their children in the Spanish immersion program in Culver City, one finds little evidence that these parents expected anything more than that their children would learn a foreign language, a language that might be of some use in southern California but not one that might be considered a critical factor in their children's academic or economic futures.

Nevertheless, in both Canada and the United States, the immersion programs are additive in nature. That is, in addition to the full and complete development of English, the home language of the children, they are provided with opportunities to acquire a foreign language. This situation is in sharp contrast to that found in the typical "transitional" bilingual education program for minority children. In this kind of program, after a brief one- or two-year period during which children are taught in their native language, they are given no additional opportunities, in the school context, to develop scholastic skills in their home language.

In spite of the different roles that Spanish plays in southern California and French in Quebec and the different expectations held by

parents as to the importance of the foreign language for their children's professional, social, and academic futures, a set of predictions for the CCSIP was established that seemed to conform to the results derived from the St. Lambert project as follows:

- The children will acquire a native-like proficiency in speaking, understanding, reading, and writing Spanish (the assumption being that by the end of the kindergarten year, the children would have attained a high degree of proficiency in understanding spoken Spanish and that proficiency in production would become evident in the first and second grades).
- They will make normal progress in achieving the standard objectives of the elementary school curriculum (language arts in English will be introduced as part of the second grade curriculum).
- They will maintain normal progress in the maturation process of their first language (English).
- They will develop positive attitudes toward representatives of the Spanish-speaking community while maintaining a positive self-image as representatives of the English-speaking community. (Campbell, 1972, p. 82)

Several comments are in order about the four predictions made previously. One should note that, in the first and third predictions, the children not only would acquire a high degree of proficiency in the foreign language, Spanish, but also would *maintain* and *develop* their competence in their *home* language, English. Implied in the second prediction is the assumption that, in spite of early immersion in a foreign language, the children would, when their entire elementary school achievement record was evaluated, compare favorably with their peers who had received all of their education in English. The implication of this comment, and it is again of special interest when we think of the implementation of immersion for minority children, is this: If there were any evidence that immersion were detrimental to the students' scholastic achievements, then the medium of instruction of the curriculum would revert to the children's native language. This alternative is never available to non-English-speaking students in our public schools.

The fourth prediction reflects a concern for how Anglo students will feel about Hispanic people and the cultures that they represent as a consequence of immersion education. But of equal concern is how these students will feel about the culture of which they are a member.

To return to these predictions and the implicit assumptions that underlie them later on will be useful. Those who would recommend immersion in English for minority students must realize that these goals are inherent to and constitute an integral aspect of the immersion model of foreign language education.



Theoretical Underpinnings of Immersion

Another dimension of a definition of immersion is an attempt to describe it in terms of the theoretical constructs on which it was based. Unfortunately, the Culver City immersion program was developed and implemented without the benefit of a well-defined set of hypotheses about language acquisition. As noted previously, there were predictions as to the benefits that would accrue to the participants. These benefits, however, were based on the well-documented successes of children in the St. Lambert program, not on a set of cause and effect assumptions that had been previously established in psycholinguistic theories of second language acquisition (SLA). In fact, one can say with some confidence that the state of the art of SLA theory was in its infancy at the time of the program's inception and that the tremendous advances in that area since 1971 have been concurrent with, but to a large extent independent of, the history of foreign language immersion programs in Canada and in the United States.

It is therefore of some interest to compare the conditions of instruction under which CCSIP children are expected to acquire Spanish and the conditions under which current psycholinguistic theory would claim to be optimal for second language acquisition.

Of all current theoretical positions held by SLA researchers, those formulated by Krashen (1981, p. 56) seem most closely relevant to the attempts in this paper to define and explain immersion. Krashen enumerates and discusses five hypotheses:

1. The acquisition-learning hypothesis
2. The natural order hypothesis
3. The monitor hypothesis
4. The input hypothesis
5. The affective filter hypothesis

In consideration of Krashen's first hypothesis, the acquisition-learning hypothesis, the immersion model of foreign language education provides an extremely rich, convenient, and almost laboratory-like environment in which to observe and measure children's capacity to *acquire* a foreign language; that is, to gain competence in a foreign language in a manner that Krashen in his article "Bilingual Education and Second Language Acquisition Theory" describes as:

... similar to the way children develop first language competence ... a subconscious process in two senses: people are not often aware that they are acquiring a language while they are doing so. What they are aware of

is using the language for some communicative purpose. Also, they are not often aware of what they have acquired; they usually cannot describe or talk about the rules they have acquired, but they have a "feel" for the language. (p. 56)

The *acquisition* process is in contrast to *learning* a foreign language as a consequence of instruction which leads to "... knowing about language or formal knowledge of a language. ... In everyday terms *acquisition* is picking up a language. Ordinary equivalents for *learning* include grammar and rules" (p. 56). Current theory suggests that *acquisition* is by far the more powerful channel for an individual to develop competence in a second language. This assumption is manifested in the immersion model of foreign language education, since formal instruction in the grammatical or phonological rules of Spanish is not a programmatic feature of immersion programs. A Culver City immersion student, responding to a question posed by a newspaper reporter, has been quoted as saying, "We do not study Spanish, we study in Spanish." In that statement she captured one of the basic tenets of the language immersion approach which would seem to be completely compatible with the implications of Krashen's first hypothesis and its interdependence with the second and third hypotheses as well.

According to the second hypothesis, the natural order hypothesis, "... students acquire (not learn) grammatical structures in a predictable order; that is, certain grammatical structures tend to be acquired early and others late." This hypothesis is amenable to testing in the immersion context. Indeed, some phonological data have already been collected and analyzed (Snow and Campbell, 1981) that will provide a basis for future studies of this hypotheses.

The third hypothesis, the monitor hypothesis, is closely related to the first one. According to the third hypothesis, "conscious *learning* is not at all responsible for our fluency but has only one function; it can be used as an editor or monitor." This hypothesis is taken here as relevant to the discussion later in this paper of CCSIP student performance in Spanish.

If immersion depends almost entirely on acquisition (the first hypothesis) for the development of foreign language competence, then a question of how acquisition happens must be raised. The answer comes in the form of the fourth hypothesis, the input hypothesis. Some of the key assumptions underlying this hypothesis, in Krashen's words, are as follows:

The input hypothesis postulates that we acquire by ... understanding language that contains input containing structures that are a bit beyond the acquirer's current level.

We acquire structure by understanding messages and not focusing on the form of the input or analyzing it. We can do this, we can understand language that contains structures we do not "know" by utilizing context, extralinguistic information, and our knowledge of the world.

The best way to "teach" speaking, according to this view, is simply to provide "comprehensible input." Speech will come when the acquirer feels ready. (pp. 58-59)

Careful reading of the referenced article by Krashen (1981) would fill in many of the gaps in his excellent discussion of the input hypothesis not captured in these selected quotations. Apparently, however, the immersion model, as defined in this paper and exemplified in the Culver City program, provides an opportunity for close examination of this hypothesis. CCSIP teachers would appear to provide nearly ideal comprehensible input to their students through their almost inexhaustive use of gestures, audiovisual aids, realia, and perhaps of critical importance, their verbal reactions (for example, repetition, reformulation, and reduction of language) to indications of their students' incomprehension of messages. Furthermore, the children are granted a silent period in kindergarten before they are required to speak Spanish, "a phenomenon of second language acquisition that is consistent with the input hypothesis." (p. 60)

Krashen's fifth hypothesis, the affective filter hypothesis, states, in part, that anxiety, motivation, and self-confidence are related to success in second language acquisition. Furthermore, he hypothesizes that:

... these affective factors relate more directly to subconscious language acquisition than to conscious learning, because we see stronger relationships between these affective variables when communicative-type tests are used (tests that require the use of the acquired system) and when we test students who have had a chance to acquire the language and not just learn it in foreign language classes. (p. 62)

As has already been noted, the CCSIP children have massive opportunities, in the school context, to apply their subconscious language acquisition strategies. Therefore, these affective factors loom large in this description of the features of current theory and practices in CCSIP classrooms.

Although no formal ethnographic and certainly no empirical testing has been done to determine the anxiety level of CCSIP children during their immersion experience, especially during the early days of the kindergarten year (which one would think might be the most anxiety-ridden period), no evidence exists that these monolingual English-speaking children are adversely affected emotionally by their encounter with a monolingual Spanish-speaking teacher. If one speculates why this situation is so, one would look first to the behavior of

the teachers who (1) hold high expectations that the children can and will learn to communicate with them in Spanish; (2) are exceedingly gentle, patient, and tolerant in their treatment of the children; and (3) are quite sympathetic and empathetic with the children's predicament in that they have, especially the early grade teachers, been in the children's shoes as part of their own personal experiences.

Also, the children are never frustrated because the teacher fails to understand and respond to their urgent personal needs. The teachers are, as stated earlier, bilingual. Finally, although encouraged to use Spanish, the children may and do speak English with each other at will. There appears to be little in the immersion model that would cause these children anxiety, which is not to say that this feeling does not occur.

It is difficult to speak of discrete motivational factors that might be attributed to or recognized in five-year-old CCSIP children. However, one suspects that the immediate positive feedback in the form of attention and praise the children receive from teachers, parents, and, occasionally, media reporters could be considered motivating factors.

At what point and to what degree the children begin to understand the potential uses to which they might employ their Spanish language abilities are still unclear. However, by the sixth grade, the students can and do articulate perceived benefits of learning Spanish; for example, getting a job, communicating with Spanish-speaking people, and fulfilling university foreign language requirements (Snow, 1979).

All in all, there appears to be a very close match between the hypothesized optimal conditions for SLA and the conditions for SLA found in the Culver City immersion program. In a sense immersion can then be defined, in part, as a model of foreign language education whose conditions are largely consistent with Krashen's five hypotheses.



Results Obtained from Immersion

In the effort to define immersion, we have thus far examined the human and logistical factors as well as the predicted results and the compatibility of CCSIP with hypotheses underlying current SLA theory. A final form of definition can be given now in terms of results that have been documented from the actual implementation of the model.

Keeping in mind the 1971 predictions for the program and the apparent near optimal conditions for students' second language

acquisition, we now have a frame of reference in which to examine the results obtained from the Culver City immersion program. We will begin by reviewing the results that relate to the second, third, and fourth predictions and then return to the first one.

As has been the case with children in the French immersion programs in Canada (Lambert and MacNamara, 1969; Tucker and others, 1971), CCSIP children have consistently performed scholastically at a level equal to or higher than their peers who have received all of their elementary school education in English. Table I was prepared by Culver City school officials for distribution to parents, the Culver City school board, and other interested parties. The comparative grade-level results that this table shows for three consecutive years of sixth grade students' performance on the *Comprehensive Test of Basic Skills (CTBS)* is typical of the results obtained on all scholastically oriented tests required by the school system. Clearly, CCSIP children's performance justifies and satisfies the second prediction stated previously. Furthermore, since a substantial amount of formal school testing measures English language skills, it is clear from the results reported in Table I that, with the exception of mechanics and spelling, CCSIP children are as proficient as their peers in their English language abilities. In the case of vocabulary, comprehension, and expression, these children far exceed their peers.

Has the fourth prediction been supported as well? Several attempts have been made by researchers to measure CCSIP children's attitudes. Waldman (1975) found that:

The CCSIP children have the same positive attitudes toward the Anglo culture and English speakers as the other children (native English-speaking students enrolled in a traditional school program). But they had more positive attitudes toward the Mexican-American culture and Spanish than the other subjects. (p. 51)

Jashni (1976), reporting on the CCSIP children's attitudes toward their own culture, stated that:

There were no significant differences at the .01 level of confidence in the attitudes toward the English culture of the Cross-Cultural Inventory for kindergarten through third grade [*sic*] when comparing program, sex, or their interaction. (p. 99)

Using a less empirical approach to her research, Lebach (1974) found that:

The students have developed positive attitudes toward Spanish language and culture and toward foreign language learning in general (pp. 71—72).

Although the evidence is not overwhelming, there is reason to believe that the fourth prediction has, in fact, been confirmed.

Table 1
Mean Grade Equivalent Scores for Sixth Grade
CCSIP Students Compared with Other Sixth Graders
Who Took the Comprehensive Test of Basic Skills (CTBS)
Three-Year Average—1977—1979
(Norm = 6.1)

	<i>CCSIP students</i>	<i>Nonimmersion students in same school</i>	<i>Culver City Unified School District</i>
Reading			
Vocabulary	7.50	6.80	6.61
Comprehension	8.10	6.80	6.60
Total	7.80	6.80	6.61
Mathematics			
Computation	7.00	6.50	6.49
Concepts	6.80	6.40	6.22
Applications	7.00	6.30	6.31
Total	6.90	6.20	6.29
Language			
Mechanics	5.00	7.60	7.08
Expression	9.00	7.00	6.95
Spelling	5.60	5.90	5.90
Total	6.70	6.40	6.48
Total Battery	7.10	6.40	6.33

NOTE: Results are reported in grade equivalent scores. The term *total* refers to the average grade equivalent score for a subject matter area.

Clearly, if the conditions surrounding the CCSIP program remain the same, parents, school personnel, and the public can be confident that children who follow the CCSIP curriculum will not be disadvantaged insofar as their scholastic performance, prediction 2; English language development, prediction 3; or self-concept, prediction 4, are concerned. In fact, the opposite seems to be true in each case.

This statement is, all things considered, a very powerful one with enormous implications. Research studies have repeatedly demon-

strated that under the conditions described thus far, in spite of or as a consequence of, children receiving up to 60 percent of their total elementary school education in a second language, they will perform scholastically as well as, or better than, their peers and will have a broader sociocultural perspective of themselves and of representatives of at least one other ethnic group. This situation must be considered a clear, positive advantage. If in addition to these accomplishments, one finds that the children also make substantial progress toward acquisition of a foreign language, then the immersion model becomes extremely attractive.

We can now return to the first prediction; namely, "The children will acquire native-like proficiency in speaking, understanding, reading, and writing Spanish." This prediction is the one most intimately related to SLA theory as manifested in Krashen's five hypotheses. This prediction pertains to that area that typically is of major interest to foreign language educators. Just how much Spanish do students learn in the Culver City immersion program?

The response to this question must be broken down into two sub-questions: (1) When students are tested for linguistic accuracy in their use of Spanish, how well do they perform? and (2) What can they do with the Spanish they know? These questions are another way of asking about the students' linguistic competence versus their communicative competence, or at least nearly so.

Clearly, the 1971 prediction as far as the students' linguistic competence is concerned was overly optimistic. Even after seven years (kindergarten through the sixth grade) of participation in CCSIP, the children still do not sound like native speakers of Spanish, nor can they perform as well as native speakers in reading, writing, or aural comprehension. Their Spanish is accented, they make grammatical and pronunciation errors, and they misuse or are ignorant of vocabulary that would be common knowledge to native speakers of their own age groups. Plann's research led her to the following conclusions:

... in a cross-sectional study of their [CCSIP students] acquisition of agreement rules for article-noun-adjective gender and number, and for verb person and number, it was shown that none of these forms could be considered fully acquired. Furthermore, no definite trend of improvement across grades was found. (1979, p. 119)

Somewhat earlier, Plann made this observation:

Both the tenaciousness and systemacity [*sic*] of these errors suggest the development of a classroom dialect peculiar to Spanish Immersion Program students. The children ... reinforce each other's incorrect usage, and fossilization at the morphological level results. This may be an inevitable by-product of acquisition of a second language in an immersion program. (1977, p. 131)

Other studies (Cohen, 1976; Boyd, 1974; Plann and Ramirez, 1976; Snow and Campbell, 1981) confirm Plann's findings as they pertain to linguistic competence. Evelyn Hatch (private conversation) speculated that Chicano children who produced the same number of errors in their production of English as the typical CCSIP child produces in Spanish would be categorized among those who were in dire need of ESL instruction.

Earlier in this paper it was established that there appeared to be a very close match between current SLA theory and the salient features of the immersion model of foreign language education. It was especially noted that immersion, as practiced in the Culver City program, would seem to offer precisely the kind of comprehensible input that would be optimal for students' efficient second language acquisition. However, the evaluations of CCSIP students' production of Spanish previously reported indicate that, in spite of nearly 4,000 hours of classroom exposure, students have not acquired full command of the syntactic, morphological, lexical, or phonological rules of Spanish. SLA scholars have, in fact, anticipated and discussed this phenomenon. Corder (1967), Krashen (1976), and others have noted the critical difference between *input* and *intake*. Clearly, CCSIP children do not process for acquisition all of the Spanish they are exposed to. Just as in all areas of learning, a continuum exists along which the CCSIP students fall insofar as their acquisition of Spanish is concerned. That is, given what appears to be equal opportunity to acquire Spanish, some students demonstrate extremely low levels of grammaticality in their production of Spanish while others, in the same quantity, consistently produce nearly error-free oral and written Spanish. Speculation as to why this is the case leads one to take very seriously the effects of Krashen's "affective filter" hypothesis.

It has been said that the CCSIP students are indeed sheltered, protected, and encouraged in the immersion context. Never is their performance in Spanish ridiculed; in fact, they frequently receive enthusiastic praise for even their deviant utterances. There appears to be a minimum of the kind of social pressure or the amount of overt correction by teachers that might motivate the students to modify their production toward the native-speaker norm. Apparently, the CCSIP students typically reach a level of linguistic competence adequate for communicative purposes and are indeed prepared to make the next step toward native-like linguistic competence, but they are unlikely to do so until there are reasonable, powerful motives to do so.

In the previous few paragraphs, it has been emphasized that the 1971 prediction that CCSIP students would have native-like competence in Spanish was overly optimistic. It must be reiterated, however, that, while the children's speech is typically accented (in some

way deviant), the children produce a very high percentage of the linguistic forms required in any given utterance in adherence to the linguistic rules of Spanish. In fact, the students' degree of grammaticality, that is, the correct selection of lexical and grammatical forms and the correct pronunciation in the production and comprehension of Spanish utterances, far exceeds the degree of ungrammaticality. Only when the actual results are compared to the 1971 prediction is there reason for concern. When compared to children from any other known elementary school foreign language program, CCSIP children are extraordinarily competent. In the future, given a social or scholastic need, these children will, it is confidently assumed, modify their production rapidly and efficiently toward native speaker norms.

If the 1971 prediction had been worded in a slightly different way, one would find that the CCSIP experience has been extremely successful. The prediction might have read:

Students who participate in the CCSIP (K--6) will be able to use Spanish to fulfill social and scholastic tasks related to the domain of the school.

Substantial evidence exists that this post hoc prediction has been more than satisfied. Students use Spanish daily to communicate their needs, desires, requests, and feelings, to their teachers, to their peers, and to the frequent classroom visitors (Boyd, 1974; Flores, 1973). Outside the school, anecdotal evidence from parents and teachers suggests that the children have participated, in Spanish, in many social interactions in the greater Los Angeles community and, of great pride to parents, in international travel in Spanish-speaking countries. Galvan and Campbell (1979) presented experimental evidence of the children's ability to act as interpreters in a setting outside the classroom. These researchers argued that this ability indicates that CCSIP children can successfully use Spanish for authentic communicative purposes. Rarely has it been possible to make such strong claims about the level of communicative competence that can be gained from students' participation in any other foreign language education program that has been offered in American schools.

The post hoc prediction has also been confirmed insofar as the use of Spanish for scholastic purposes. Abundant observational evidence exists of the students' ability to use Spanish in all facets of classroom work in all content areas. The most convincing evidence of students' level of achievement in this area, however, is found in the students' performance on the *CTBS* test given in Spanish.

Over the past four years, the *CTBS (Español)* has been administered to sixth grade CCSIP children. As shown in Table 2, the immersion program students typically fall behind no more than a few months in grade level and, in some cases, are ahead of the norming

Table 2
Mean Grade Equivalent Scores for Sixth Grade
Students Who Took the CTBS—Español
1979—1982

	1979	1980	1981	1982
	Norm 6.8	Norm 6.8	Norm 6.8	Norm 6.7
Reading				
Vocabulary	6.2	*	6.5	5.5
Comprehension	6.2	*	7.0	6.8
Total	6.3	5.7	6.6	6.1
Mathematics				
Computation	7.3	*	9.6	7.9
Concepts	6.0	*	8.4	6.7
Applications	7.0	*	8.5	7.3
Total	7.0	*	8.9	7.1

*Scores not available.

NOTE: Results are reported in grade equivalent scores. The term *total* refers to the average grade equivalent score for a subject matter area.

group of native Spanish-speaking children in reading skills and are considerably beyond the norm in mathematics.

In summarizing the discussion of results that have been observed as a consequence of student participation in the CCSIP, one finds that students from the immersion model have a very high level of communicative competence in a foreign language without detracting from their normal development in their first language or from their success in scholastic achievement. Further, this program provides opportunities for the enhancement of students' understanding and appreciation of other ethnolinguistic groups without a reduction in the students' self-esteem. In other words, with the exception of the students' acquisition of a native-like level of linguistic competence, the 1971 predictions have been attained. These findings correspond to those recorded for immersion programs in Canada and would, we can safely predict, be found for similar programs inaugurated in other schools in the United States or elsewhere.



Conclusion

This paper began with a discussion of the paucity of foreign language resources in the United States. Next came a description and a definition of a model of foreign language education that has demonstrated in Canada and in the United States a potential for producing students capable of using foreign languages to fulfill authentic, real-life social and scholastic needs. Further, the conditions were described that were present, in terms of personnel, time, and other variables that, combined, seem to account for the children's achievements. Even though there appear to be limitations on what can be accomplished insofar as linguistic competence is concerned, the gains that children make toward acquiring foreign languages would support recommendations for the immersion model as an optional program for children in school districts across America. It is indeed heartening to note that programs similar to the Culver City program are now flourishing in a number of American cities and that the number of schools offering immersion or partial immersion programs is increasing each year. (See the appendix to this paper for information about these schools prepared by Rhodes and Schreiberstein, [1983]).

The speculations raised earlier as to why Americans are so reluctant to support foreign language education for their children can be reexamined. It is true that English is in a favored position as an international *lingua franca*. Yet, as Congressman Paul Simon's book *The Tongue-Tied American* (1980) so painfully demonstrates, our collective incompetence in foreign languages is costing us dearly in international prestige, in economic and political competition, and even in areas of national defense. His message must find ways of reaching the public.

Fears that the addition of foreign language education programs would substantially increase the cost of elementary school education can now be easily allayed. The CCSIP program has not required the addition of extra teachers, additional space, or even significant amounts of extra funds for instructional materials. Neither the CCSIP program, nor any other known immersion program, has increased the operational costs of schools in any appreciable way. This information must also be passed on to a cost-conscious public.

Many parents have been worried about the effects that foreign language study might have on their children's overall scholastic achievement. As has now been convincingly demonstrated in dozens and dozens of cases, English-speaking children who participate in immersion programs typically perform on a par with or even better than their peers who follow an English-only curriculum. Thus, in most cases, parents' fears are unfounded. The real problem appears to

be that most parents are not aware of these results and consequently are unable to make knowledgeable decisions about the language education of their children.

Finally, the stereotypical negative foreign language experience that many Americans have shared, one that colors our collective view about foreign language study, can be laid to rest. The immersion model of foreign language education has provided children with opportunities to acquire overall competence in a second language that permits them to use that language for real-life, authentic social and scholastic purposes. The model has indeed allowed students to become functional bilinguals to a degree that has never been matched in the history of foreign language education in our public schools in this country. Surely, it is time to provide our children and our nation with the benefits that can be derived from this model of foreign language instruction.

Selected References

- Adams, M. S. "The Acquisition of Academic Skills and a Second Language Through a Program of Total Immersion." Master's thesis, University of California, Los Angeles, 1972.
- Baker, K., and A. de Kanter. *Effectiveness of Bilingual Education: A Review of the Literature*. Washington, D.C.: U.S. Department of Education, Office of Technical and Analytic Systems and Office of Planning and Budget, 1981.
- Bell, T. H. "Ask Them Yourself," *Family Weekly*, July 18, 1981.
- Berman, J. "Some Effects of Formal Instruction on the Attitudes and Second Language Oral Proficiency of Students Enrolled in an Early Total Immersion Program." Ph.D. diss., University of California, Los Angeles, 1982.
- Bilingual Education Amendments of 1981*. 97th Cong., 2nd sess., April 23 and 26, 1982. S. 2022.
- Boyd, P. "The Acquisition of Spanish as a Second Language by Anglo Children in the Third Year of an Immersion Program." Master's thesis, University of California, Los Angeles, 1974.
- Broadbent, R. "Some Consequences of Following an Elementary School Curriculum in a Second Language." Master's thesis, University of California, Los Angeles, 1973.
- Campbell, R. N. "Bilingual Education in Culver City." *Workpapers in Teaching English as a Second Language*. Vol. 6 (1972), 87—91.
- Campbell, R. N., and J. Galvan. "Bilingual Education, Language Immersion, and Home Language Maintenance." Paper presented at the Early Childhood Education Forum. Austin: University of Texas, 1980.

- Campbell, R. N.; D. Taylor; and G. R. Tucker. "Teachers' Views of Immersion-Type Bilingual Programs: A Quebec Example." *Foreign Language Annals*, Vol. 7 (October, 1973), 106-110.
- Cathcart, R. L. "Report on a Group of Anglo Children After One Year of Immersion in Instruction in Spanish." Master's thesis, University of California, Los Angeles, 1972.
- Cleghorn, A. "Patterns of Teacher Interaction in an Immersion School in Montreal." Ph.D. diss., McGill University, Montreal, 1981.
- Cohen, A. D. "The Acquisition of Spanish Grammar Through Immersion: Some Findings After Four Years." *Canadian Modern Language Review*, Vol. 23 (May, 1976), 562-74.
- Cohen, A. D. "The Culver City Spanish Immersion Program: The First Two Years." *The Modern Language Journal*, Vol. 58 (1974), 95-103.
- Cohen, A. D. *A Sociolinguistic Approach to Bilingual Education*. Rowley, Mass.: Newbury House Pubs., 1975a.
- Cohen, A. D. "Successful Immersion Education in North America." *Working Papers in Bilingualism*, No. 5, 1975b, 39-46.
- Cohen, A. D.; V. Fier; and M. Flores. "The Culver City Spanish Immersion Program—End of Year #1 and Year #2." *Workpapers in Teaching English as a Second Language*, Vol. 7 (1973), 65-74.
- Cohen, A. D., and S. Lebach. "A Language Experiment in California: Student, Teacher, Parent, and Community Reactions After Three Years." *Workpapers in Teaching English as a Second Language*, Vol. 8 (1974), 33-46.
- Cohen, A. D., and M. Swain. "Bilingual Education: The 'Immersion' Model in the North American Context." *TESOL Quarterly*, Vol. 10 (March, 1976), 45-54.
- Corder, S. P. "The Significance of Learner's Errors." *International Review of Applied Linguistics*, Vol. 5, No. 4 (1967), 161-70.
- Epstein, N. *Language, Ethnicity and the Schools*. Washington, D.C.: Institute for Educational Leadership, George Washington University Press, 1977.
- Fier, V. "The Culver City Spanish Immersion Program: An Overview." Master's thesis, Occidental College, Los Angeles, 1974.
- Flores, M. "An Early Stage in the Acquisition of Spanish Morphology by a Group of English-Speaking Children." Master's thesis, University of California, Los Angeles, 1973.
- Galvan, J. "A Progress Report on the Learning of Spanish by English Speakers in the Culver City Immersion Program: Spanish Reading." Paper presented at TESOL Conference, Mexico City, 1978.
- Galvan, J., and R. N. Campbell. "An Examination of the Communication Strategies of Two Children in the Culver City Spanish Immersion Program," in *The Acquisition and Use of Spanish and*

- English as First and Second Languages*. Edited by Roger W. Anderson. Washington, D.C.: Teaching English to Speakers of Other Languages, 1979.
- Galvan, J.; A. Imamura; and B. Jaffe. "A Report on Research in Progress in the Culver City Spanish Immersion Program." Paper presented at American Council on Teaching Foreign Languages Conference, San Francisco, 1977.
- Jaffe, B. "Strategies of Communication: Spanish Immersion Program." Master's thesis, University of California, Los Angeles, 1978.
- Jashni, V. "Effects of Spanish Immersion Education in the Kindergarten and Primary Grades on the Affective and Cognitive Domains." Ph.D. diss., Brigham Young University, Provo, 1976.
- Krashen, S. "Bilingual Education and Second Language Acquisition Theory," in *Schooling and Language Minority Students: A Theoretical Framework*. Developed by the California State Department of Education, Office of Bilingual Education. Los Angeles: California State University, Evaluation, Dissemination, and Assessment Center, 1981, pp. 51—79.
- Krashen, S. "Formal and Informal Linguistic Environments in Language Acquisition and Language Learning." *TESOL Quarterly*, Vol. 10 (June, 1976). 157—68.
- Lambert, W., and J. MacNamara. "Some Intellectual Consequences of Following First-Grade Curriculum in a Foreign Language." Mor. McGill University, 1969, Manuscript.
- Lebach, "Report on the Culver City Spanish Immersion Program in Its Third Year: Its Implications for Language and Subject Matter Acquisition, Language Use and Attitudes." Master's thesis, University of California, Los Angeles, 1974.
- Plann, S. "Acquiring a Second Language in an Immersion Classroom," in *On TESOL 77*. Edited by D. Brown, C. Yorio, and R. Crymes. Washington, D.C.: Teaching English to Speakers of Other Languages, 1977, pp. 213—25.
- Plann, S. "Morphological Problems in the Acquisition of Spanish in an Immersion Classroom," in *The Acquisition and Use of Spanish and English as First and Second Languages*. Edited by Roger W. Anderson. Washington, D.C.: Teaching English to Speakers of Other Languages, 1979, pp. 119—132.
- Plann, S. "The Spanish Immersion Program: Towards Native-Like Proficiency of Classroom Dialect?" Master's thesis, University of California, Los Angeles, 1976.
- Plann, S., and A. Ramirez. "A Study of the English and Spanish of Spanish-Speaking Pupils in a Spanish Immersion School Program," in *Workpapers in Teaching English as a Second Language*, Vol. 10, 1976, 89—108.

- Rhodes, N. Unpublished survey data. Center for Applied Linguistics, Washington, D.C., 1982.
- Rhodes, N., and A. Schreiberstein. *Foreign Language in the Elementary School: A Practical Guide*. Washington, D.C.: Center for Applied Linguistics, 1983.
- Seheding, S. "A Case Study in Forgetting a Second Language: Joanna." Master's thesis, University of California Los Angeles.
- Simon, P. *The Tongue-Tied American: Confronting the Foreign Language Crisis*. New York: Continuum Publishing Co., 1980.
- Snow, M. A. "Development, Administration, and Evaluation of the 'Prueba de Lectura C.I.D.'" Los Angeles: University of California, 1981c.
- Snow, M. A. "Graduates of the Culver City Spanish Immersion Program: A Follow-up Report." Los Angeles: University of California, 1981.
- Snow, M. A. "The Immersion Technique of Bilingual Education: The St. Lambert and Culver City Models." Los Angeles: University of California, 1977.
- Snow, M. A. "Self-Report of Attitudes and Language Use by Students in a Spanish Immersion Program." Master's thesis, University of California, Los Angeles, 1979.
- Snow, M. A., and R. N. Campbell. "The Acquisition of Spanish Phonology by English-Speaking Children in an Immersion Program." Paper presented at the Sixth International Congress of Applied Linguistics Association Internationale de Linguistic Appliquée (AILA), Lund, Sweden, 1981.
- Snow, M. A.; J. Galvan; and N. Campbell. "The Pilot Class of the Culver City Spanish Immersion Program: A Follow-up Report After the Seventh Grade, or, What Ever Happened to the Immersion Class of '78?" in *Second Language Acquisition Studies*. Edited by K. Bailey, M. Long, and S. Peck. Rowley, Mass.: Newbury House, 1983, pp. 115—25.
- "Strength Through Wisdom: A Critique of U.S. Capability: A Report to the President from the President's Commission on Foreign Language and International Studies, November, 1979." *The Modern Language Journal*, Vol. 64, No. 1 (spring, 1980), 9—54.
- Tucker, G., and others. "Cognitive and Attitudinal Consequences of Following the Curricula of the First Four Grades in a Second Language." Montreal: McGill University, 1971. Manuscript.
- Waldman, E. "Cross-Ethnic Attitudes of Anglo Students in Spanish Immersion, Bilingual, and English Schooling." Master's thesis, University of California, Los Angeles, 1975.
- Weissman, J. "Strategies of Communication in the Culver City Spanish Immersion Program." Master's thesis, University of California, Los Angeles, 1978.

Immersion and Partial Immersion Language Programs in U.S. Elementary Schools, 1982

<i>School District or City</i>	<i>Comments</i>	<i>Number of schools</i>	<i>Number of pupils</i>	<i>Number of teachers</i>	<i>Languages</i>	<i>Number of aides</i>	<i>Contacts</i>
Alpine, Utah School district	Started in 1978 Total immersion Local funding only Grades 1-5	1	104	4	Spanish		Janet G. Spencer, Principal Cherry Hill Elementary School 250 E. 1650 South Orem, UT 84057 (801) 225-3387
Baton Rouge, Louisiana Local educational agency	Started in 1980 Total immersion	1	60	4	Spanish French		Ben Peabody, Sr., Principal La Belle Aire Elementary 12255 Tams Dr. Baton Rouge, LA 70815 (504) 275-7480
Cincinnati, Ohio Public schools	Started in 1974 Partial immersion Total immersion in kindergarten Local funding only Articulation with junior and senior high schools	4 Spanish 3 French 1 German 1 Middle school <hr/> 9 total	900 Spanish 480 French 580 German 430 Middle schools <hr/> 2,390 total	80 (approximate total)	Spanish French German	1 part-time 1 full-time	Mimi Met, Supervisor Cincinnati Public Schools 230 E. 9th St. Cincinnati, OH 45202
Culver City, California	Started in 1971 Total immersion Magnet school Local funding only	1	149 Total	5 (full-time)	Spanish	Some parent volunteers	Eugene Ziff, Principal La Ballona Elementary School 10915 Washington Blvd. Culver City, CA 90230 (213) 839-4361, Ext. 229
Holliston, Massachusetts	Started in 1979 Total immersion Grades K-4 Spanish partial im- mersion offered in middle school	1	99	3 149	French	1 full-time 1 part-time	James Palladino, Principal Miller Elementary School Woodland St. Holliston, MA 01746 (617) 429-1601

Immersion and Partial Immersion Language Programs In U.S. Elementary Schools, 1982

School District or City	Comments	Number of schools	Number of pupils	Number of teachers	Languages	Number of aides	Contacts
Milwaukee, Wisconsin Public schools	Started in 1977 Magnet schools Begins with four-year-old kindergarten children Total immersion Articulation with junior and senior high schools	2 Total German K 6 French K 5 Spanish K 3	174 German 199 French 190 Spanish 30 Junior High 593 Total	20	German French Spanish	10	Helena Anderson, Foreign Language Curriculum Specialist Milwaukee Public Schools P.O. Drawer 10K Milwaukee, WI 53201 (414) 475-8305
Montgomery County, Maryland Public schools	French total immersion started at Four Corners Elementary School and now continues at Oak View Elementary School Small outside funding Articulation with junior high: one subject course per year for former immersion pupils	1 French	172	7	French	1 position (college volunteers, occasionally parents), high school interns	Gabriel Jacobs, Principal Oak View Elementary School 400 E. Wayne Ave. Silver Spring, MD 20901 (301) 589-0020
	Spanish total immersion Magnet school Local funding only	1 Spanish	45 50	2 (Grades 1, 2, 3) (Grades 4, 5, 6)	Spanish		Louise Rosenberg, Principal Rock Creek Elementary School 8330 Grubb Rd. Chevy Chase, MD 20815 (301) 589-0005
Rochester, New York	Started in 1981 Total immersion (except for English reading) Grades 1-2	2	48	2	Spanish		Alessio Evangelista, Director Foreign Language Department City School District 131 W. Broad St. Rochester, NY 14608

Immersion and Partial Immersion Language Programs in U.S. Elementary Schools, 1982

<i>School District or City</i>	<i>Comments</i>	<i>Number of schools</i>	<i>Number of pupils</i>	<i>Number of teachers</i>	<i>Languages</i>	<i>Number of aides</i>	<i>Contacts</i>
San Diego, California City schools	<p>Started in 1977</p> <p>Total immersion for students who begin in grades K-2, partial for those who begin in grades 3-6</p> <p>Partial immersion for grades 7-12</p> <p>Magnet schools</p> <p>Special funding in initial years; regular funding now</p>	5 (includes two secondary schools)	850 Total	35 Total	French Spanish	35 (native speakers)	<p>Harold B. Wingard, Curriculum Specialist Second Language Education San Diego City Schools Linda Vista Elementary, B-8 2772 Ulric St. San Diego, CA 92111 (714) 569-9640</p>
Tulsa, Oklahoma Public schools, Independent school district #1	<p>Started in 1981</p> <p>Total immersion</p>	1	26	1	Spanish	1	<p>Jack Griffin Associate Supervisor for Instruction Tulsa Public Schools P.O. Box 45208 Tulsa, OK 74145 (918) 743-3381, Ext. 485</p>
Washington, D.C.	<p>Started in 1966</p> <p>Independent</p> <p>Partial immersion English/French, English/Spanish</p> <p>Nursery school through grade 12</p> <p>Pupils 85 nationalities; staff 35 nationalities</p> <p>International baccalaureate</p>	1	550	60 full-time equivalents	French Spanish		<p>Dorothy Bruchholz Goodman Director Washington International School 3100 Macomb St., NW Washington, DC 20008 (202) 966-8510</p>

151

Immersion and Partial Immersion Language Programs in U.S. Elementary Schools, 1982

<i>School District or City</i>	<i>Comments</i>	<i>Number of schools</i>	<i>Number of pupils</i>	<i>Number of teachers</i>	<i>Lan- guages</i>	<i>Number of aides</i>	<i>Contacts</i>
Washington, D.C.	Started in 1971 Partial immersion Local funding only	1	330	11 Spanish 11 English	Spanish	1 (Pre-K)	Frank Miele, Principal Oyster Elementary School 29th and Calvert Sts., NW Washington, DC 20008 (202) 673-7277

(Source: Rhodes and Schreiberstein, 1983)

The information on this chart was compiled by:

The Center for Applied Linguistics
Elementary School for Foreign Language Project
3520 Prospect St., NW
Washington, DC 20007
(202) 298-9292

The Inadequacy of English Immersion Education as an Educational Approach for Language Minority Students in the United States

Eduardo Hernández-Chávez
Instituto de Lengua y Cultura
Elmira, California¹

Over the years the public school system in the United States has not provided an adequate education to students from subordinate language minority groups.² These groups have, in general, the lowest academic achievement, the highest attrition rates, and the lowest records of college enrollment in comparison with all other groups. This systematic failure of the nation's schools to meet the needs of minority students is endemic and has been amply documented (Coleman, 1969; Carter, 1970; *A Better*³ . . . , 1975; *Mexican* . . . , 1978; *Bilingual* . . . , 1978; *Domestic* . . . , 1978; Carter and Segura, 1979; *The Condition* . . . , 1980). Latino students, for example, are reported consistently to have lower achievement scores at every grade than do other groups, with an increasing discrepancy in the higher grades. These students tend to be overage for their grade, and inordinately

¹Acknowledgment is due to staff members in the Cross-Cultural Resource Center, California State University, Sacramento, for their assistance in the preparation of this paper.

²A clear distinction needs to be made between *repressed ethnolinguistic groups* and those that participate more or less freely in American society. The former are comprised principally of the Native American peoples, Puerto Ricans, Chicanos, Hawaiians, and Filipinos. They are groups whose status is determined historically through military conquest or economic or political domination, peoples whom John Ogbu (1978) refers to as caste minorities. Other ethnolinguistic groups are mainly immigrants or their descendants who seek economic, religious, or political opportunity in the United States. Many are white Europeans such as the Jews, Greeks, or Estonians, though many are not; e.g., Cubans, Japanese, or Vietnamese. The repressed groups have the lowest status in society and are severely discriminated against; the immigrant groups—especially those who are nonwhite—are not yet considered “full” Americans, but for political and sociohistorical reasons, they are generally more assimilable to the wider society and therefore more acceptable. (See Ogbu [1978] and Matute-Bianchi [1980] for a more detailed discussion.) In this paper the term *language minority* will be used to refer to the repressed ethnolinguistic groups.

³Only the first major word of a title is given for references in the text that are cited according to their title. The complete titles appear in the selected references section at the end of this paper.

high percentages are classified and placed below grade level or in classes for the educable mentally retarded. Dropout rates for this group are among the highest in the nation. Of those who finish high school, a small proportion of students enter college; and even fewer finally graduate. Similar patterns of failure are documented for Native American children (Kennedy, 1969) and for Hawaiian children (Gallimore and Boggs, 1974), with even more dismal statistics.

Social scientists and educators have traditionally placed the source of these kinds of problems in the cultural, linguistic, and social character of the minority language groups themselves. In addition, they maintain that the students do not hold the values appropriate to achieving a high level of education, and lack the cultural experiences thought to be adequate for proper schooling. Exemplifying this view, Heller (1966) writes:

The kind of socialization that the Mexican-American children generally receive at home is not conducive to the development of the capacities needed for advancement in a dynamic industrialized society. This type of upbringing creates stumbling blocks to future advancement by stressing values that hinder mobility—family ties, honor, masculinity, and living in the present—and by neglecting values that are conducive to it—achievement, independence, and deferred gratification. (pp. 33–34)

The language problem is considered equally damaging. The lack of English is believed to make the children unable to understand instruction; the native language is impoverished and an inappropriate vehicle for conceptual development; and bilingualism impedes the proficient learning of English (*Mexican . . .*, 1978).

In the opinion of social scientists and educators, the low socioeconomic status of most language minority children further aggravates the problem. Poor health care, malnourishment, an environment not conducive to academic work, and poorly educated parents, who cannot provide either the motivation or the substantive help for schoolwork, are all considered to contribute significantly to the academic difficulties of the minority child.

Thus, the child, the child's family, and the child's culture are defined as the principal causes of educational failure. Schooling and academic learning are assumed to be uniform and objective processes; children, however, arrive in various stages of preparedness to benefit from these processes. According to some points of view, if children are unprepared, they must be made over and shaped to fit the requirements of the educational system. For language minority children, the language barrier is identified as the major obstacle, and breaching this barrier is the principal strategy for opening the doors to learning. Rarely is the adequacy of the educational system itself questioned. Rather, educators have concerned themselves almost exclusively with ways in which to change the child to adapt to the norms of the school.



Historical Approaches to Language Minority Education

From these kinds of ideas have evolved a variety of instructional approaches for language minority education in the United States. The earliest and still most prevalent philosophy strives for the rapid and complete assimilation of the student. Three quarters of a century ago, Elwood Cubberly (1909) stated that it was the task of society to:

... assimilate and amalgamate these people as a part of our American race, and to implant in their children, so far as can be done, the Anglo-Saxon conception of righteousness, law and order, and our popular government . . . (pp. 15-16).

According to Israel Zangwill in *The Melting Pot: Drama in Four Acts* (1909), the school's mission is to transmit the values of society, which in this case are the ideals of the crucible, the "fires of God" that are "making America."

Submersion

From this social philosophy is derived the laissez faire approach to minority education, what has generally become known as submersion. (See *Schooling and Language Minority Students: A Theoretical Framework*, p. 217.) Language minority children were schooled with no recognition of differences in language and culture, except as impediments to learning and as a burden to the efficiency of the school. If these children did not know the language, they were expected to learn it before their education could proceed.

This raw submersion approach is no longer widely used with monolingual speakers of minority languages, though it is quite regularly used with children who have acquired a minimal functional command of English. Such children are often dominant in their native language although they may comprehend and speak English fairly well in face-to-face communication. Since the language barrier is thought no longer to be a problem, the children are placed in the regular school programs alongside native speakers of English. If these children continue to have academic problems, as large numbers of them do, these difficulties are seen as confirmation of cultural deficits which the school can do little about.

The effects of submersion were, and are, extremely damaging. Minority children in these kinds of programs appear to their teachers and classmates as inferior because of their language, culture, and social position; and these children themselves soon acquire strong feelings of inferiority. They become ashamed of who they are and of their parents, and their rejection by the majority groups deepens their

alienation. By the time these children can function in English sufficiently well to receive instruction, they are far behind their classmates in academic skills. Confused and feeling unworthy, they become convinced that they are unable to perform well in school. Typically, the result is academic failure, truancy, and, eventually, dropping out.

English as a Second Language

Following World War II, with the increasing urbanization of the population and the consequent requirements for a more literate work force, the need arose for a more efficient method to assimilate language minorities. Models of compensatory education were developed which began to take account of social and cultural differences, but which saw these differences as deficiencies that had to be remedied for the child to become acculturated (Davis, 1948; Deutsch, 1964; Riessman, 1962). In this context the work of structural linguists during the war provided the sought-after approach in English-as-a-foreign-language methodology, later becoming English as a second language, or ESL. Language minority students were drilled intensively in oral English structures to hasten their learning of English and to prepare them for academic instruction. The rest of these students' schooling basically followed the submersion model.

Neither submersion alone nor ESL with submersion had an appreciably positive effect on English acquisition or academic achievement. Linguistic minority children continued to show low academic scores, high truancy and dropout rates, and all the other manifestations of alienation from the schools (*Mexican . . .*, 1978). Larger numbers of students began to attain functional English proficiency, perhaps not so much because of the special programs but because of these students' greater social contact with the language.

Bilingual Education

The civil rights movement of the 1960s brought with it increasing demands for a better and more relevant education. Language minority groups included in virtually every set of demands a call for bilingual and culturally responsive schools. Bilingual education was to be a system of education wherein the students' native language and culture were valued, the students were enabled to develop a positive self-image, the students' opportunities for academic success were enhanced, and the students' solidarity with their communities was strengthened.

The response of political and educational leaders was swift, predictable, and reactionary. It was imperative politically to defuse the civil rights protest movement, and with the economy on a war basis because of the Vietnam War, it was advantageous to prepare larger numbers of minorities for entry into the military and into technologi-

cally advanced industries. Bilingual education was offered as a means of preparing these minorities. By avoiding early academic retardation and promising to accelerate English acquisition, advocates of bilingual education offered an approach that was superior to ESL and submersion and was a felicitous response to political pressures and economic necessities. This program's label ostensibly met protestors' demands, but its underlying philosophy and goals maintained intact the compensatory approach.⁴ This rationale is succinctly expressed in the *California Education Code*, which states:

[A] lack of English language communication skills presents an obstacle to such pupils' right to an equal educational opportunity which can be removed by instruction and training in the pupils' primary languages while such pupils are learning English (Section 52161).

The primary goal of these transitional bilingual education programs as stated in the *California Education Code* is as follows:

... as effectively and efficiently as possible, to develop in each child fluency in English (Section 52161).

The conflicting perceptions of the objectives of bilingual education between proponents and opponents of the approach have led to acrimonious debate about this program's effectiveness. Minority advocates claim that bilingual education is successful because it supports the self-image of children, teaches them about their culture, and helps them to maintain their native language—all seen as important preconditions for successful academic achievement. Opponents cite evidence such as the American Institutes for Research (AIR) study (Danoff, 1978) that the programs do not improve English acquisition or academic achievement. They believe that the instructional use of the native language is the cause of this result.

As might be expected, the reality lies somewhere in between. The development of the native language and culture is not a major purpose of these programs, so in most cases they succeed merely in allaying to some extent the precipitous language and culture loss that occurs in nonbilingual programs. The amount of the native language that is normally taught in bilingual education programs does not impede the rapid acquisition of oral English skills. However, there is a serious question as to whether the programs have any significant positive effect on the formal language skills involved in reading or on other academic learning. Thus, it appears that transitional bilingual education as it is generally practiced in the United States fulfills the

⁴Bilingual education programs are to be considered compensatory, not because the intended recipients of the programs are language minority students from poor backgrounds as is so often stated (see, for example, Fishman, 1973), but because the express intent of these programs—philosophically, legislatively, and programmatically—is to overcome presumed linguistic and cultural barriers by rehabilitating the student to the norms of the school.

goals of neither its advocates nor its opponents. This program does not maintain and develop the native language and culture, and it fails to demonstrate clear-cut gains in academic achievement and in formal English language skills. Perhaps these failings are interrelated.



Immersion: The New Remedy

Despite bilingual education's firm goals of English acquisition and mainstreaming, this program has seemed contrary to the idea that one learns English by studying English rather than by being taught in one's native language. Bilingualism in the classroom, it is believed, of necessity reinforces societal bilingualism and raises the specter of ethnic separatism. These fears are being fed by the depressed economic conditions of the early 1980s and are accompanied by a growing resentment toward the large numbers of brown-skinned, other-language-speaking immigrants who, it is believed, depress wages and take away jobs. Added to these situations are the tight fiscal policies in education throughout the nation and the conservative back to basics movement. The result is a perceived need for still another approach to language minority education.

A model that is currently under very close scrutiny is second language immersion. The requirements for such an approach are that English must be taught as efficiently as possible, without the need for special materials, specially trained teachers, classroom aides, or the extra costs of administering a bilingual program. In addition the mistakes of submersion education must be avoided by having the teachers demonstrate sensitivity towards the linguistic status of the students. Yet, the excesses of progressive education must be repudiated by requiring language minority students to succeed academically through English only, since this is the language of higher education, of commerce, and of all important social interaction.

The Canadian Programs

A model for such an approach is believed to be readily available in the Canadian immersion programs. These are widely described in the literature (see, for example, Lambert and Tucker, 1972; and Swain and Lapkin, 1981) and are amply discussed in this publication. Thus, for the purposes of this paper, only a brief summary of the major goals and assumptions of these programs, their methodologies, and their outcomes will be necessary.

The overriding goal of the Canadian immersion programs has been the development of enrichment bilingualism. The students who are to

become bilingual are native English-speaking students learning French as a second language. The purposes of enrichment bilingualism are to provide the students with opportunities to participate freely in the economic life of both the English- and French-speaking regions of Canada, to raise the students' cultural awareness of French-Canadian ways, and to facilitate social interaction among English and French Canadians.

These purposes are to be accomplished while maintaining and developing the native language. A critical premise of this approach is that, given particular sociocultural conditions, a home-school language switch is possible without deleterious effects on the students' native language proficiency. Another important principle of immersion education is that students in these programs are able to attain a level of academic achievement equivalent to that of students who study in their native language. (See Genesee, this publication, for a fuller discussion of the theoretical principles of immersion education.)

Typically, children in immersion programs begin their schooling with fluent native French-speaking teachers. The teachers also know English but use French exclusively with the children, though the children themselves are permitted to use English in the early stages of schooling. All subject matter is taught through French, adjusting the level of structure and vocabulary to one that the students can comprehend. In this way language and content learning proceed side by side, and content becomes the vehicle of language acquisition.

English language arts classes are generally begun when students are in the second grade or sometimes in the third or fourth grade. The time spent in English increases gradually, until by the fourth grade, one-half of the instruction is in English. Native English-speaking teachers conduct these classes so that the students associate the use of each language with particular persons.

The immersion programs were begun as a collaborative effort between a team of university researchers and parents who were disillusioned with the results of traditional foreign language teaching and who wished to have their children educated in French. Together, these two groups prevailed on the administrators from the St. Lambert school system to initiate the experimental program. The researchers monitored the implementation of the program and evaluated the children from a variety of perspectives, including language development, academic achievement, and language attitudes. In general these studies revealed that the initial expectations were met with respect to second language (L₂) development, first language (L₁) maintenance, and academic achievement. Indeed, some of the results have exceeded the original expectations. Thus, although even by the sixth grade, the children still demonstrated nonnative control of French pronunciation and grammatical structure, they communicated freely and with great skill across all topics.

In academic achievement the students were equal and in some areas superior to students who had been schooled monolingually, either in French or in English. The results of standardized achievement tests in mathematics and science and in English and French reading demonstrate that schooling in a second language using this immersion model facilitates the transfer of students' academic skills to their native language. (See Swain, this publication, for a comprehensive review of evaluation results.)

Studies in the United States

Immersion programs instituted in the United States following the Canadian model have had very similar results. Russell Campbell (this publication) reports on the Culver City, California, project, which has objectives and a structure that are patterned on the St. Lambert experiment. Rather than French, however, the native English speakers are learning Spanish. The findings of the Culver City project correspond very closely to those of the St. Lambert studies. The children were able to attain a high level of proficiency in their second language without harmful consequences in their first. Moreover, they were able to learn academic content while acquiring a second language, lending support to the generalization of the Canadian findings to other contexts. Lambert (this publication) reports on several early immersion programs that have been initiated in various parts of the U.S. since the late 1970s. From these programs positive results are being obtained that are similar in many ways to those of the Canadian and Culver City programs.

Baker and de Kanter (1981) reviewed a program in McAllen, Texas, in which minority children are learning English through a modified immersion approach. At the time of the review, the program had been in existence for only one year at the kindergarten level; yet, the results obtained indicated that children in this program had made impressive gains in their English oral language development.⁵

As a result of the Canadian studies, the few immersion programs for majority language students in the United States, and a single one-year program in English immersion for Chicano children, some policymakers and educators have begun to expound the virtues of this approach for language minorities. Immersion education appears to contain all the proper ingredients for meeting the expressed goals of effective English acquisition, for avoiding academic retardation, and for providing an environment of "sensitivity" toward the native language and culture of the students. Nevertheless, important and

⁵ The McAllen program is not a good example of classical immersion, since the students' native language is used for a substantial portion of the school day from the beginning, a structure more typical of bilingual education programs. Also, the children in this program were already bilingual to an important extent.

crucial differences exist between immersion programs for majority and minority language children. In the following sections we will review some of the more important differences in the types of programs and in their socio-cultural contexts as a means of evaluating the adequacy of English immersion as an approach to minority students' education.

Program Goals

Critical among the differences are the goals that underlie the approaches in the two contexts. In the case of majority language children, the central purpose is to achieve an *enrichment or additive bilingualism*. The second language is an addition to the child's native language skills—a socially and economically valuable extension of the child's educational repertoire, much like learning to play the piano, for example, or acquiring computer literacy. The knowledge and skills that the child brings to the schooling process and the development of these capabilities are never in question. Indeed, it is a fundamental principle of enrichment immersion that children's academic achievement, native language development, and native cultural values not only will be unharmed but will be reinforced and enhanced by the addition of proficient bilingual skills. The acquisition of bilingualism, then, enriches the child in two major ways: (1) by the addition of a valuable set of skills; and (2) by the positive effect of this learning on other knowledge, skills, and values that the child already has acquired.

In contrast, the overriding goal of immersion for language minorities, as is beginning to be advocated by certain policymakers in the United States, is *displacement bilingualism* or, as it has been called, subtractive bilingualism (see Lambert, this publication). The proponents of displacement immersion note the importance of tolerance and sensitivity toward the native language of the students. Teachers should understand the language, and students should be allowed to use it for necessary communication. Full proficiency in English, however, is the primary objective (e.g., Baker and de Kanter, 1981; *Bilingual . . .*, 1981). English is seen as the only appropriate language of education and of commerce, the *sine qua non* of participation in society in the United States. The native language, while it is important to the child and the child's family on a personal and ethnic cultural level, does not have the far-reaching practical value of English. This language, for most purposes, must *take the place of* the native language outside the ethnic community. Even for the most important economic purposes, English is used within the ethnic community. In displacement immersion the native language is not necessarily suppressed. The model allows for the introduction of native language arts courses in the upper grades and, as already noted, does

not deny the beginner a limited functional use of the language. However, development of the students' native language is clearly not among the goals of displacement immersion as it is in enrichment immersion.

The goals of enrichment immersion include the development of relatively high levels of skill in a second language for limited economic and cross-cultural purposes. There is little expectation that students will acquire completely native-like proficiencies or that they will become dominant users of the second language. In displacement immersion, however, the overriding objective is to render the student fully proficient in English, developing all skills to as near native proficiency as possible. In all but home-related domains, students should ultimately become dominant users of English, since this skill is of greatest importance for full social participation in the United States.

Program Features

Directly related to the goals of the two kinds of programs are important differences in program design. Enrichment immersion is a label that is given to what is essentially a special kind of bilingual education for speakers of the majority language. The label at once designates a program structure and a methodology for teaching language. Structurally in early immersion, the target language is used exclusively at first as the medium of instruction. The native language is then phased in by stages until, by the fourth or fifth grade, it comprises 40 percent or more of the curriculum. This bilingual approach then continues throughout the children's schooling. (Conversely, though somewhat analogously, transitional bilingual education programs in the United States typically begin with the native language as the medium of instruction, phasing English in rapidly until by second or third grade, it becomes the exclusive medium of instruction.)

Displacement immersion programs do not have a bilingual structure. Students may use the native language in the early stages to make themselves understood, but the teacher uses English exclusively, and all the instruction is in English. Other immersion proposals (e.g., Met, 1982) allow native language arts as a part of the curriculum, especially in the upper grades,⁶ but this approach is not an essential feature of displacement immersion.

⁶In this view immersion represents a set of techniques for teaching content in a second language, where that approach is dictated by local conditions, rather than an integrated approach to minority language education. Met (personal communication) stresses that immersion for minorities should be implemented only where it is not possible to institute a bilingual program as, for example, in a district that serves several different minority language groups.

Methodologically, enrichment and displacement immersion education do not differ very much. In both, the target language is the language of instruction, and it is expected that students will acquire the language naturally in this setting. Students may be silent in the early stages, or they may have recourse to their native language; but in either case, they are not expected to use the target language productively until they are ready. Techniques are employed in both approaches for encouraging the students gently or firmly to use the target language. Students, then, learn through subject matter rather than through structured language lessons. One recent and influential displacement immersion proposal (Baker and de Kanter, 1981) calls for a linguistically structured approach in which the teacher presents the subject matter content by using only the vocabulary and structure understood by the students, introducing new forms slowly and according to the progress of the students. This method is consistent with the theoretical notion of *comprehensible input* advanced by Krashen (1981). For language acquisition to be most effective, this theory holds that linguistic input to the child must be in a meaningful context and must make use of forms the child already knows or that are readily deducible from the context. The theory implicitly rejects the notion that language acquisition makes use of the full range of adult input, selectively recreating the structures of the language in a natural order (Chomsky, 1965). The theory also presupposes that such a restricted linguistic input in the classroom is sufficient to present academic content in all its conceptual richness, an assumption that has yet to gain empirical support.

In summary, the programmatic features of enrichment and displacement immersion need to be clearly distinguished. On the one hand, as a methodology for language development, the two types of programs differ only in detail. On the other hand, they differ sharply in terms of their principles and their structure. The crucial differences, as we have seen, pertain to the goal of bilingualism and the structure of the curriculum designed to achieve it. Enrichment begins with the L₂, gradually and systematically increasing the use of L₁ as a co-equal medium of instruction. Displacement immersion also begins with L₂, but by the second year all instructional use of the native language, however informal, is eliminated.

Displacement immersion does precisely what the label implies—it puts aside the native language in favor of the L₂. Enrichment immersion is a form of bilingual education especially tailored to the needs of speakers of the majority language.

Table I provides a summary of the programmatic differences between the Canadian immersion model and the kind of immersion programs that are widely proposed in minority contexts in the United States. In only one area, that of L₂ methodology, is there any substantial agreement between the two kinds of programs.

Table 1

Major Differences in Program Characteristics Between Canadian Immersion Programs and Proposed Immersion Programs for Language Minorities in the United States

	<i>Canadian Immersion Programs</i>	<i>Proposed Immersion Programs in the United States</i>
Program Goals	<p>Enrichment bilingualism: L₁ is developed fully; L₂ is developed to a high degree.</p> <p>Academic achievement occurs in both L₁ and L₂.</p> <p>Native cultural knowledge is recognized and developed; L₂ culture is added for enrichment.</p>	<p>Displacement bilingualism: L₂ is developed to a native-like proficiency; L₁ is phased out of the academic program.</p> <p>Academic achievement occurs in L₂ only.</p> <p>L₂ cultural development is central; L₁ culture is to be maintained by the home.</p>
Program Design	<p>Begin with L₂ only; no L₁.</p> <p>Instruction in L₂ ultimately is decreased to about 40 percent.</p> <p>Instruction in L₁ is increased commensurately with a decrease in L₂.</p> <p>L₂ methodology is based on the comprehensible input notion.</p>	<p>The program begins with L₂; maybe some L₁.</p> <p>Instruction in L₂ ultimately is increased to 100 percent.</p> <p>L₁ is phased out of the program within two to three years.</p> <p>L₂ methodology is based on the comprehensible input notion.</p>

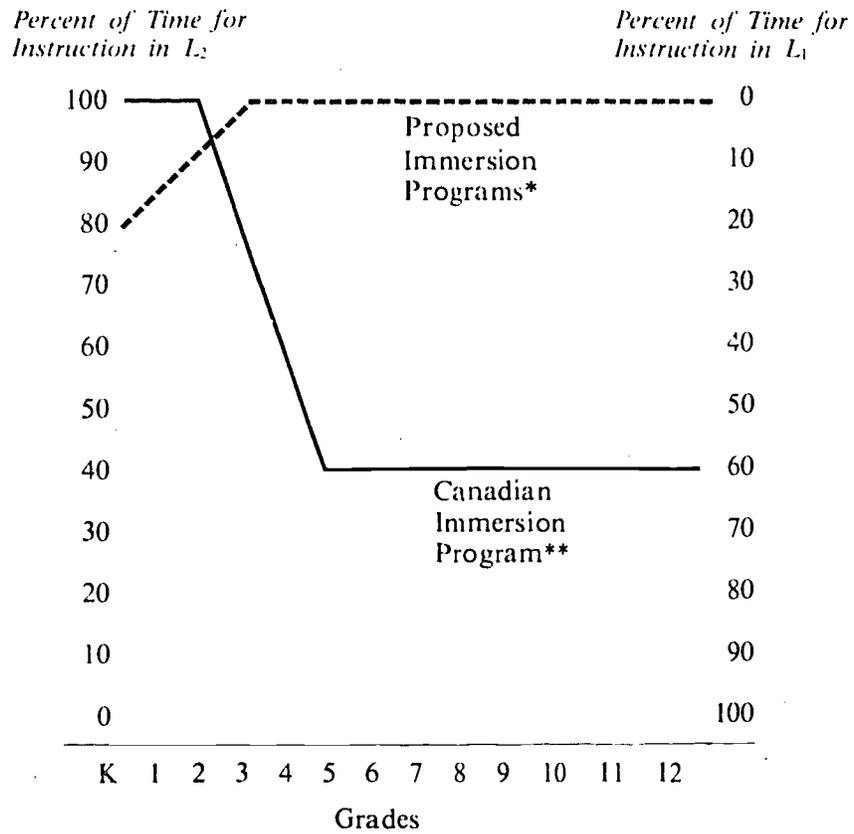
Program Variation

In the establishment of enrichment immersion programs in many parts of Canada, the most common type is the one known as early total immersion. In this model the pupils receive all of their instruction in French as a second language, beginning in kindergarten. From the second grade on, instructional time in French decreases until high school, where approximately 40 percent of the instructional time is in French. However, other models have also been developed. Major variations include partial versus total immersion and early versus delayed or late immersion. (See Lapkin and Cummins, this publication). These variations mostly follow the same philosophies and methodologies as the early total immersion model. These programs differ in that partial immersion typically uses the second language as a medium of instruction about 50 percent of the time for the first several years and then gradually increases the amount of the native language to perhaps 70 percent. In this respect the partial model slightly resembles some maintenance-oriented bilingual education models in the United States, although these models generally increase rather than decrease the instructional time in the second language. Delayed or late immersion programs may be total or partial, but they are usually partial. In these programs second language instruction may begin early as the fourth grade or as late as high school. The amount of instruction in the second language is usually initially greater than in early partial immersion and then decreases gradually over the grades.

Proposals for displacement immersion programs in the United States focus principally on the early total immersion model. Prime examples of these proposals are Baker and de Kanter (1981), the *Bilingual Education Amendments of 1981* offered by Walter Huddleston of Kentucky (which failed to pass Congress), and a report by the Twentieth Century Fund (*Report . . .* 1983). Some variations in this basic model are beginning to appear that tend to blur the distinction between immersion and bilingual education. Thus, for example, Met (1982) describes a possible early immersion program that begins with from 50 percent to 90 percent of the instructional time in L_2 , increasing that time rather abruptly by the first or second grade and subsequently phasing out the L_1 . The principal difference between this immersion model and transitional bilingual education is in the instructional methodology. The L_2 is introduced through the content areas rather than through structured language classes, and the method of instruction is based on the notion of comprehensible input.

The different relationships of the L_1 and L_2 in typical models in the United States that are being proposed and in the Canadian programs are shown in Figure 1.

Figure 1
Comparison of L₁ and L₂ Distribution Over Time in Typical Canadian and Proposed Early Total Immersion Programs in the United States



*Following Met (1982) and Baker and de Kanter (1981).
 **After Lapkin and Cummins (this publication).

The Psycholinguistic Validity of Immersion Programs

A great deal of contradictory evidence exists concerning the relative merits of the native language and the second language as mediums of instruction for early schooling. Numerous studies in various parts of the world support the hypothesis that the native language is superior to a second language for initial instruction. (See, for example, Prator, 1950; Macnamara, 1966; Modiano, 1968; Skutnabb-Kangas and Toukoma, 1979. For analyses favorable to this view, see Troike, 1978; and Zappert and Cruz, 1977.) John Macnamara (1967) provides theoretical support to the native language approach in the form of a linguistic mismatch model. He reasons that a weaker second language offers an inadequate grasp of language and involves a greater difficulty in semantic decoding. These difficulties are adduced to explain the results that he cites which show poorer performance in complex problem solving and sentence interpretation tasks by students schooled in a weaker second language.

However, ambiguities in the results of these kinds of studies are pointed out by several reviewers, including Engle, 1975; Paulston, 1975; Danoff, 1978; and Rotberg, 1982. They note that studies such as those of Tucker, Sibayan, and Otones (1970) in the Philippines, Lambert and Tucker (1972) in Canada, and Cohen (1975) in the United States, plus the large number of other studies describing the Canadian immersion programs, show that initial instruction in a second language yields results that are equal to or even superior in some respects to those obtained through the first language.

The theoretical bases of the Canadian immersion programs are discussed in detail by Genesee elsewhere in this volume. These bases include the neurolinguistic and psycholinguistic evidence for early second language acquisition, the social-psychological factors in language learning and cross-cultural communication, and the principles of second language acquisition. The weight of this research supports the following principles of immersion: (1) young children can attain high levels of fluency in a second language; (2) second languages are best acquired in contexts in which meaningful communication is promoted; and (3) a second language is an appropriate vehicle for learning academic content.

Thus, one linguistic educational model, the language mismatch hypothesis, is used to explain the results of studies showing that the native language approach is superior. Supporting the immersion approach is an educational model based on principles of second language acquisition.

In an attempt to resolve the theoretical impasse arising from the varied results reported, Cummins (1979, 1981; see also Lapkin and Cummins, this publication) has hypothesized a *common underlying*

proficiency for certain aspects of bilingual proficiency that are academically related. That is, context-reduced and cognitively demanding language proficiencies, which are cognitive-academic skills of a high order, once learned, are available to the bilingual student in both languages. (See pages 11 and 12 and 215 of *Schooling and Language Minority Students: A Theoretical Framework*.) Cummins further hypothesizes a *threshold effect*, which is based partially on the work of Skutnabb-Kangas and Toukoma (1976). These researchers found that young Finnish immigrants, who had immigrated to Sweden, schooled completely in Swedish failed to develop normally in either Finnish or Swedish, a condition they describe as "limited bilingualism." On the other hand, children who had emigrated at a later age and who had acquired many of their cognitive-academic skills in their first language both maintained their Finnish skills and acquired high levels of Swedish.

Cummins interprets these results to mean that a minimum threshold of cognitive-academic skills must be attained by bilingual children to avoid the negative effects of limited bilingualism. The older children had reached this threshold in the schools of their home country; the younger children had not and, consequently, were inhibited from learning in their second language. Since instruction was not given in the younger children's first language, this language also failed to develop, leading to limited bilingualism.

Cummins advances these notions of common underlying proficiency and the threshold effect to explain the results both of immersion programs for majority group children and of successful bilingual programs for language minorities. In the bilingual programs academic proficiencies are developed in the first language, and as English is acquired, these proficiencies become part of the cognitive-academic repertoire of the second language. In this way the academic aspects of the second language are enhanced by their prior development in the first language.

Similarly, in enrichment immersion programs, academic proficiencies are developed in the second language and, according to the common underlying proficiency model, become available to the children in the native language as well, *ensuring its continued development*. Since both languages are developed to a high threshold level, cognitive-academic advantages are the result.

Implicit in Cummins' analysis for both bilingual education and enrichment immersion is the full development of the native language, both through the social environment and through classroom instruction. The displacement immersion model proposed for minorities in the United States has, at best, a minimal and transitory role for the native language. It is evident that an exclusively L₂ oriented program such as this fails to take into account the important acquisitional

principle of common academic-linguistic proficiencies. By attempting to develop these proficiencies solely in English, the program virtually ensures a slower development of the skills and ultimately risks an unacceptably low level of linguistic and cognitive attainment. Without the L₁ component, richly developed to its fullest extent as in the Canadian programs, immersion education for language minorities is less than adequate. By failing to advance academic skills in the native language, this program fails in its own primary goal of developing these skills adequately in English.

In enrichment bilingualism the first language never loses its vitality. So, even if the L₂ were not developed to a high degree, no limited bilingualism and, consequently, no cognitive deficits would exist. Moreover, if both languages are developed to a high level, evidence indicates that positive cognitive effects are the result (Cummins and Mulcahy, 1981; Duncan and de Avila, 1979; Kessler and Quinn, 1980). That is, high levels of bilingualism provide cognitive advantages over similarly high levels of proficiency in a single language.

These kinds of benefits are, essentially by design, denied to participants in the displacement immersion model. The Canadian programs provide strong evidence that high levels of cognitive-academic language proficiency in a second language require many years to attain, perhaps as many as six to seven years, even under optimal learning conditions (Swain, 1982). If these skills have not been developed in the native language to a high degree, attainment of these skills in the second language is delayed even further. In such a case, academically related language proficiencies in both languages do not reach native speaker levels. Academic achievement, related language proficiencies, and cognitive abilities all suffer. This situation is a familiar one for language minorities in the United States. Such educational conditions historically have been the direct result of language-and-culture-deficit oriented programs such as submersion, ESL, and transitional bilingual education. Displacement immersion, based on an English deficiency model, fits precisely into this mold and does nothing to ameliorate those conditions.

The foregoing discussion reveals that displacement immersion, which is the model generally proposed for minorities in the United States, is totally inadequate to fulfill even its own goals of academic achievement through second language development, much less to meet the broader educational needs of minority groups. Displacement immersion is an immersion program in name only, for it shares with the Canadian programs only a modified—even trivialized—version of a second language teaching methodology based on the principle of comprehensible input. Without this methodology, displacement immersion is reduced to little more than a sympathetic, updated submersion approach. This program differs from submersion only in that chil-

dren are placed in a classroom where English is the language of instruction and where the students are segregated from native English speakers to maintain a simpler level of instruction. The students' native language may be temporarily tolerated for the sake of basic communication.



Sociocultural Factors in Enrichment Immersion Education for Language Minorities

The question remains as to the adequacy of the enrichment immersion model and its application to language minority education. The documented successes of Canadian enrichment immersion in developing full bilingualism and high levels of academic achievement in both languages for speakers of the majority language make this program attractive also as a potential educational model for language minorities in the United States. To address this question, one must compare, in addition to the program factors discussed previously, the sociocultural differences in the populations that are to be served by the programs. These differences are much more critical than the program factors because they have a powerful impact on the quality of education in general—whatever the instructional approach—and will influence the potential effectiveness of immersion programs as well.

Sociopolitical Status

Significant social, academic, and political differences exist between the Canadian immersion students and language minorities in the United States. First, the English-speaking Canadian students are members of the majority population. Even in Quebec, where native English speakers are a numerical minority, they enjoy all the rights and privileges that derive from control of the major economic, political, and cultural institutions of the country. Political and economic power provides the resources for the educational system, which supports and perpetuates the rights and privileges of the dominant group. Educational goals, approaches, staffing patterns, methods, and materials are all consistent with the needs, the aspirations, and the status of the English-speaking majority. The result is that the majority of the members of this group are well-served by the schools and obtain an education that prepares them for full participation in the society.

Language minority students in the United States, on the other hand, most generally belong to nonwhite racial groups that have low socioeconomic status. This position in society carries with it the

absence of political and economic power and, concomitantly, the lack of educational and other mass cultural resources, which are in the hands of the Anglo-American majority. Under these conditions the educational system is structured to function in the interests of the majority group, and it responds to the needs of minorities only insofar as they correspond to majority goals. As a consequence minority students either receive an inferior education or else become so alienated from the schools that they receive little education at all. Equal political and economic participation in society becomes impossible, and the cycle is repeated.

These differences in the sociopolitical status of Canadian immersion students and language minorities in the United States have general educational effects and, in the context of the present discussion, affect also the relevance of immersion education for minorities. As members of the majority society that has ultimate control over educational resources, the Canadian parents were the initiators of the first immersion programs, and the school system was constrained to respond to their needs (Lambert and Tucker, 1972). In this response the parents were afforded important prerogatives over the determination of goals, curriculum, and staffing policies.

The fact that many of the policies of the immersion program were consistent with already established school policy reflects the congruent educational philosophies of the parents and the school system. Thus, for example, congruent policies include assurances that the achievement level of the students and the development of the full range of English skills not be sacrificed to bilingualism. In addition, both the schools and the parents were concerned that the children retain a strong English-Canadian identity. In implementation the optional nature of the program, both for school districts and students, represents a high level of cooperation between school staff and parents. The result of such congruent policies is that students have positive motivation and high achievement.

Other policies desired by the parents, though new, did not contradict the program's overall educational philosophies. Even the central goal of the proposed program—full French-English bilingualism—had long been one goal of the schools in these districts. The difference lay in immersion, the mode of implementation. The use of French as a medium of instruction and the employment of native French-speaking teachers were but operational consequences of the new approach. In these ways the educational philosophies and goals of the parents, as members of the majority group that controls the school system, were confirmed and supported by that system.

The majority status of the English-Canadian parents and students within an immersion program is a powerful advantage in attaining the goals of full English development and maintenance of English-

Canadian cultural identity. Despite the official status of French in Quebec, English is the dominant language of the major cultural and economic institutions of the country as a whole and of the social domains of home and community. In this context the school program ensures language and cultural maintenance by the gradual and substantial increase in the use of the native language as the medium of instruction.

In the movement toward immersion education for minorities in the United States, the basic policies and program designs are initiated and formulated by government officials, legislators, and educators representing the majority society. The recipients of the program have essentially no voice. The program is proposed ostensibly to improve the education of minority children, who, it is recognized, are not well-served by current submersion, ESL, or transitional bilingual education programs. Yet, the expressed goals, objectives, and structure of the programs follow from the educational philosophies of the majority; namely, assimilation to the English-speaking norm ("mainstreaming") and a sufficient level of achievement for the individual to enter the economic system at an appropriate level. There is little real expectation that the minority children's academic achievement will equal that of the majority, an expectation which then becomes a self-fulfilling prophesy. Group relevance (i.e., ethnic sociocultural identity) is not a serious goal. The inevitable results are the children's alienation from their family and community, their hidden or open resentment toward the educational system, and their poor achievement. The few who succumb to the assimilatory pressures that the system requires for high achievement cannot be considered models for other members of the minority group. Rather, these persons are examples of tragically margined individuals who have become alienated from all, including themselves. A case in point is *Hunger for Memory: The Education of Richard Rodriguez* (Rodriguez, 1982). Melting-pot philosophers draw on the views expressed in Rodriguez's book to support their arguments.

Besides being in the majority, the Canadian immersion students are mostly from middle-class backgrounds. A natural consequence of this situation is that their parents have the academic background and incentive to participate directly and effectively in their children's education. They not only monitor the quality of the program and the instruction, they also provide substantive help to their children with their lessons. Thus, the immersion children, though they receive subject matter instruction in French, most certainly are given complementary help with their schoolwork in English by their parents. An indication of this situation is the finding by Lambert and Tucker (1972) of the lack of a significant difference with respect to the vari-

able, "guidance in school work," between the experimental (immersion) group and the various control groups. This finding could account in part, at least, for the rapid academic gains made once English instruction is begun.

Lower socioeconomic status (SES) minority parents generally do not have the academic experience to assist their children in this way. Nor do they usually feel that they have the understanding, technical skills, or language proficiency to monitor the school's program. Added to this lack of skills and knowledge is the belief held by many minority parents (a belief often instilled and encouraged by the unresponsive institutions themselves) that they have no right to intervene in what is regarded as the exclusive province of the school.

Sociolinguistic Relationships

The sociopolitical differences discussed previously have important ramifications in the sociolinguistic relationships between minority and majority groups. The most obvious point to consider is that the native language and culture of the English Canadian students are the dominant language and culture of all the important institutions in the country, even to a great extent within those provinces where French is widely spoken. For linguistic minorities in the United States, their languages and native culture have no official standing and minimum functional status within the major institutions. Even this status is ordinarily for the economic or administrative convenience of the institutions themselves rather than for that of the speakers of the language.

Thus, English, the socially prestigious language, is the native language of one group and the target language of the other. For English speakers the native language and cultural identity are not in jeopardy. And, though the school is an important institution, the fact that, in an immersion program, it uses a language and teaches a culture that is not of the majority does not diminish the linguistic and cultural socialization of the majority child from a multitude of other sources.

Contrasts occur between the linguistic and cultural situation of the minority child. Outside of family and ethnic community relationships, few institutions exist that support the socialization of the child in L₁. Virtually all other media that influence the child's enculturation are oriented toward English and Anglo cultures. An English-oriented educational system closes the circle; for next to the family itself, schools are the most influential institution in the young child's life.

This situation has far-reaching consequences. Without institutional support, an individual's native language and culture are in danger of losing their vitality. This situation is so especially because, as the child's schooling increases, English makes deeper and deeper inroads into the family and community. For once the child enters school, the

predominance of English brings tremendous pressures to bear for the use of English in the home, especially if the parents and older siblings are bilingual even to a minimum degree. (For further discussion of this point, see Hernández-Chávez, 1978.) In the neighborhood as well as in the home, mass cultural media transmit great amounts of English into the child's environment. This pervasiveness of English combined with the restricted social functions of L₁ leads inexorably toward language shift and alienation from the home culture.

Another important sociolinguistic difference between the Canadian students and language minorities in the United States pertains to the dialectal status of their languages. The native language of the Canadian students is standard by definition since they belong to the dominant socioeconomic group in their society. The native speech of language minority children is often a nonstandard variety. Most language minorities in the United States have belonged to economically and/or politically oppressed groups in their homelands, groups whose speech is a nonstandard variety. These varieties are nonstandard only by social convention, since those who define them as such are members of the dominant sociocultural group. Moreover, because of the subordinated status of these groups, they have not been able to develop in their speech the full range of technical, professional, and academic functions valued by the dominant society.

In both these aspects of form and function, the nonstandard character of minority languages is a direct consequence of the subordinate politicoeconomic status of the groups who speak them, both in their homelands and in the United States. In form, invidious comparisons are made with the varieties spoken by foreign elites; in function, the nonstandard variety is considered to be impoverished and incapable of expressing the technological or academic concepts taught by the schools.

A similar distinction applies to the variety of French acquired by anglophones in Canada and the variety of English developed by minority persons in the United States. In Canada French has a much higher status than do minority languages in the United States. And in acquiring French, the children are encouraged and praised even for nonnative control of the language because of their relatively high level of comprehension and communicative skills. Language minority children in the United States generally will attain a native-like command of English rather quickly, though this command is often a variety characterized by Haugen (1956) as having bilingual norms; i.e., a variety historically influenced by the native language but with culturally transmitted features unique to a given bilingual community. This variety is labeled nonstandard and is considered to be a major source of learning problems for the children even though it is,

by and large, more native-like than the French of the immersion participants.

These general contrasts in sociolinguistic patterns between the Canadian majority and minority groups in the United States have additional implications for the applicability of enrichment programs here. First, the subordinate status of the minority language will very likely lead to native language loss if strong institutional support is not provided. Academically related language proficiencies in the minority language are generally not highly developed either in the family or in society at large (Hernández-Chávez and Curtis, 1982, in press). If these formal, school-related proficiencies are not sufficiently advanced in L₁, the acquisition of cognitive-academic skills in English as L₂ are delayed as well. Since in the enrichment model, the native language is not introduced until the third year, academically related language proficiencies are delayed in this language, too, and the condition of limited bilingualism described by Skutnabb-Kangas and Toukomaa (1979) is the probable result.

The nonstandard character of the child's native language aggravates these kinds of problems. The L₁ is denigrated by the majority society, and the child's loyalty to the home language is thereby weakened. The child's English is also considered nonstandard and a principal cause of learning difficulties. The response of the schools is typically a form of remedial instruction that is often inappropriate. The effects can be devastating, for the children soon receive the message that they are unintelligent and incapable of learning what the school demands. They develop a low self-concept and negative attitudes toward academic language and schoolwork.

In such a context enrichment immersion is simply unworkable. Advocates of this approach assume that language minority students will experience a vigorous development of their native language outside of school. Additionally, the complexity and difficulty of acquiring cognitive-academic skills in a second language is not adequately addressed. In enrichment immersion, the L₁ is introduced late and in relatively modest amounts, increasing the time until it is equal to or greater than the amount in L₂. In such a model by the time language minority students would be introduced to their mother tongue, they would have already experienced substantial loss of their native language. English as an L₂ requires careful and positive nurturing under conditions in which the child's cognitive, emotional, and academic development is promoted in an unthreatening manner. The English language cannot be expected to carry the full burden of cognitive-academic development until very late in the child's school career. Table 2 shows some of the important sociolinguistic differences between minorities in the United States and the Canadian immersion students.

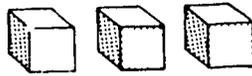
Table 2

Comparison of the Sociocultural Features of Canadian Immersion Students and Language Minorities in the United States

	<i>Canadian Students</i>	<i>Language Minorities in the United States</i>
Sociopolitical Status	<p>Students are members of the majority group in society.</p> <p>Students come mainly from the middle socioeconomic group.</p> <p>Parents have control over political and economic resources.</p> <p>The school program is designed to serve the needs of this group.</p>	<p>Students are members of a minority group.</p> <p>Students come mainly from the lower socioeconomic group.</p> <p>Parents have no control of resources.</p> <p>The school program is designed to serve the needs of the majority society.</p>
Sociolinguistics	<p>L₁ is the dominant language. It has prestige in society and has institutional support.</p> <p>L₁ is fully maintained. The child keeps and develops native cultural identity.</p> <p>L₁ is standard. Its forms are considered correct; this language is considered the only appropriate vehicle for technical and academic learning.</p> <p>L₂ is standard but incompletely learned; deviations are considered natural for L₂ learners.</p>	<p>L₁ is the subordinate language. It is unvalued in society and has little institutional support.</p> <p>L₁ is often lost. The child is alienated from both L₁ and L₂ cultures.</p> <p>L₁ is nonstandard. Its forms are considered corruptions of correct speech. This language is considered inappropriate for learning of advanced concepts.</p> <p>L₂ is nonstandard. Deviations are seen as problems for academic learning.</p>

In summarizing the preceding discussion, one finds that minority children in immersion programs (or for that matter submersion, ESL, and even bilingual education programs) would struggle in the educational system without societal support for their language and culture, which are also devalued by the school. A crucial resource of the development of one's self-concept and learning ability is thereby denied to these children. The minority status of these parents also removes them from a position of determining or influencing the nature of their children's education. The lower socioeconomic condition of these parents precludes their recommendations and effective participation in the formal educational process.

For majority language students enrichment education is aligned with the Canadian cultural and social condition. It is unreasonable in the extreme to expect the Canadian enrichment model to be directly transferable to language minority contexts in the United States. This model is appropriate and effective in Quebec, and now in other parts of Canada, because the program was designed under specific educational conditions by and for a middle class majority population and with the guidance of dedicated researchers backed by sound psycholinguistic theories. The Canadian enrichment model is not appropriate for language minority children in the United States because the requisite sociopolitical, sociolinguistic, and educational conditions for the successful conduct of an enrichment program are completely different.



Conclusions

French immersion programs in Canada have been highly successful in a number of ways and for a variety of important reasons. They have promoted a degree of bilingualism far superior to that of any other program, and they have accomplished this goal while at the same time ensuring solid academic achievement in both languages as well as the normal development of native English proficiency and sociocultural identity.

The successes of French immersion can be attributed largely to the sociopolitical position of the English-Canadian group for whom this program was developed. As the politically and economically dominant group, English Canadians enjoy strong influence over the allocation of resources and the design of educational programs that match the needs of their students. The English language is sociolinguistically dominant, a crucial fact that permits the intensive attention to developing second language skills. Societal support for the native language

produces a positive sociocultural self-concept and strong English language skills. Both of these, in turn, reinforce the child's cognitive and academic growth in the child's second language.

The objectives and outcomes of the Canadian programs are supported by a body of psycholinguistic theories that predict that cognitive-academic language skills learned in one language support the acquisition of these skills in a second language. Also supported is the prediction that high levels of skill in two languages lead to cognitive advantages.

The types of displacement immersion programs proposed for language minority students in the United States purport to use the Canadian results as a rationale. Yet, the current proposals share almost nothing with the Canadian programs. The students' native language is to be used, if at all, in the early stages of the program and then only as a temporary prop rather than as a medium of instruction. The amount of time a student spends in the second language is rapidly increased to 100 percent rather than decreased. The programs would use the second language as the medium of instruction—the foremost similarity with the Canadian programs—but the profound sociocultural differences in the two contexts are completely ignored.

Such programs are immersion programs only in name, a distortion of the Canadian enrichment programs. The similarities are limited to the use of the second language as the medium of instruction and the methodologies for teaching the second language. Beyond these similarities, the so-called immersion programs are little more than examples of the discredited submersion approach, together with novel instructional techniques and superficial recognition of linguistic and cultural differences.

It is not reasonable to attempt to transplant the enrichment model itself for language minorities in the United States. This approach was designed for a very different population, with specific sociocultural characteristics and with particular philosophies and goals. Second language enrichment presumes a first language that is socioculturally strong. Minority languages hold a precarious position in society in the United States, and only languages like Spanish, with its growing population and nearness to Mexico and Puerto Rico, can claim widespread use. Even this situation is due in large part to continued immigration rather than to major institutional support. Those planning enrichment programs also assume that the students have an academic background that is based on middle-class, majoritarian traditions. Such an assumption is unwarranted for language minorities in the United States. For these children the use of a second language for the development of academic achievement is a luxury that they can ill afford and one that is badly tarnished by the failure to provide a solid academic foundation in their first language.

Clearly, the Canadian immersion models cannot simply be accepted *in toto*. One major question that still remains is whether these programs can be extended or modified in any way to apply to minority bilingual populations in the United States. No adaptation or application of them should be attempted, however, without a precise specification of their goals and objectives, of the ways in which they relate to sociocultural processes at work in language minority communities, and of the validity of an educational approach as supported by empirical and theoretical research. In the past programs such as ESL or bilingual education have been conceived, designed, and instituted out of reformist zeal or political necessity. Always these programs have been put in place precipitously and within the framework of compensatory education. This philosophy is rarely challenged, and proponents seek support for the programs in evaluations or theory only after these programs have become established.

Criteria for Minority Language Education

It is beyond the scope of this paper to attempt a complete specification of how immersion programs can be adapted to the United States. However, certain criteria for a well-founded educational approach for language minorities can be inferred from our analysis. One of the primary goals of language minority education needs to be seen as full cognitive-academic development. This would appear to be an unnecessary statement of the obvious. But a moment's reflection on the history of educational theorizing in minority education reveals a very different emphasis. As usually formulated, the problem appears to be one of *preparing or reshaping the minority child to fit within the format of an already established educational paradigm*. Given such a perspective, one finds that the task of school staff is to compensate for the presumed intellectual deficiencies of the children, to render them fluent in English, and to resocialize them into the majoritarian culture. Academic development will be a fortuitous by-product of these outcomes, if and when they are achieved.

Academic development as a goal should be paramount. For the attainment of broad academic skills and cognitive abilities by minority children will mitigate to some extent the effects of many other social ills, including institutionalized discrimination, marginal status, cultural disruption, and social alienation. However, academic achievement alone will not eliminate these social ills, for the full and equal participation of language minorities in American society requires not that these groups try to become indistinguishable from the white majority, but rather that they strengthen themselves from within—culturally, socially, politically, and economically.

A sound educational approach for minority children, therefore, must have as one of its highest priorities the firm establishment of a

deep sense of social and cultural identity that is grounded in the ethnic community. A central component of this goal is the development of a keen awareness of the social, economic, and political processes that condition the subordinate role of many minority groups in society in the United States (Freire, 1970). Students who do not understand these processes or who do not have the critical-analytical skills necessary to acquire an understanding of them will not be likely to develop a sense of loyalty and responsibility toward their communities. Academically prepared individuals who are alienated from their community and who are culturally adrift cannot be assets either to themselves or to society. Similarly, a community that is drained of its educated members through abrupt cultural change is debilitated and unable to contribute its full potential either to its own development or to that of the wider society. Moreover, a large body of educational literature, including the Canadian immersion studies, demonstrates that for students to achieve academic success, it is of the utmost importance that they have a positive self-image that includes a strong social and cultural identity. In contrast the disruption of one's socio-cultural identity leads to alienation and the loss of motivation for academic endeavors.

The language of home and family is a central aspect of sociocultural identity and self-esteem. If this language is stigmatized in society and repudiated by the school, an individual's self-esteem must necessarily suffer. If this language fails to be used as the primary vehicle for social, affective, and cognitive development, these aspects of the child's growth will be damaged, bringing great harm to the child's educational potential. In addition the Canadian immersion experience demonstrates that cognitive development in the native language is a crucial factor in the attainment of a high level of cognitive-academic skills in the second language.

Finally, for language minority children in the United States, strong English proficiency in all domains is essential. English proficiency is indispensable in today's world for advanced academic training. Participating adequately in business, commerce, or the occupational market without a full command of English would be extremely difficult for an individual. And the use of English for interethnic relations in most situations is natural and appropriate and thus very important.

Yet, the view that immediate acculturation and acquisition of English fluency by minority children are the solutions to their educational problems and, indeed, are prerequisite to academic progress is myopic and destructive. Neither the educational or linguistic theories nor the sociocultural or sociolinguistic realities of minorities in the United States require the immediate acculturation and acquisition of English fluency. As we have seen, the cognitive and academic abilities developed in the first language of an individual become available to

him or her in the second language once it is learned. These abilities do not need to be developed first in the second language, and if they are not also developed in the native language, it is extremely difficult for them to be learned adequately.

In the United States the acquisition of English communicative skills by language minority children is a foregone conclusion. The time, effort, and money dedicated to the early and rapid teaching of English would not be necessary were it not for the erroneous educational philosophy that students' academic learning can only be properly carried forward in this language. The environmental conditions for English acquisition are such that for virtually all children, English will become a fluent and even preferred mode of communication within a matter of a few years from their first encounter with it. The mass media, the economic institutions, the educational system, and the community all ensure vast amounts of meaningful input from which the acquisition of English is all but inevitable.

Under these conditions the cognitive-academic skills learned in the native language will be quite naturally incorporated into the child's developing English. The introduction of formal English language arts instruction, in its own time, will reinforce the common underlying proficiencies and will be the catalyst for the kinds of positive advantages of bilingualism that have been shown to accrue to the Canadian children.

A rational educational program for language minorities, then, must take into account a philosophy of education, the sociocultural factors related to the status of language minorities, and the theory and research to be considered in all aspects of the learning process. The major goals for such a program may be summarized as follows:

- To develop a strong sociocultural identity and a high level of self-esteem
- To develop full cognitive-academic abilities in the native language
- To develop academic achievement commensurate with the level of attainment of other groups in the society
- To develop native-like proficiency of English

For all practical purposes these are the same goals as are articulated for enrichment immersion programs, though they may be emphasized differently. Development of sociocultural identity is virtually a given in the Canadian programs. In minority contexts in the United States, strong measures must be taken within the educational program itself to ensure this development. For the Canadians, the second language development must be heavily stressed; for language minorities this enrichment requires a different emphasis, the development of the native language.

Structure of a Minority Language Immersion Program

Given the Canadian experience and the different sociocultural context in the United States, one finds that these goals have a number of implications for program design. First, the immersion aspects need to focus on the *culture and language of the child's family and community*. This is the implicit prerequisite for academic success in Canadian immersion, and it must be the explicit prerequisite in language minority education. In Canadian immersion, support derives from all of society's institutions. In language minority education, support does not come from these institutions; the educational system has to accept this responsibility by taking a much more active and powerful role. For in the final analysis the basis of educational attainment lies in the full development of the native language and culture.

This statement broadens the definition of immersion education in an interesting way. In both Canada and the United States, for both majority and minority children, the language and culture of immersion are those of sociopolitically subordinate groups in each society. These are precisely the languages and cultures that need to be developed and strengthened to meet the particular objectives of each group. In Canada and in the United States, English, as the dominant language, is essentially self-sustaining, both for the majority and for language minorities. The learning of French by English Canadians, however, requires a strong methodology such as that found in second language immersion. Similarly for language minorities in the United States, the development of the native language and culture, which are in such a precarious position, demands a powerful and fundamentally different educational approach from the one that is now used.

Effective learning through the native language and culture will require--as it does in any educational program--a long-term commitment, very possibly throughout the public school years as it does in Canada. A short-term program of three or four years as in bilingual education becomes a transitional program that necessarily has its emphasis on the changeover to English. American educators would be appalled at any suggestion that the study of English by Anglo-American students cease after the third or fourth grade or that social studies and civics be limited to the celebration of Lincoln's and Washington's birthdays. It is recognized that effective language study and enculturation into Anglo-American values require continual and intensive study, even into the college years. Given the importance of the native language and culture for language minorities, one finds that the development of these aspects of an individual's ethnic heritage requires no less of a commitment. Thus, the native language should be used as the principal medium of instruction throughout the school years, and culturally appropriate content, materials, and methods, should be incorporated into the curriculum.

Sociocultural relevance must not be limited to the celebration of ethnic holidays or the teaching about ethnic heroes. Activities relevant to the students' sociocultural background must permeate the curriculum. Such activities should be in alignment with the minority community's ways of communicating, the ways in which the child relates to others socially, and the child's preferred modes of thinking and problem solving. (See Castañeda [1974] for a discussion of these areas and their centrality to cultural pluralism.) More important, sociocultural relevance involves the development of critical awareness about the social and political history of the ethnolinguistic community. For only through such an understanding will minority students learn to analyze the relationships of their own group to the majority society and to appreciate, in a deep sense, their own identity.

For majority children these aspects of sociocultural identity are transmitted through all the institutions of society and are reinforced by the school. For language minorities only the family and ethnic institutions transmit these values.

The second implication for program design is that a strong parent involvement component must be central to the program. If minority parents do not initiate the program, set its goals and guidelines, or evaluate its progress and that of the children, educators have a serious responsibility to educate, motivate, and lead parents to assume just those roles. Parents cannot serve only in a passive advisory capacity, for then their function becomes one merely of validating policies and decisions that are made by others in their name. Again, enrichment programs in Canada and in the United States demonstrate that parents' initiative and active participation in all aspects of the program are crucial to its success.

Finally, English is introduced gradually, as in the enrichment programs. It may ultimately become the dominant language of instruction, though the native language must continue to have a prominent role throughout the schooling period. The methods of English instruction must be consistent with what is known about natural acquisition processes in second language learning—in developing both oral proficiency and proficiency in the context-reduced, cognitively demanding sectors.

Variations in the Model

The criteria and structure outlined previously for minority immersion have been inferred from the successful features of the Canadian immersion model and from our own analyses of the sociocultural factors in immersion programs. The same criteria and structure are adaptable to a variety of language minority contexts. Clearly, criteria and structure are applicable in a situation that calls for minority language early total immersion in which the pupils are monolingual

or dominant speakers of the minority language. Immersion is in the pupil's native language and culture, with a gradual increase in English until, by junior high school, the language distribution is more or less equal.

Even in situations in which the pupils have acquired some English prior to school entry or are even dominant in English, minority language immersion can be a very powerful approach, especially if an early partial model is used. Typically, these children understand the minority language very well even though their active, productive use is limited. Their parents and other family members use the language regularly, and it is used for many purposes in the community. The minority language in these circumstances remains an extremely important determinant of sociocultural identity. The use of the native language and culture as a principal medium of instruction, along with English, will serve to reinforce and strengthen this aspect of the child's development.

For older students, such as those in secondary school, whose early schooling has been totally or mostly in their native language, the middle or late immersion models (see Lapkin and Cummins, this publication) are fully appropriate. English is introduced immediately as a minor medium of instruction, and its use is increased rather quickly, ultimately receiving 50 percent or more of the instructional time.

Many schools, especially in urban areas, have an ethnically mixed student population that makes implementation of any minority language oriented program extremely problematic. The general tendency is to use English as the principal language of instruction. Teacher aides or specialists are employed who speak the native languages of the students and who provide special tutoring. In these situations sound educational principles give way to practical considerations of schedules, student grouping, and teacher qualifications. Yet, the criteria outlined above are just as valid in an ethnically mixed school as they are in one with a single minority language. From an educational point of view, these students, as much as students in schools with only one minority group, require the development of cognitive-academic linguistic skills in their native language and the strengthening of sociocultural identity. If our paramount concern is the education of children, sound educational principles must dictate school organization and not the other way around.

The similarity of the approaches outlined above to strong maintenance-oriented bilingual programs that many scholars have proposed is not coincidental. (See Kjøseth, 1972; Castañeda, 1974; Hernández-Chávez, 1978.) The Canadian immersion programs are themselves strong maintenance-oriented bilingual programs for majority children. Their success is rooted firmly in the maintenance of the

native language and culture of the majority student. The criteria that we have suggested and the minority language immersion approaches that we have proposed are founded on the same educational principles as the Canadian programs, taking directly into account the important sociocultural differences in the two contexts.

Demonstration Projects

Few precedents exist in education in the United States for the approach that is being proposed here. Most so-called maintenance bilingual programs introduce English immediately and in large amounts. As the children acquire a functional oral proficiency in English, this language becomes the principal medium of instruction; and the native language is relegated to language arts classes. The native cultural content of these programs is superficial and weak, and parent involvement is coincidental. The central focus of these programs is English acquisition, and they differ from transitional bilingual education only in degree.

Two projects for which data are available have some of the features of minority language immersion, although several critical components are lacking. One of these is the San Diego Title VII Demonstration Project ("An Exemplary . . .," 1982), which was inspired by the Canadian programs. The project extends from preschool to the sixth grade and involves both Spanish-speaking and English-speaking children. From the beginning the children are taught using Spanish as the medium of instruction. English is taught for 20 minutes per day at preschool, increasing to 30 minutes in kindergarten and to one hour in the second grade. By the fourth grade the distribution of the languages becomes approximately equal, and the project begins to resemble a transitional bilingual program. At some grade levels one teacher provides instruction in each of the languages, making it difficult to monitor language use in the classroom (David Dolson, personal communication).

In the beginning of the project, workshops were held for parents to explain the program, to provide recommendations on how to assist the children, and to teach the parents English. Most of the teachers for the Spanish portion of the program were native speakers of Spanish. Those who taught in English were native speakers of English. The latter were required to speak to the children only in English (Gloria Resa, personal communication).

In oral language skills the Spanish speakers attained grade-level proficiency in English within three to four years, and the English speakers reached grade-level proficiency in Spanish within two to five years. In reading, kindergarten entrants progressed to within one grade level in both languages by the time they were in the fifth grade. First grade entrants were one year above grade level by the time they

were in the sixth grade. By the sixth grade, students' mathematics scores in English and Spanish were a year or more above grade level. These results show that, in such a program, students attain oral language proficiency in their second language to a high level within a few years and that academic skills at the end of several years can be average or even above average.

A Title VII preschool project in Carpinteria, California (Campos, 1982), has used a Spanish-only approach in its program for two years. Based explicitly on Cummins' notion of common underlying proficiencies, the program's intent is to prepare Spanish-speaking children to enter kindergarten on an equal footing with majority group youngsters and to provide a better basis for the acquisition of English. The results of the second year of the program (the first year's results were based on only six months of classes) are remarkable. A test of school readiness showed the Spanish-speaking children to be close to the average for English speakers in contrast to Spanish-speaking children who did not participate and who were far below the norm. An achievement test showed noteworthy gains in percentile rank from just above the 50th percentile in language and mathematics concepts at kindergarten entry to 73rd and 85th percentiles, respectively, at the end of kindergarten. Finally, results of language proficiency tests showed that 76 percent of the experimental children were at a level of minimum functional proficiency in English as compared to 42 percent of the children from a day-care center that uses a concurrent bilingual approach.

The programs just described are both first-language oriented and demonstrate the potential benefits that can accrue from attention to students' native language. Even though the Carpinteria project is limited to preschool children, it provides dramatic evidence of the importance for academic achievement of strengthening the native language of language minorities and of developing their self-concept. In the San Diego project, certain critical aspects of a total minority language immersion program, as has been proposed, seem to be lacking. One is a long-term commitment to the native language as the principal medium of instruction. By the fourth grade the allocation of the two languages for instruction is 50-50, and there are no plans to carry the program beyond the sixth grade (Gloria Resa, personal communication). Second, there is no emphasis on the development of sociocultural identity. The curriculum is the same one as is regularly taught in English. Attempts are made to include aspects of the children's culture, mainly through the celebration of holidays, but understanding of the community's economic and political history is not an objective, and apparently there is no effort even to integrate children's cultural values, modes of learning, and so forth into the educational program. If these objectives were incorporated and if the

involvement of parents were strengthened, the San Diego project would approximate more closely the criteria that were set forth previously and would provide a strong test of these ideas.

A Final Note

One cannot be overly optimistic that the proposals set forth in this paper could be widely implemented. Even purely language-based projects such as those in San Diego and Carpinteria appear to be aberrations from the general trends in bilingual education. A program that fully integrated the minority culture and community concerns into the curriculum would be clearly unacceptable to many in an American public school system.

The schools are but a mirror of the larger society. In the United States today language minorities occupy the lowest educational and occupational levels; they are largely excluded from the political process; and they are discriminated against linguistically and culturally by the major institutions. The educational system plays a central role in the perpetuation of this social stratification that is based on class and race distinctions. This stratification occurs through any number of established strategies and practices, including the allocation of resources, segregation, tracking systems, testing and classification, staffing patterns, irrelevant curricula, and much more. (See Berreman, 1972, and Katz, 1971, for an elaboration of these themes.)

The educational problems of language minorities are thus revealed to be a result of inherent and systematic inequalities in the schools, which reflect the prevailing political and economic philosophies of society. Historically, every educational approach used with language minority populations has operated within this paradigm of structured inequality. The English immersion programs currently being proposed follow precisely the same pattern. But it is not the immersion concept per se that is unequal, as the Canadian experience shows. It is, rather, the ways in which it is applied within a particular socio-political context.

What, then, are the conditions under which a successful education for language minority children might be carried out? The foremost and indispensable consideration, it seems, is that such an education must serve the true interests of minority groups rather than the interests of the majority group—interests as defined by the minority communities themselves, not as they are perceived by majority group educators or scholars.

From this proposition follow quite naturally some important consequences. First, the goals of education would surely change from an emphasis on mainstreaming and assimilation to cultural pluralism and ethnolinguistic solidarity. The ideal of social and economic success for the individual through education would be refocused on the

potential of education for the developing of communities socially and economically. The commitment to such goals and to excellence in minority education would need to be made at all levels of the educational system, beginning with the political leaders whose responsibility it is to enact the enabling legislation.

Second, resources of both the majority and minority communities would be committed to training teachers, developing curricula, and conducting research, all of which would be directed toward fulfilling the educational goals and objectives of the minority communities.

Finally, programs would be designed whose proponents daringly reject the old formulas to embrace innovative and socioculturally valid approaches which are the key to effective education for language minorities. In these pages one such approach has been proposed, designated minority language immersion. Its provisions derive from a deep need to revitalize ethnolinguistic communities in the United States; to give them a measure of self-determination in one of the most important areas of modern life; and, ultimately, to build the capacity of these communities for self-sufficiency. This model is surely not the only system of education that can meet these goals. Nevertheless, it is based solidly on results of theoretical and empirical research, the actual experience of many projects, and a commitment to full participation in the educational process by the minority communities themselves.

Selected References

- Baker, A. K., and A. de Kanter. *Effectiveness of Bilingual Education: A Review of the Literature*. Washington, D.C.: Office of Planning, Budget, and Evaluation, 1981.
- Berreman, G. "Race, Caste, and Other Invidious Distinctions in Social Stratification." *Race*, Vol. 13, No. 4 (1971), 385 - 414.
- A Better Chance to Learn: Bilingual-Bicultural Education*. U.S. Commission on Civil Rights, Clearinghouse Publication No. 151. Washington, D.C.: U.S. Government Printing Office, 1975.
- Bilingual/Bicultural Education: A Privilege or a Right?* Illinois State Advisory Committee, The United States Commission on Civil Rights. Salem, N.H.: Ayer Co., 1978.
- Bilingual Education Amendments of 1981*. 97th Cong., 2nd sess., April 23 and 26, 1982. S. 2002.
- Campos, J. *Evaluation Report 1982-83*. Carpinteria, Calif.: Carpinteria Unified School District, 1982.
- Carter, T. P. *Mexican Americans in School: A History of Educational Neglect*. New York: The College Board, 1970.
- Carter, T. P., and R. Segura. *Mexican Americans in School: A Decade of Change*. New York: The College Board, 1979.

- Castañeda, A. "Melting Potters Versus Cultural Pluralists: Implications for Education," in *Mexican Americans and Educational Change*. Edited by A. Castañeda, M. Ramirez III, C. E. Cortés, and M. Barrera. New York: Arno Press, 1974, pp. 22-39.
- Chomsky, Noam. *Aspects of the Theory of Syntax*. Cambridge, Mass.: MIT Press, 1965.
- Cohen, A. D. *A Sociolinguistic Approach to Bilingual Education: Experiments in the American Southwest*. Rowley, Mass.: Newbury House Pubs., 1975.
- Coleman, James S. *Equal Educational Opportunity*. Cambridge, Mass.: Harvard Univ. Press, 1969.
- The Condition of Hispanic Americans*. Washington, D. C.: National Center for Education Statistics, 1980.
- Cubberly, Elwood P. *Changing Conceptions of Education*. Boston: Houghton Mifflin Co., 1909.
- Cummins, J. "Cognitive Academic Language Proficiency, Linguistic Interdependence, the Optimum Age Question, and Some Other Matters," *Working Papers on Bilingualism*, Vol. 19 (1979), 197-205.
- Cummins, J. "The Role of Primary Language Development in Promoting Educational Success for Language Minority Students," in *Schooling and Language Minority Students: A Theoretical Framework*. Developed by the California State Department of Education, Office of Bilingual Bicultural Education. Los Angeles: California State University, Evaluation, Dissemination, and Assessment Center, 1981, pp. 3-49.
- Cummins, J., and R. Mulcahy. "Orientation to Language in Ukrainian-English Bilingual Children," *Child Development*, Vol. 49, No. 4 (1979), 1239-42.
- Danoff, M. N. *Evaluation of the Impact of ESEA Title VII Spanish/English Bilingual Education Program*. Palo Alto: American Institutes for Research, 1978.
- Davis, W. A. *Social-Class Influences Upon Learning*. Cambridge, Mass.: Harvard Univ. Press, 1948.
- Deutsch, M., and B. Brown. "Social ... in Negro-White Intelligence Differences," *Journal of ...*, Vol. 20, No. 2 (1964), 24-35.
- Domestic Student Enrollment*. Berkeley: University of California, Office of Outreach Services, Student Academic Service, 1978.
- Duncan, S., and E. de Avila. "Bilingualism and Cognition: Some Recent Findings," *NABE Journal*, Vol. 4 (1979), pp. 15-50.
- Engle, P. L. "Language Medium in Early School Years for Minority Language Groups," *Review of Educational Research*, Vol. 45 (1975), 285-325.

- An Exemplary Approach to Bilingual Education: A Comprehensive Handbook for Implementing an Elementary-Level Spanish-English Language Immersion Program.* ESEA Title VII Bilingual Demonstration Project. San Diego: San Diego City Unified School District, 1982.
- Fishman, J. "Bilingual Education: What and Why?" *Florida FL Reporter*, Vol. 2, No. 1 (1973), 13-14; and Vol. 2, No. 2 (1973), 42-43.
- Freire, P. *Pedagogy of the Oppressed*. New York: Continuum Publishing Co., 1970.
- Gallimore, R., and J. C. Boggs. *Culture, Behavior, and Education: A Study of Hawaiian Americans*. Beverly Hills: Sage Publications, 1974.
- Haugen, E. *Bilingualism in the Americas: A Bibliography and Research Guide*. Publication of the American Dialect Society, 16. University, Ala.: University of Alabama Press, 1956.
- Heller, C. *Mexican-American Youth: Forgotten Youth at the Crossroads*. New York: Random House, Inc., 1966.
- Hernández-Chávez, E. "Language Maintenance, Bilingual Education, and Philosophies of Bilingualism in the United States," in *International Dimensions of Bilingual Education*. Edited by James Alatis, Georgetown University Round Table Monograph. Washington, D.C.: Georgetown University Press, pp. 527-50, 1978.
- Hernández-Chávez, E. "Meaningful Bilingual Bicultural Education: A Fairytale," in *Language Development in a Bilingual Setting*. Edited by Roberto Ortiz. Pomona, Calif.: National Multilingual Multicultural Materials Development Center, 1979, pp. 48-57.
- Hernández-Chávez, E., and J. K. Curtis. "The Graphic Sense Hypothesis: You Can't Read Firecrackers," in *Sociolinguistic/Ethnographic Approaches to Language Proficiency Assessment*. Edited by Charleen Rivera. Clevedon, Avon, England: Multilingual Matters. In press.
- Hernández-Chávez, E., and J. K. Curtis. *Study of Graphic Sense and Its Effects on the Acquisition of Literacy*. Elmira, Calif.: Instituto de Lengua y Cultura, 1982.
- Katz, M. B. *Class, Bureaucracy, and Schools: The Illusion of Educational Change in America*. New York: Praeger Pubs., 1971.
- Kennedy, E. *Indian Education: A National Tragedy—A National Challenge*. Report of the Special Subcommittee on Indian Education of the Committee of Labor and Public Welfare, U.S. Senate. Washington, D.C.: U.S. Government Printing Office, 1969.
- Kessler, C., and M. E. Quinn, "Positive Effects of Bilingualism on Science Problem-Solving Abilities," in *Thirty-first Annual Georgetown University Round Table on Languages and Linguistics*.

- Edited by James F. Alatis. Washington, D.C.: Georgetown University, 1980, pp. 295-308.
- Kjolseth, R. "Bilingual Education Programs in the United States: For Assimilation or Pluralism?" in *The Language Education of University Children: Selected Readings*. Edited by Bernard Spolsky. Rowley, Mass.: Newbury House Pubs., 1972.
- Krashen, S. D. "Bilingual Education and Second Language Acquisition Theory," in *Schooling and Language Minority Children: A Theoretical Framework*. Developed by the California State Department of Education, Office of Bilingual Bicultural Education. Los Angeles: California State University, Evaluation, Dissemination, and Assessment Center, 1981, pp. 51-79.
- Lambert, W. E., and G. R. Tucker. *Bilingual Education of Children: The St. Lambert Experiment*. Rowley, Mass.: Newbury House Pubs., 1972.
- Maenamara, J. *Bilingualism and Primary Education*. Edinburgh: Edinburgh University Press, 1966.
- Maenamara, J. "The Effects of Instruction in a Weaker Language," in *Problems of Bilingualism: The Journal of Social Issues*. Edited by John Maenamara, Vol. 23, No. 2 (1967), pp. 121-35.
- Matute-Bianchi, M. E. "What Is Bicultural About Bilingual-Bicultural Education?" *The Urban Review*, Vol. 12 (1980), 91-108.
- Met, M. *Immersion and the Language Minority Student*. Milwaukee: Midwest National Origin Desegregation Assistance Center, 1982.
- Mexican American Education Study*. 5 vols. in one. Edited by Francesco Cordasco. Salem, N.H.: Ayer Co., 1978.
- Modiano, N. "National or Mother Tongue in Beginning Reading: A Comparative Study," *Research in the Teaching of English*, Vol. 2, (1968), 32-43.
- Ogbu, J. *Minority Education and Caste*. New York: Academic Press, Inc., 1978.
- Paulston, C. B. "Ethnic Relations and Bilingual Education: Accounting for Contradictory Data," *Working Papers on Bilingualism*, No. 6 (1975), 1-44.
- Prator, C. H., Jr. *Language Teaching in the Philippines*. Manila: U.S. Educational Foundation in the Philippines, 1950.
- Report of the Twentieth Century Fund Task Force on Federal Elementary and Secondary Education Policy*. New York: Twentieth Century Fund, 1983.
- Riessman, F. *The Culturally Deprived Child*. New York: Harper and Row Pubs., Inc., 1962.
- Rodríguez, R. *Hunger of Memory: The Education of Richard Rodríguez. An Autobiography*. Boston: David R. Godine Pubs., Inc., 1982.

- Rotberg, F. C. "Some Legal and Research Considerations in Establishing Federal Policy in Bilingual Education," *Harvard Educational Review*, Vol. 52, No. 1 (1982), pp. 149-68.
- Skutnabb-Kangas, I., and P. Toukomaa. "Semilingualism and Middle Class Bias: A Reply to Cora Brent-Palmer," *Working Papers on Bilingualism*, Vol. 19 (1979), 182-96.
- *Skutnabb-Kangas, I., and P. Toukomaa. *Teaching Migrant Children's Mother Tongue and Learning the Language of the Host Country in the Context of the Socio-Cultural Situation of the Migrant Family*. Helsinki: The Finnish National Commission for UNESCO, 1976.
- Swain, M. "Canadian Immersion Programs: Their Relevance in U.S. Context," Paper presented at the Fourth Annual Summer TESOL Meeting, Evanston, Illinois, July 16-17, 1982.
- Swain, M., and S. Lapkin. *Bilingual Education in Ontario: A Decade of Research*. Toronto: The Minister of Education, Ontario, 1981.
- Troike, R. C. "Research Evidence for the Effectiveness of Bilingual Education," *Bilingual Education Paper Series*, Vol. 2, No. 5 (1978).
- Tucker, G. R.; B. P. Sibayan; and F. T. Otanes. "An Alternate Day's Approach to Bilingual Education," in *Report of the 21st Annual Round Table Meeting on Linguistics and Language Study*, Vol. 23. Edited by J. E. Alantis. Washington, D.C.: Georgetown University, 1970, pp. 281-99.
- Weiss, R. "The Efforts of Education in the Earnings of Blacks and Whites," *Review of Economics and Statistics*, Vol. 52, No. 2 (1970), 150-59.
- Zangwill, I. *The Melting Pot: Drama in Four Acts*. New York: Macmillan Publishing Co., Inc., 1909.
- Zappert, L., and R. Cruz. *Bilingual Education: An Appraisal of Empirical Research*. Berkeley, Calif.: Bay Area Bilingual Education League, 1977.

Other Publications Available from the Department of Education

Studies on Immersion Education: A Collection for U.S. Educators is one of approximately 500 publications that are available from the California State Department of Education. Some of the more recent publications or those most widely used are the following:

American Indian Education Handbook (1982)	\$3.50
Bilingual-Crosscultural Teacher Aides, A Resource Guide (1984)	3.50
Bilingual Program, Policy, and Assessment issues (1980)	3.25
California Private School Directory	9.00
California Public School Directory	12.50
Curriculum Design for Parenthood Education (1982)	4.00
Desegregation and Bilingual Education Partners in Quality Education (1983)	4.25
Foreign Language Framework for California Public Schools (1980)	2.50
Guidelines for Proficiency Tests (1982)	2.00
Handbook for Planning an Effective Mathematics Program (1982)	2.00
Handbook for Planning an Effective Reading Program (1983)	1.50
Handbook for Planning an Effective Writing Program (1983)	2.50
Handbook on Teaching Portuguese-Speaking Students (1983)	4.50
History - Social Science Framework for California Public Schools (1981)	2.25
Individual Learning Programs for Limited-English-Proficient Students (1983)	3.50
Martin Luther King, Jr., 1929 - 1963 (1983)	3.25
Raising Expectations: Model Graduation Requirements (1983)	2.75
Reading Framework for California Public Schools (1980)	1.75
Relationship Between Nutrition and Student Achievement, Behavior, and Health (1980)	4.00
Science Education for the 1980s (1982)	2.00
Science Framework for California Public Schools (1978)	1.65
Statement on Competencies in English and Mathematics: Expected of Entering Freshmen (1982)	2.50
Studies on Immersion Education: A Collection for U.S. Educators (1983)	5.00
Toward More Human Schools (1981)	1.75
Visual and Performing Arts Framework for California Public Schools (1982)	3.25

Orders should be directed to:

California State Department of Education
P.O. Box 271
Sacramento, CA 95802

Remittance or purchase order must accompany order. Purchase orders without checks are accepted only from government agencies in California. Sales tax should be added to all orders from California purchasers.

A complete list of publications available from the Department may be obtained by writing to the address listed above.