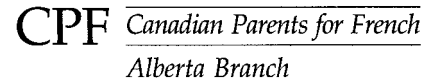


A working conference for education leaders held November 19 & 20, 1998

During this ground-breaking conference, educational leaders from across the province—senior district administrators, trustees, school principals—considered the current and future challenges of Alberta's French Immersion Programs.

In her keynote address, Dr Nancy Halsall reviewed the research on second language learning, as summarized in the following paper.

Organizing Partners



ASBABE Alberta School Boards
Association for Bilingual Education



French Immersion: The Success Story Told by Research

Nancy D. Halsall, PhD

Edited for the conference *French Immersion in Alberta: Building the Future*
November 19 & 20, 1998
Edmonton

Table of Contents

Introduction	1
Acquisition of French Language Skills	1
English Language Skills of French Immersion Students	2
Special Education for Immersion Students	2
Attrition/Retention	4
Pedagogy of Immersion	5
Beyond High School	7
Motivations and Attitudes	8
Challenges for Immersion Programs	9
Administrative Issues	9
Implications for Decision-makers	12
Conclusion	14
References	15

Introduction

French immersion, it has been said by the Canadian Education Association (1992), is the most researched topic of all educational innovations. Although bilingualism and multilingualism occur in many parts of the world, in Canada, French immersion was initially seen as an experiment. The title of the 1983 booklet *The Trial Balloon That Flew* captures the attitude of experimentation toward French immersion. This idea of experimentation is one reason for the extensive research surrounding French immersion. A second reason is that each generation of parents, administrators, and trustees has sought fresh evidence that French immersion works. By “works,” people seem to mean that French immersion will do no irreparable harm to students, that the students will learn French, and that their English language skills will not be different from non-immersion students. A third reason is that, as immersion has expanded, students with all levels of ability have entered programs, and researchers have wanted to check whether immersion is suitable for a wide variety of students.

After three decades, the general concerns about whether French immersion works have been amply answered. Other issues remain for further scrutiny.

Acquisition of French Language Skills

Immersion programs vary according to the grade level at which they begin and the amount of time devoted to French during the school day. Early French immersion (EFI) typically begins in kindergarten or Grade 1; late French immersion (LFI) usually begins in Grade 6 or 7, and middle French immersion (MFI) usually begins around Grade 4. High school subjects in French are usually offered to students who have been in immersion in prior grades. The amount of time spent in French varies by grade level, by the grade at which students enter the program, and from province to province and school to school. The range runs from 100% to 50% of time being spent in French. These multitudinous arrangements make studying language acquisition in French immersion complicated, but the abundance of evidence is clear.

When the French acquisition of students in various immersion programs has been compared, the finding has been that the students who have had the largest number of hours in French have had the highest achievement. EFI students do better in French than LFI students, and MFI students fall between the students in the other two programs (Day & Shapson, 1989; Edwards, 1989; Harley, 1987; Hart & Lapkin, 1989; Lapkin, Hart, & Swain, 1991; Hart, Lapkin, & Swain, 1992; McVey, Bonyun, Dicks, & Dionne, 1990; Swain & Lapkin, 1986; Wesche, 1996). EFI students have been found to have greater speaking ability, greater listening skills, and more confidence in using their French language skills. More consistent levels of performance have been found among EFI students (Lapkin, Hart, & Swain, 1991).

The French language skills of immersion students are high, but when compared with the skills of students whose first language is French, are below those of Francophones (Genesee, 1978; Holobow, Genesee, Lambert, & Chartrand, 1987; Swain & Lapkin, 1981). The skills that diverge the most are speaking and writing.

A widespread belief is that by the time students reach high school there is no discernible difference between students who have come through the various programs. On the face of it, there is some evidence to support this belief, particularly regarding the receptive skills of listening and reading (Dicks, 1994). However, a clear look at what transpires in immersion programs is warranted (Edwards, 1989).

It is clear that LFI programs are valuable for those who enrol in them and stay in them, but it is important to determine who enrolls, what their capabilities are, and whether they remain in the program. EFI is seen as drawing a more diverse range of students than other programs. It is possible that LFI students who continue to take courses in French immersion are more motivated than their peers. It is possible that better teaching strategies can be used in EFI programs. Finally, it is possible that the presence of LFI students in high school classes slows down the progress of EFI students.

English Language Skills of French Immersion Students

A great concern for parents and students has been and continues to be whether students jeopardize the quality of their English language skills by taking French immersion (Halsall, 1997). Much investigation of the issue has been carried out and several summaries of findings have been done (Alberta Education, 1992; Carleton Board of Education, 1994; Edwards, 1989; Lambert & Tucker, 1972; Parkin, Morrison, & Watkin, 1987).

Researchers have found that there are some lags in English language skills in students in grades 1 to 3. The lags disappear by Grade 4 or 5, independent of the proportion of English instruction time provided from Grade 3 on (Edwards, 1989).

For MFI students no negative findings have been reported related to English language skills. One group of researchers (Hart, Lapkin, & Swain, 1988) found that EFI students did better than MFI students in reading and vocabulary. This finding was interpreted as indicating that immersion education enhances English skills over the long term.

For LFI students, researchers have found no detriment to English skills (Halpern, MacNab, Kirby, & Tuong, 1976; Shapson & Day, 1982). Recent research on English language skills has confirmed the findings in the 1970s and 1980s (Fine, 1992; Gaudet & Pelletier, 1993; McVey, Bonyun, Dicks, & Dionne, 1990)

Immersion has not been found to be detrimental to intellectual development. In fact, recently researchers have found that some skills, such as the figurative and metaphoric use of language, might be enhanced by second language learning (Neufeld, Arnold, Flaborea, Paterson, & St. Lewis, 1992).

Special Education for Immersion Students

As students with a wider range of ability level than the very first immersion students have entered immersion, particularly EFI, researchers have continued to find favourable

comparisons between the skills of immersion students and their peers in Francophone programs and in English programs (Carleton Board of Education, 1994). Attention has now turned to the issue of whether students with special needs can be served in and benefit from immersion programs. This issue is integrally related to the issue of attrition from immersion programs. Immersion has been found to be suitable for students having academic difficulty and for the learning disabled (Edwards, 1989). Language disability is an impediment to academic achievement, but this has not been found to be more so when students are enrolled in immersion.

Yet the main reasons for the transfer out of immersion continue to be difficulties with academics, language problems, and behavioural problems (Ali Khan, 1993; Kasian, 1993; Stern, 1991; Vedovi, 1992).

Researchers have not concluded that students experiencing difficulties should leave immersion programs, but have encouraged the development of strategies for working with students with special needs within their program (Ali Khan, 1993; Keep, 1993; Wiss, 1989). Interestingly, the call for increased services within immersion has been made by researchers with extensive experience not only in immersion but also in special education (Ali Khan, 1993; Cummins, 1984; Demers, 1994; Halsall, 1994; Keep, 1993; Murtaugh & Dirren, 1992).

The empirical evidence that transferring a student out of immersion leads to success for that student is scant (Carleton Board of Education, 1994; Halsall, 1989, 1994; Kasian, 1993; Lakehead Board of Education, 1990). This practice of removing students from immersion who are referred for assessments cannot be supported on the basis of research. Students who remain in immersion are more likely than students who leave to have parents convinced of the value of immersion and to be devoted to having their children remain in immersion (Demers, 1994; Stern, 1991; Vedovi, 1992).

In Edmonton, the public school district experimented for two years with a self-contained class specifically designed for learning disabled students in French immersion programs. On the basis of the evidence gathered, the program will continue and may expand, according to Rousseau (1998). Although the trend in education is toward integration of students with special needs in regular classrooms along with appropriate programming and support, this experiment in a self-contained setting for French immersion students with learning disabilities will undoubtedly produce information that will be helpful to all immersion teachers.

The matter of the provision of support to special needs students frequently leads to questions regarding the prediction of who will be able to cope and who will do well in French immersion. A very cogent discussion of the issue was provided by Edwards (1989). Briefly, he stated that prediction of success in general, that is, in English, French immersion, or any type of program, while possible for groups of students, is not possible for individuals. Prediction in immersion is not possible, given the current state of knowledge and the measurement instruments available. He cautioned against the overinterpretation of assessment results. Edwards's discussion is based on the work of Cummins (1984), Makin (1984), and Trites (1976, 1977, 1980).

There has been little research on prediction of success in immersion. In one study on stress in the immersion classroom, the researcher found that more students who tested low on coping strategies and resources transferred out of immersion than remained in immersion (Ali Khan, 1993).

Most writing on prediction has focussed on the ways of continuing to serve students in immersion programs rather than removing them.

Attrition/Retention

At the high school level, the reasons given by students, parents, and teachers for attrition in immersion programs have been summarized as:

- a lack of variety of course choices;
- too heavy a workload caused by the demands of immersion;
- the need to choose between immersion and other programs, such as the International Baccalaureate;
- the belief that higher marks for university entrance would be obtained in English;
- a lack of opportunity to practise speaking French, both in and out of school; and
- a poor quality of teaching and courses.

(Calgary Board of Education, 1991; Halsall, 1994; Husum, 1992).

At the elementary level, the reasons given for transfer from immersion have been summarized as:

- difficulty in understanding, speaking, and reading French;
- difficulty in reading English;
- poor relations with the immersion teacher;
- emotional or behavioural problems; and
- lack of remedial help.

(Halsall, 1994; Parkin, Morrison, & Watkin, 1987).

An Alberta Education study (1992) as well as other research (Bennett, Boss, Carlson, & Soucy, 1982) lends support to the belief that students get higher marks when they take exams in English. By policy, Alberta allows students to take diploma exams in English. This is an issue requiring further study and may well be explored in future, as researchers turn their attention to the pedagogy, or teaching/learning aspects, of French immersion programs.

These recommendations for retention at all grade levels have been made:

- that a model be developed for studying attrition,
- that ongoing teacher training be provided in methodology,
- that teacher selection and recruitment be improved,
- that special education programs be developed within immersion,
- that more extensive awareness programs be undertaken, and

- that the contribution of second language learning to the development of multilingual capabilities be emphasized.

(Halsall, 1994; Regina Board of Education, 1992).

Recommendations directed specifically toward high school have been:

- increasing the amount of speaking in classes,
- supporting other ways of maintaining French (e.g., clubs),
- ensuring sufficient materials are available, and
- finding ways to make immersion available at the high school level to non-academic students.

(Carleton Board of Education, 1992).

Much discussion has taken place regarding the blending of EFI and LFI students in high school courses, that is, placing students with different numbers of hours of French instruction together in the same courses. In the early years of immersion this practice was avoided, and is still avoided where the enrolment for courses is large enough to warrant organizing different courses for EFI and LFI students. No well-designed research has been undertaken to answer the question of what effect blending has on the achievement of students. Some evidence regarding blending was found in one school district (Carleton Board of Education, 1992) where more EFI than LFI students studied French throughout their high school careers. It was thought that the practice of blending might contribute to this difference in attrition between EFI and LFI students.

Informal comments of students have indicated that blending creates difficulties for LFI students (Halsall, 1997). As well, a study in which data were collected on the relative skills of EFI and LFI students just before high school entry found sufficient differences among the EFI and LFI students for the researchers to advise that blending should be avoided (Hart, Lapkin, & Swain, 1992).

Pedagogy of Immersion

A criticism that has been levelled at immersion is that it is not and cannot be child centred. The basis of such thinking is that second language teaching must be teacher directed and cannot therefore respond to the interests and needs of individual children. Researchers studying the issue have found that immersion, if designed and carried out along child-centred lines, does not have to be teacher directed. French immersion classrooms can be as child centred as English program classrooms if there is a desire to do that (Halsall & Wall, 1992). This is one example of how research is turning its focus on how language is learned.

A recent bibliography has focused on the instructional, or pedagogical, aspects of immersion (Lyster, 1995). The emphasis on the processes used to impart the French language to students is a departure from the prior emphasis on product, that is, the amount of French learned. In other words, the interest in whether immersion works has been supplanted with an interest in how it works. From the interest in process will come an increased understanding of what

classroom practices will best serve immersion students. A review of the topic has been written by Harley (1998).

Investigation into the pedagogy of immersion will require research designs that extend beyond the traditional quantitative studies. Qualitative designs that describe the learning process and case studies of individual students will be used. Qualitative research has burgeoned in the last two decades and has a methodology of its own. When properly used, qualitative research is every bit as legitimate as research based on statistics.

An example of qualitative research has been provided by Weber and Tardif (1991), who studied kindergarten students by observing them in their classroom as they began to learn French. The researchers found that the students memorized words that were significant to them in the kindergarten context. The students did not appear to be going through any sort of grammatical analysis.

Another issue, which is both pedagogical and administrative, is when to begin the teaching of English in immersion programs. Typically, in EFI, the first years in the program are devoted exclusively to instruction in French. But as more has been understood about how a student's first language supports the learning of a second language, some theorists have called for the inclusion of some English instruction from the outset of the immersion experience. This point of view has been most fully articulated by Cummins (1977, 1986, 1992, 1993) in the context of immigrant children learning English. A good deal of the general public in North America believe, to some extent, that formal learning is best begun in the mother tongue. There is no solid accumulation of research to back up this belief. The immersion experience and the experience in other cultures indeed provide evidence to the contrary. Nevertheless, the issue of when to start English instruction remains unresolved.

Preliminary research findings on the introduction of English illustrate the lack of resolution of the issue. Noonan and Colleaux (1994) studied two groups of students in Saskatoon. One group consisted of students who learned to read English in Grade 1 and French in Grade 2. The other group consisted of students who learned to read French in Grade 1 and English in Grade 2. No differences in either French or English were found between the two groups at the end of Grade 3. Fifteen immersion students in the Calgary Separate School Board had reading and writing in both English (60 minutes) and French. In Grade 1, and to a lesser extent Grade 2, they lagged behind other immersion students who had French reading and writing, but who had only 30 minutes of English. The lag was in both English and French. In English they also lagged behind students in an English class who had only English reading (Bonnar & Cummins, 1993). By Grade 3, the 15 immersion students were reported to outperform both other groups of students in both languages. This finding must be interpreted in light of the small number of students studied, possible differences in teachers, and possible socio-economic status differences (Bonnar & Cummins, 1993). Results of standardized testing must also be taken into account because the average scores of French and English have been above the provincial standard for many years, according to Cécile Bonnar (personal communication, January 24, 1995).

Two additional reports have been issued in Alberta jurisdictions. A report for the Fort McMurray Roman Catholic Separate School District and the St. Albert Protestant Separate School District stated that immersion students with English in Grade 1 did not read as well as students with only French in Grade 1. This statement was based on the finding that by Grade 3, the students with both English and French were a year behind the students with only French, in both English and French. However, all groups read above grade level. The study was unable to identify the reasons for the difference, which could be attributed to a variety of causes (Cadrin & Sawchuk, 1995). Another report from the Greater St. Albert Catholic Regional Division described the results of a three year experiment in which English was introduced in Grade 1. In the judgment of the author, on the basis of teacher-parent questionnaires and test results for students as well as teacher ratings of the students, the performance of the students in French and English was good enough to continue the program (Pinco, 1996).

Thus it is clear that the reports to date do not resolve the issue of when to begin English instruction in French immersion. Large-scale studies in which all the elements that contribute to differences in achievement are controlled would be necessary. It would also be necessary to have groups that do not have English instruction in order to compare the achievement of students in different situations.

The state of knowledge on this issue has been detailed in the report *Introducing English Language Arts in Early French Immersion* (Halsall, 1995). The author of the report concluded it was likely that no one approach would serve all students and that the issue should be reframed as how to meet the needs of individual students within French immersion. Investigating the different learning needs and styles of French immersion students is part of the new directions in research, that of investigating immersion pedagogy.

Beyond High School

Language learning requires ongoing practice, so as large numbers of students began graduating from high school with French skills, researchers have been interested in the experiences of those students in the world of work and in university.

As part of a larger study (Hart, Lapkin, & Swain, 1989), students in Calgary, after they had been out of school for one year, were sent a questionnaire regarding their use of French since high school. Students reported more recent use of speaking and listening skills than of reading and writing skills. Watching television and casual conversation were the situations in which French was most frequently used. Forty percent were taking a course in French. The reason given for not taking a course in French was that none was available. In the same study, a group of students still in high school said they would be trying to get a job in which they would be able to use French.

In Saskatchewan, seven years' worth of high school graduates who had been in immersion programs were contacted (Husum & Bryce, 1991). Eighty percent or more of the graduates reported that they were glad to have been in immersion, that they planned to enrol their

own children in immersion, and that they had had experience with French since leaving high school. Among the graduates 53% felt that, to some degree, French had helped them get a job.

A survey of immersion graduates attending four universities in eastern Ontario (Wesche, 1992) during their years at university and afterward found high levels of French proficiency. The graduates also reported that they expected to use their French in future and had a strong desire to use and improve their capabilities in French.

The Toronto Board of Education (1993) surveyed immersion graduates and found that 53% had studied French at university and had felt very prepared to do so. They watched television; read books, magazines, and newspapers; and spoke with bilingual and Francophone friends in French. EFI graduates spoke with friends in French more often than LFI graduates. Half the graduates who were employed full time said knowing French had helped them in getting a job, and half reported using French on the job.

A survey (Hart, Lapkin, & Swain, 1990) in the greater Toronto area of 34 employers in the area of sales and customer service found that French skills enabled graduates to win an entry-level job, but that future promotion was not likely to be enhanced by the ability to speak French because managers related more to staff who could speak English than to customers who might only speak French. Employers were skeptical that immersion graduates could actually fill the positions that were available, so mock interviews of graduates with staff in charge of evaluating the French language skills of job applicants were conducted. It was concluded that many immersion graduates could indeed fill the jobs requiring the use of French.

Motivations and Attitudes

In addition to getting jobs, students and parents also believe that learning French is an enriching experience in and of itself. As recently as last year, the same results were found in a study conducted in Prince Edward Island (Halsall, 1997). The attitudes of immersion students toward French have generally been found to be positive (Edwards, 1989; Wesche, 1992).

At Grade 8, EFI students have been found to have more confidence than LFI students in using French in real-life situations. At Grade 12, EFI students were still found to be more confident than LFI students (Wesche, 1996).

A change in motivation for enrolling in immersion was found in one study (Toronto Board of Education, 1993). The initial reasons for enrolling were given in this order: learning a second language, future jobs, and challenge or enrichment. Later students moved learning a second language (for reasons of bilingualism and biculturalism) to third place.

Positive parental attitudes and beliefs toward immersion have been found to be instrumental in whether students enter immersion and whether they stay in the program (Edwards, 1989; Halsall, 1997; Olson & Burns, 1983; Stern, 1991; Vedovi, 1992).

Challenges for Immersion Programs

Immersion has been criticized (Bibeau, 1984; Hammerly, 1985; Harley, 1984; Lyster, 1987) because immersion students have difficulty using French in real-life situations and because the students speak a faulty language that is neither correct English nor correct French. Tardif and d'Anglejan (1981) found that the accent of Anglophones hindered communication with Francophones. When reviewing these issues (Edwards, 1989; Lapkin, Swain, & Shapson, 1990), writers have concluded that these are not reasons to abandon immersion programs, but to look for precise modifications to immersion curriculum and pedagogy which will overcome the difficulties encountered. Indeed these concerns, along with other issues, have led to the current research interest in specific classroom practices.

An example of the current research that will inform and alter pedagogy is the work of two researchers (Geva & Clifton, 1994) who compared the progress of good and poor readers in the English program with good and poor readers in the immersion program. The researchers found that good readers in the English program and good readers in the immersion program had similar reading profiles. Good readers, regardless of the language in which they read, showed differences from poor readers on all measures of reading skills. The researchers believed that it was important to determine how appropriate instructional intervention could be systematically applied to increase reading skills in immersion students.

An earlier study (Chmilar, Kendall, & Obadia, 1984) found that there were more differences between students with varying abilities within language programs than there were between immersion and English programs. These researchers, too, concluded that the important intervention was to tailor instruction to the individual needs of students.

A reason that some people give for wanting to begin English in Grade 1 is that students could then receive help in English. Other people feel that the provision of help in French would remove the necessity for reading instruction in two languages simultaneously. Despite this discussion, it is clear that immersion students deserve support in the programs they enrol in. This is not just an issue at the elementary school level, for high school students often report that they do not find the support needed to function well in courses offered in French (Carleton Board of Education, 1992; Halsall, 1994, 1997). How to supply a range of services for the individual needs of students within immersion will be the subject of continued experimentation and research.

High school students do not feel that they get to practise speaking French often enough in class (Carleton Board of Education, 1992; Halsall, 1997). An extensive speaking component is necessary at the high school level. Finding ways to help teachers include speaking in high school courses is a challenge for immersion pedagogy.

Administrative Issues

Historically, it has been thought nearly impossible to determine the costs of programs such as immersion. Reviewing the issue, Edwards (1989) directs interested individuals to

Partlow (1977), Churchill, Orlikow, Greenfield, and Rideout (1979) and Ragsdale (1979) regarding the complexities and futility of costing such programs. However, with the aid of computers, models for costing special education programs have been developed in the United States and Canada. Building on the special education costing models, some work on costing models for French immersion has been done in Canada.

At the behest of trustees, Halsall (Carleton Board of Education, 1994) reviewed the costing of immersion programs by a number of school districts. Among the school districts was Mount Rundle, in Alberta, now part of the Canadian Rockies School District, which in 1992 reported that immersion did not cost more than the regular program and, in fact, improved the overall financial situation. Some districts reported increased costs because of starting immersion programs, higher textbook costs, administrative staff, and transportation. However, most boards found that immersion programs, once established, do not cost more than regular programs. Transportation is the one area where districts reporting no increased costs believed there might be additional costs, but no district reported an actual tallying of additional costs. In fact, it is recognized that immersion programs generate revenue for school districts. After the findings of school districts were reviewed, Halsall drew together experts with diverse backgrounds to brainstorm on the factors influencing the costs of immersion. Ultimately, a preliminary model was proposed as a first step in developing a costing model for immersion (Carleton Board of Education, 1994).

In the early years of immersion, class size in immersion tended to be smaller than regular program class size (Edwards, 1989; MacNab, 1978; Unitt & MacNab, 1977). The perception that class size is smaller in immersion continues today (Carleton Board of Education, 1994; Halsall, 1989, 1997). However, when carefully investigated, the perception does not always appear accurate (Carleton Board of Education, 1994; Halsall, 1997; Sargent, 1994). This is an issue that has not been thoroughly investigated. It is part of the larger issue of the effects on a school system of offering immersion programs.

Ten years ago, in one large school district where more than 50% of kindergarten students enrolled in immersion, the differential effects (Halsall, 1989) of the two programs were investigated. For the regular program, the effects were found to be as follows:

- more multigrade classes,
- streaming at grades 7 and 8,
- the youngest and least experienced teachers assigned to core French,
- possible reduction in staff morale,
- perception of being second best,
- need to accommodate students who had dropped out and students with negative attitudes toward French,
- higher mobility of students, and
- responsibility for a large proportion of exceptional students.

For the immersion program, the effects were found to be difficulty in finding staff, blending of EFI and LFI students in high school courses, vocal parent groups, young teachers at

high school, lack of special education classes, need for programming for gifted students, and a tendency for students to take few courses in French in high school.

Some of the differential impacts on the two programs had eased by 1994. In particular, over the intervening five years, the discrepancy in the number of multigrade classes and in class size lessened. More students were taking courses in French at the high school level (Carleton Board of Education, 1994). Of course, the differential impacts of programs depends on many factors, including the following:

- the size of the school district,
- region of the country,
- linguistic characteristics of the region,
- the availability of staff, and
- whether the region is rural, suburban, or urban.

(Edwards, 1989). The research is clear; offering alternative programs has system repercussions (Lapkin, Swain, & Shapson, 1990).

In the 1980s, rapidly expanding immersion programs taxed the supply of available native French speakers qualified as second language specialists and, at the high school level, qualified to teach specific subject matter (McGillivray, 1984; Nagy & Klaiman, 1985; Obadia, 1984). This was particularly so in rural areas. One survey (Obadia, 1984) found that 25% of immersion teachers did not claim to have native French skills. The displacement of regular program teachers created morale problems (Halsall, 1989; Nagy & Klaiman, 1985; Olson & Burns, 1983). As well, principals felt ill prepared to supervise immersion programs (Edwards, 1989).

The appearance of former immersion students on the job market has eased the situation somewhat. The Canadian Education Association (1992) reported that the situation had improved over a ten year period. In some parts of the country, though, there are still difficulties in staffing immersion programs (Asper, 1990; Fine, 1992). The common notion that the French language skills of teachers do not matter with young students has no basis in the research literature. High school students can be quite vocal about the lack of skills of a teacher unable to function with ease (Halsall, 1997). Principals have become more accustomed to supervising immersion programs, and support has been provided to them through workshops and the sharing of expertise through journal articles (Dagenais, 1990; Kirkland, 1993; Lamarre, 1990; Safty, 1992).

Nevertheless, despite seeming progress in staffing immersion programs, training teachers remains a high priority (Calvé, 1988; Genesee, 1987; Parkin, Morrison, & Watkin, 1987; Swain & Lapkin, 1982; Tardif, 1985). Indeed, teacher education was identified as the highest priority for the 1990s (Lapkin, Swain, & Shapson, 1990). A review of the activities of the 1990s will tell us if this priority has been addressed or has fallen by the wayside, because of reduced budgets.

Many writers, parents, and school personnel have felt that gifted students are bound to do well in immersion. Although immersion programs in and of themselves probably do not meet the criteria designed for gifted programs, the need to foster creativity in gifted students might be met,

at least in part, by immersion programs (Edwards, 1989). Exposure to a second language has been found to enhance creativity and divergent thinking (Edwards, McCarrey, & Fu, 1980; Landry, 1970, 1973, 1974; Neufeld, Arnold, Flaborea, Paterson, & St. Lewis, 1992; Worrall, 1970).

In a 1985 survey of the availability of enrichment in French for immersion students, it was found that it was not provided in most jurisdictions (Canadian Parents for French, 1985). Four years later, Collinson (1989) found that, in comparison with regular program students, gifted French immersion students were disadvantaged in terms of enrichment in French. Teachers have indicated a need for training in recognizing gifted students and providing programs for them (Collinson, 1989).

Some people have questioned the appropriateness of immersion for heritage language students, that is, those whose mother tongue is neither French nor English. After reviewing the issue, Edwards (1989) concluded that there was no research to indicate that immersion was not appropriate for heritage language students. In one study in metropolitan Toronto, the researchers found that heritage language students enrolled in a 50% English-50% French program starting at Grade 5 did well in the program. This was particularly so for students who were literate in their heritage language. Students who were not literate in their heritage language and students who had spoken only English prior to Grade 5 did not do as well as literate heritage language students (Swain, Lapkin, Rowen, & Hart, 1989). In another study it was found that learning French strengthened first language skills (Harley, Hart, & Lapkin, 1986). Studies such as these, and others (Chmilar, Kendall, & Obadia, 1984; Geva & Clifton, 1994), have led to an understanding of the importance of the development of strong literacy skills in students (Lapkin, Swain, & Shapson, 1990), regardless of the program.

Implications for Decision-makers

Decision-makers have a difficult task in resolving issues surrounding immersion in their school districts, for each decision must be made in light of the particular circumstances of the local setting. Research provides some definitive findings, some tentative hints, and some unresolved issues.

What the research does show is that French immersion works. Students do learn French, and the more time they spend in French, the better their skills. Students also learn English. In fact immersion might strengthen English skills, though that is not always the perception. Creativity and divergent thinking may be fostered by bilingualism. Thus decision-makers need not fear that instituting and continuing immersion programs in their district will harm students.

Although we know that there may be some students for whom immersion is inappropriate, with the exception of the severely disabled (such as autistic students), we do not yet have ways of identifying students who will not benefit from immersion. Researchers should be encouraged to continue to find the characteristics of students which enable them to succeed in immersion. This information may come from those interested in psycho-educational assessment or from those exploring teaching/learning practices. Or perhaps understanding may come from

farther afield from education—the new brain research that has already contributed to our understanding of the importance of preschool education.

At any rate, since we do not know who will not benefit from immersion and we do know that support for individuals via special education and remedial resources has proven effective, the prudent strategy would seem to be to provide supports within immersion similar to those in regular programs. It is difficult to see why it would be more costly or problematic to provide resources in one program or another. Special education issues are related to attrition issues.

Many of the reasons for attrition have to do with the quality of immersion programs and the way the programs are structured. For example, the practice of blending students with differing numbers of hours of instruction in French has repeatedly been pointed out as a possible cause of attrition. The French language skills of some teachers and their capability in second language teaching have also been targeted as causes of attrition. Knowing the above, decision-makers should support research that leads to better teacher education and should demand and fund ongoing teacher training for immersion teachers, not omitting high school teachers.

Organizing programs at the high school level has proven a challenge in many school districts. Gathering a sufficient number of students to offer a vibrant program must be weighed against the costs of transportation and students' desires to be with their friends. In this situation, decision-makers must consider whether it is best to provide as much instruction as possible in French prior to high school entry; that is, they must consider the role of EFI in balancing the difficulties of providing high school immersion. At the high school level, the richest possible offering of courses and extracurricular activities in French should be made available.

The question of when to start English language arts is an unresolved one. In fact there may not be one answer to the question. Programs that have been functioning well may not need to be altered. The key is ongoing monitoring of the outcomes of immersion programs. An important consideration is how much time can be taken out of French immersion before the program no longer functions the way it was intended to. Immersion means students are immersed in the language. In the end, a better question might be how best to serve the needs of individual students within immersion programs.

We know that practising a language is an ongoing process and that many high school graduates want to study in French. We know that French is helpful in obtaining employment. Decision-makers can support the aspirations of students by encouraging linkages with institutions of higher learning so that they continue the work that has been started by school districts. Although the research is not clear on gifted French immersion students, special care should be taken that the needs of gifted students are met within immersion.

Nor is the research yet clear on how best to serve heritage language students in immersion. The fact that students have a heritage language might mean that they are in a position to benefit from learning additional languages.

These are some examples of the help that research can provide decision-makers.

Conclusion

This brief review of research findings regarding French immersion illustrates the contribution that research has made over three decades to understanding immersion and the issues surrounding it. Research cannot make the decisions, however. The role of research is to provide information for decision-makers. In the case of immersion, the information tells the story of success.

References

- Alberta Education. (1992). *Language of testing study report*. Edmonton: Author is publisher.
- Alberta Education. (1997). *Yes, you can help! Information and inspiration for French immersion parents*. Edmonton: Author is publisher.
- Ali Khan, N. (1993). *School-related stress: Regular and early French immersion programs*. Unpublished doctoral dissertation, Carleton University, Ottawa.
- Asper, L. (1990). Secondary immersion: A Manitoba solution. In B. Fleming, & M. Whitla (Eds.), *So you want your child to learn French!* Ottawa: Canadian Parents for French.
- Bennett, J., Boss, M., Carlson, J., & Soucy, F. (1982). *Evaluation of advanced level geography, 1982*. Nepean, ON: Carleton Board of Education.
- Bibeau, G. (1984). No easy road to bilingualism. *Language and Society*, 12, 44-47.
- Bonnar, C., & Cummins, J. (1993). *Literacy immersion project: Third year status report*. Calgary: Calgary Roman Catholic Separate School District No. 1.
- Cadrin, Y., & Sawchuk, R. (1995). *Reading skills and attitudes of French immersion students*. Fort McMurray and St. Albert, AB: Fort McMurray Roman Catholic Separate School District and St. Albert Protestant Separate School District.
- Calgary Board of Education. (1991). *Survey of Grade 9 students in the CBE French immersion program*. Calgary: Author is publisher.
- Calvé, P. (1988). Immersion: How high will the balloon fly? In P. Calvé (Ed.), *Aspects of/de l'immersion*. Toronto: Ontario Educational Research Council.
- Canadian Education Association. (1992). *French immersion today*. Toronto: Author is publisher.
- Canadian Parents for French. (1985). *Remedial and enrichment instruction in French immersion programs: A survey*. Saskatchewan: Author is publisher.
- Carleton Board of Education. (1992). *Secondary school French immersion study*. Nepean, ON: Author is publisher.
- Carleton Board of Education. (1994). *French immersion update*. Nepean, ON: Author is publisher.
- Chmilar, R., Kendall, J., & Obadia, A. (1984). *A comparison of the reading skills of grade one students in French immersion and regular English classrooms*. Vancouver: Educational Research Institute of British Columbia.

- Churchill, S., Orlikow, L., Greenfield, T., & Rideout, B. (1979). *Cost models of bilingual education: The world of theory*. Ottawa: Secretary of State, report for contract #470-410.
- Collinson, V. (1989). *A needs assessment of gifted education for French immersion students in Canadian elementary schools*. Unpublished master's thesis, University of Windsor, Windsor, ON.
- Cummins, J. (1977). Delaying native language reading instruction in immersion programs: A cautionary note. *The Canadian Modern Language Review*, 34(1), 46-49.
- Cummins, J. (1984). *Bilingualism and special education: Issues in assessment and pedagogy*. Clevedon, England: Multilingual Matters.
- Cummins, J. (1992). *Interpretations of Calgary RCSSD #1 literacy immersion project year 3 data*. Toronto: Ontario Institute for Studies in Education.
- Cummins, J. (1993, August). *Reflections on the European schools model in relation to French immersion programs in Canada*. Paper presented at the symposium Multilingualism for All, organized by the AILA Scientific Commission on Language and Education in Multilingual Settings, Amsterdam.
- Cummins, J., & Swain, M. (1986). *Bilingualism in education*. London: Longman Group UK Limited.
- Dagenais, D. (1990, February). Principal's role in French immersion. *The Canadian School Executive*, 3-8.
- Day, E., & Shapson, S. (1989). Provincial assessment of French immersion programmes in British Columbia, Canada. *Evaluation and Research in Education*, 3(1), 7-23.
- Demers, D. (1994). *Learning disabilities and cross-linguistic interference in French immersion: When to transfer, when not to transfer?* Winnipeg: Learning Disabilities Association of Manitoba and Canadian Parents for French.
- Dicks, J. (1994). *A comparative study of the acquisition of French verb tense and aspect in early, middle, and late French immersion*. Unpublished doctoral thesis, University of Ottawa, Ottawa.
- Edwards, H. (1989). Review of the literature. In N. Halsall, *Immersion/regular program study*. Nepean, ON: Carleton Board of Education.
- Edwards, H., McCarrey, H., & Fu, L. (1980). *Evaluation of the second language program extensions offered in grades 3, 4, and 5. Final report, 1979-80*. Ottawa: Ottawa Roman Catholic Separate School Board.

- Fine, J. (1992). *Immersion/extended French program review*. Mississauga, ON: The Peel Board of Education.
- Genesee, F. (1978). A longitudinal evaluation of an early French immersion program. *Canadian Journal of Education*, 3, 31-50.
- Genesee, F. (1987). *Learning through two languages*. Cambridge, MA: Newbury House.
- Geva, E., & Clifton, S. (1994). The development of first and second language skills in early French immersion. *The Canadian Modern Language Review*, 50(4), 646-667.
- Halpern, G., MacNab, G., Kirby, D., & Tuong, T. (1976). The full bilingualism alternative. In *Alternative school programs for French language training*. Toronto: Ontario Ministry of Education.
- Halsall, N. (1989). *Immersion/regular program study*. Nepean, ON: Carleton Board of Education.
- Halsall, N. (1994). Attrition/retention in French immersion with particular emphasis on secondary school. *The Canadian Modern Language Review*, 50(2), 312-345.
- Halsall, N. (1994). *French immersion update*. Nepean, ON: Carleton Board of Education.
- Halsall, N. (1995). *Introducing English language arts in early French immersion*. Ottawa: Canadian Association of Immersion Teachers.
- Halsall, N. (1997). *French immersion organizational review*. Osgoode, ON: Halsall Measurement Analysis Inc.
- Halsall, N., & Wall, C. (1992). Pedagogical practices in French immersion and regular English programs. *The Canadian Modern Language Review*, 49(1), 60-73.
- Halsall, N., & Wall, C. (1994). Assessing child centeredness in French immersion classrooms. *Canadian School Executive*, 13(9), 19-21.
- Hammerly, H. (1985). *An integrated theory of language teaching and its practical consequences*. Burnaby, BC: Second Language Publications.
- Harley, B. (1984). How good is their French? *Language and Society*, 12, 55-60.
- Harley, B. (1987). The relationship between starting age and oral second language proficiency in three groups of classroom learners. In B. Harley et al. (Eds.), *The development of bilingual proficiency: Final report volume iii*. Toronto: Ontario Institute for Studies in Education.

Harley, B. (1998). *Process-oriented research in French immersion in Canada*. Paper presented at the Fourth European Conference on Immersion Programmes, Carmarthen, Wales.

Harley, B., Hart, D., & Lapkin, S. (1986). The effects of early bilingual schooling on first language skills. *Applied Psycholinguistics*, 7(4), 295-322.

Hart, D., & Lapkin, S. (1989). *French immersion at the secondary/postsecondary interface: Studies in three Ontario boards*. Unpublished paper, Ontario Institute for Studies in Education, Toronto.

Hart, D., Lapkin, S., & Swain, M. (1988). *Early and middle immersion programs: Linguistic outcomes and social character*. Toronto: Ontario Institute for Studies in Education.

Hart, D., Lapkin, S., & Swain, M. (1989). *Final report to the Calgary Board of Education: Evaluation of continuing bilingual and late immersion programs at the secondary level*. Toronto: Ontario Institute for Studies in Education.

Hart, D., Lapkin, S., & Swain, M. (1990). *Prospects for immersion graduates: Bilingualism in the private sector*. Toronto: Ontario Institute for Studies in Education.

Hart, D., Lapkin, S., & Swain, M. (1992). *Comparative evaluation of modes of delivery of FSL in the Maritime Provinces: The case of French immersion at grade 9*. Toronto: Ontario Institute for Studies in Education.

Holobow, N., Genesee, F., Lambert, W., & Chartrand, L. (1987). *Longitudinal evaluation of three elementary school alternatives for learning through a second language*. Montreal: McGill University, Department of Psychology.

Husum, R. (1992). *1988 Saskatchewan survey of Gr. 12 French immersion graduates*. Paper presented at the Saskatchewan Secondary Conference, Regina.

Husum, R., & Bryce, R. (1991). A survey of graduates from a Saskatchewan French immersion high school. *The Canadian Modern Language Review*, 48(1), 135-143.

Kasian, M. (1993). *Review of the 50/50 French immersion program: Executive summary*. Ottawa: Ottawa Roman Catholic Separate School Board.

Keep, L. (1993) *French immersion attrition: Implications for model building*. Unpublished doctoral thesis, University of Alberta, Edmonton.

Kirkland, D. (1993). *Effects of integration on intermediate level students in dual track schools*. Unpublished master's thesis, University of Windsor, Windsor, ON.

Lakehead Board of Education. (1990). *French immersion report: Costing*. Thunder Bay, ON: Author is publisher.

- Lakehead Board of Education. (1991). *French immersion review [Executive summary]*. Thunder Bay, ON: Author is publisher.
- Lamarre, N. (1990). The experiences of Anglophone elementary principals with French immersion programs in Alberta. Paper presented at the annual meeting of the Canadian Society for the Study of Education, Victoria, BC.
- Lambert, W., & Tucker, G. (1972). *Bilingual education of children: The St. Lambert experiment*. Rowley, MA: Newbury House.
- Landry, R. (1970). The relationship of second language learning to divergent thinking abilities of students in urban schools. *Dissertation Abstracts*, 31, 6-A, 2615.
- Landry, R. (1973). The relationship of second language learning and verbal creativity. *Modern Language Journal*, 57, 110-113.
- Landry, R. (1974). A comparison of second language learners and monolinguals on divergent thinking tasks at the elementary school level. *Modern Language Journal*, 58, 10-19.
- Lapkin, S., Hart, D., & Swain, M. (1991). Early and middle French immersion programs: French language outcomes. *The Canadian Modern Language Review*, 48(1), 11-39.
- Lapkin, S., Swain, M., & Shapson, S. (1990). French immersion research agenda for the 90s. *The Canadian Modern Language Review*, 638-674.
- Lapkin, S., Swain, M., & Argue, V. (1983). *French immersion: The trial balloon that flew*. Toronto: OISE Press.
- Lyster, R. (1987). Speaking immersion. *The Canadian Modern Language Review*, 43, 701-717.
- Lyster, R. (1995). *Instructional strategies in French immersion: An annotated bibliography*. Ottawa: Canadian Association of Immersion Teachers.
- MacNab, G. (1978). *Who chooses primary-entry immersion and what it means to the English stream*. Report 78-11. Ottawa: Research Centre, Ottawa Board of Education.
- Makin, J. (1984). *Early French immersion education: Factors in the prediction of success*. Unpublished doctoral comprehensive paper, Carleton University, Ottawa.
- McGillivray, W. (1984). School systems make it work. *Language and Society*, 12, 26-29.
- McVey, M., Bonyun, R., Dicks, J., & Dionne, L. (1990). *Early, middle or late? Ottawa Board of Education students in three French immersion programmes in grade 6 and grade 8*. Ottawa: Ottawa Board of Education.

- Mount Rundle School Division Board of Trustees. (1992). *Report of the board sub-committee studying the cost and effect of French immersion on mainstream education in the system*. Canmore, AB: Author is publisher.
- Murtaugh, G., & Dirren, B. (1992). *Report on resource services in immersion*. Halifax: Canadian Association of Immersion Teachers.
- Nagy, P., & Klaiman, R. (1985). *A comprehensive study of the provision of second language education in Wellington County, final report*. Toronto: Ontario Institute for Studies in Education.
- Neufeld, G., Arnold, H., Flaborea, A., Paterson, P., & St. Lewis, J. (1992). *Long range effects of early French immersion on language processing in English as a mother tongue*. Ottawa: University of Ottawa.
- Noonan, B., & Colleaux, J. (1994). *Two approaches to formal reading instruction in French immersion programs*. Saskatoon: Saskatoon Catholic Schools.
- Obadia, A. (1984). The teachers, key to the success story. *Language and Society*, 12, 15-19.
- Olson, C., & Burns, G. (1983). Politics, class, and happenstance: French immersion in a Canadian context. *Interchange*, 14(1), 1-16.
- Parkin, M., Morrison, F., & Watkin, G. (1987). *French immersion research relevant to decisions in Ontario* (Review and Evaluation Bulletins, No. 1). Toronto: Ontario Ministry of Education.
- Partlow, H. (1977). *The costs of providing instruction in French to students studying French as a second language*. Toronto: Ontario Ministry of Education.
- Pinco, J. (1996). *Revisiting French immersion program delivery at the elementary level*. St. Albert, AB: Greater St. Albert Catholic Regional Division.
- Ragsdale, R. (1979). Considering costs in educational decision-making. *Interchange*, 10, 41-47.
- Regina Board of Education. (1992). *Report of the committee for the review of French immersion*. Regina: Board of Education for the Regina School Division No. 4.
- Rousseau, N. (1998). *Learning disabilities in French immersion: Program evaluation* [Summary of results for Canadian Parents for French]. Edmonton: University of Alberta, Faculté Saint-Jean.
- Safty, A. (1992). French immersion: Bilingual education and unilingual administration. *Interchange*, 23(4), 389-405.

Sargent, J. (1994). *Carleton Board of Education secondary school open boundaries study*. Nepean, ON: Carleton Board of Education.

Stern, M. (1991). *The French immersion transfer process: An investigation of children transferring from the French immersion program into the regular English program*. Unpublished doctoral thesis, University of Toronto, Toronto.

Swain, M., & Lapkin, S. (1981). *Bilingual education in Ontario: A decade of research*. Toronto: Ontario Institute for Studies in Education.

Swain, M., & Lapkin, S. (1982). *Evaluating bilingual education: A Canadian case study*. Clevedon, Avon, England: Multilingual Matters.

Swain, M., & Lapkin, S. (1986). Immersion French at the secondary level: “The goods” and “the bads.” *Contact*, 5(3): 2-9.

Swain, M., Lapkin, S., Rowen, N., & Hart, D. (1989). *The role of mother tongue literacy in third language learning*. Paper presented to the annual meeting of the American Educational Research Association, San Francisco.

Tardif, C. (1985). The education of immersion teachers: Challenge of the eighties. In *More French s’il vous plaît*. Ottawa: Mutual Press Ltd.

Tardif, C., & d’Anglejan, A. (1981). Les erreurs en français langue seconde et leurs effets sur la communication orale. *The Canadian Modern Language Review*, 37, 606-723.

Tardif, C., & Weber, S. (1987). French immersion research: A call for new perspectives. *The Canadian Modern Language Review*, 44, 66-77.

Toronto Board of Education. (1993). *FSL: learning French matters in Toronto schools*. Toronto: Author is publisher.

Trites, R., & Price, M. (1976). *Learning disabilities found in association with French immersion programming*. Toronto: Ontario Ministry of Education.

Trites, R., & Price, M. (1977). *Learning disabilities found in association with French immersion programming: A cross-validation*. Toronto: Ontario Ministry of Education.

Trites, R., & Price, M. (1980). *Assessment of readiness for primary French immersion: Grade one follow-up assessment*. Toronto: Ontario Ministry of Education.

Unitt, J., & MacNab, C. (1977). *The effect of French immersion on class size and class—grade combinations in Carleton Board of Education schools*. Research report 77-02. Ottawa: Research Centre, Ottawa Board of Education.

- Vedovi, C. (1992). *Raisons des parents, des instituteurs et des orthopédagogues relatives au transfert des élèves du programme d'immersion française au programme anglais*. Unpublished master's thesis, Simon Fraser University, Vancouver.
- Weber, S., & Tardif, C. (1991). Culture and meaning in French immersion kindergarten. In L. Malavé; G. Duquette (Eds.), *Language, culture and cognition: A collection of studies in first and second language acquisition*. Clevedon, Avon, England: Multilingual Matters.
- Wesche, M. (1992). *French immersion graduates at university and beyond: What difference has it made? Appendix "A" Draft*. Unpublished manuscript, University of Ottawa.
- Wesche, M. (1996). *Comparative outcomes and impacts of early, middle and late entry French immersion options*. Ottawa: Ottawa Board of Education.
- Wiss, C. (1989). Early French immersion programs may not be suitable for every child. *The Canadian Modern Language Review*, 45(3), 517-529.
- Worrall, A. (1970). Bilingualism and cognitive development. *Dissertation Abstracts*, 31, 4-B, 2334-2335.