LEARNING DISABILITIES AND FRENCH IMMERSION: ARE THEY COMPATABLE?

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by

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A Review of the Literature on Current Research in Learning Disabilities and French Immersion

Introduction

Early French Immersion

Research (for eg. Dicks, 2001; Cummins, 1979) in the field of second language learning indicates that for the largest group of people French immersion is the most successful way to become bilingual (Dicks, 2001). In a country with two official languages many parents want their children to learn a second language. This pursuit of second language learning in Canada led to the first French immersion class in St. Lambert, Quebec in 1965 (Murphy, 2000).

Over the last 35 years the popularity of French immersion (FI) has rapidly expanded. Social, cultural, economic and political factors have influenced the growing attraction to this program. In 1969, the Official Languages Act made English and French the official languages in Canada. One year later the federal government initiated the Official Languages Education Program that moved to institutionalize bilingualism by providing financial support for educational programs, such as immersion. The program objective was to enable children to have an education in the official language of their choice while permitting students to learn their second official language. Parents, as well as government agencies, saw immersion as a uniquely Canadian method of producing social interaction between English and French leading to a greater amount of empathy and understanding between the two cultural communities. Parents and educators believed that this would produce more diversified education, and perhaps, enhanced career opportunities (Murphy, 2000).

The world is no longer a multitude of isolated regions and cultures, but is a huge collective of interactive and interdependent communities (Macro, 1998). Technology has evolved to a point where people can explore the world with both business and personal objectives in mind, subsequently, because of this globalization people find it desirable, if not necessary, to learn at least one other language (Le-lien-editor, 1997). Macro (1998) feels that globalization has led to a resurgence of second language learning. She believed the benefits of second language learning fall into four categories: personal, cognitive, academic and societal. Personal benefits ranged from self-esteem to a competitive advantage in the job force, while cognitive benefits have been linked to creativity and problem solving ability. Second language learning has been seen to enhance English and other academic subjects and lastly, society as a whole can benefit from a generation of multilingual workers. Meanwhile, the cultural benefits of immersion are not to be underestimated. Studying a second language opens students up to a whole new culture without detracting in any way from the students' identity with and appreciation of their own culture (Murphy, 2000).

As a society we are becoming more and more sensitive to the diversity of our population. Throughout Canada we see a wide variety of cultures in our workplace, communities and schools. Along with the cultural diversities we see physical, social, emotional and intellectual challenges and just as we should celebrate cultural diversity, so should we embrace individual differences (LeLien-Editor, 1997). An inclusive education system should include the ability for all to enroll in French immersion.

Learning Disabilities and Second Language Learning

Over recent years there has been much emphasis on inclusion of all students into a mainstream program. This inclusionary perspective helps the learner with mild, moderate and severe disabilities to be successful in the heterogeneous classroom and therefore, be a genuine member of the learning community (Sanacore, 1997). With provincial education dominated by public school systems, equal access to all programs such as French immersion should exist.

One group of students with diverse needs are those with learning disabilities (LD). This term is used to describe people with a learning problem, even though they are of average or above average intelligence, stemming from a variety of disorders that affect the acquisition, retention, understanding, organization or use of verbal and/or non-verbal information (Learning Disabilities Association of Ontario [LDAO], 2001).

The field of learning disabilities has generated interest and research for the last two hundred years. It is only in recent decades, however, that we are starting to acknowledge the presence of the students in French immersion classes. The field of second language acquisition has historically blamed difficulties in foreign language learning on factors such as anxiety, lack of effort, lack of motivation, poor language learning habits and "low ability" in language learning. As early as the 1960's research has challenged these traditional explanations. Harvard University professor, Dr. Kenneth Dinklage (as cited in Swartz, 1997), set out to find a reason for the extreme difficulties some of his students had in second language learning. He dismissed lack of effort because his students were sacrificing other courses to obtain their language requirement.

Lack of motivation was also discarded as a factor as these students could not graduate without a second language. He also found that anxiety was caused by the frustrations in second language learning not the reverse. Dinklage discovered that some of the students were previously diagnosed as learning disabled and their difficulty worsened with second language learning; others were learning disabled but had not been diagnosed. Thus, thirty years ago Dinklage started interpreting the literature on foreign language learning and learning disabilities. The difficulty many had occurred not because of laziness or anxiety, but because of a learning disability. He felt that once the learning disability was addressed the students learning would improve (Schwarz, 1997).

Learning Disabilities in French Immersion Research

Research (for eg., Bruck, 1978; Cummins, 1979; Trites, 1976) has shown that in the past students with LD were routinely denied access to French immersion. Learning a second language was seen as a viable option for elite students with above average intelligence. Many educators even felt that children should be taught in English for one year to ensure that the child's English was well established before they entered the French environment. If problems arose, then the student may be denied entrance to French immersion all together (Majhanovich, 1993).

Investigating the suitability of at-risk students is both practically and theoretically significant. It can lead to a better understanding of individual differences in second language learning, while contributing to the development of more effective curriculae. Without valid evidence for discouraging at risk children from French immersion, there is

some danger that the program would become or remain elitist. The appropriateness of immersion for all students also has ethical roots. In some bilingual communities such as Quebec and New Brunswick, bilingualism is not a luxury but a necessity. To deny children access to immersion in these communities may impair the survival of the target language and exclude them from educational and cultural experiences viewed as be a key to their future (Genesee, 1992).

Early Research

In Canada the research on learning disabilities and French immersion began with contradictory results. As French immersion expanded so did the emergence of students encountering difficulties. Trites (1976) observed that increasing numbers of children were being referred to his neuropsychology laboratory addressing remedial programs for children with learning disabilities. This increase in numbers was the rationale behind his research into learning disabilities involving children who fail or do poorly in French immersion. The aim of the study was to determine if there was a characteristic profile of children who have difficulty in French immersion and to see if these children resembled, in important and consistent ways, other clearly defined groups of children who also encountered difficulty in school (Trites, 1976).

Trites (1976) used a group of 32 children who were in primary French immersion and were switched to an English language program, or were experiencing difficulties in the French immersion program. Seven comparison groups were assembled and an attempt was made to match them to the immersion group for age, sex and IQ.

Comparison groups consisted of language groups and traditional reference groups. The language groups incorporated the following: French immersion (study group), Anglophone in Francophone schools, other ethnic backgrounds in Francophone schools and Francophones in Franchophone schools. Four traditional reference groups were composed of those with primary reading disability, hyperactivity, behavioural and personality problems, and minimal brain dysfunction. Each child received an extensive individual neuropsychological assessment and then a complex statistical analysis was performed on the large body of data. The reported results indicated that the test profile of the group of children who had difficulty in French immersion could be significantly discriminated from the other seven groups. The author reported that the study group had a specific deficit on the Tactual Performance Test, compatible with the interpretation of a maturational lag in the temporal lobe regions. This region is important for subserving language, memory and auditory perceptual functions. Follow-up studies were performed and Trites reported that children who switched to English programs accelerated in academic skills. The author did not support the view that the child who had difficulties in primary French immersion would experience the same difficulties in an English language program. Instead, he inferred that some children of above average abilities experience difficulties in a second language due a mild specific maturational lag (Trites, 1976).

Bruck (1978) initiated a research project regarding the best academic course for children with learning problems in French immersion. This arose from the very practical placement concerns of educational therapists. The goal of the project was to see if students with LD should be left in French immersion, or placed in all English classes. Up

to the point of Bruck's study there were two differing viewpoints. Firstly, one group of educators such as Trites, felt that French immersion either caused or contributed to the difficulties the student was having, and once in an English program the problems should disappear. On the contrary, others believed that the child would be better off to stay in French immersion. This group hypothesized that the students with LD would have the same difficulties in the English program, and switching them would be detrimental to self-esteem, looked at as failure, and would separate them from their friends.

To investigate the dilemma, Bruck followed children from Kindergarten to Grade 3. Four groups were used for comparison. Group one consisted of children with language disabilities in FI. (FP - French problem). Group two contained children with language disabilities in an English classroom (EP – English problem). The next group were students with normal language development in FI (FC – French control), and the fourth group incorporated children with normal language development in an English class (EC – English control). From Kindergarten to Grade 1, Bruck reported there was no evidence to support the contention children with language problems do poorly in French. The Grade 1 to Grade 2 results indicated as with previous studies on French immersion (Swain & Bruck, 1978), in English language the French immersion group did more poorly than the English group; however the EP group and the FP group progressed at the same rate. The results from Grade 2 to Grade 3 validated children with language problems in FI classes do not suffer impairment to verbal and nonverbal aspects of cognitive functioning from this mode of education. Also, Bruck states, while the EP and

FP groups may be well matched in verbal and full scale IQ's, the EP group is more disabled in terms of nonverbal aspects of cognitive functioning (Bruck, 1978).

Summarizing her study, Bruck reported the results as not painting a picture of instant success for FP children. They still had difficulties in school, however, they were certainly no worse off than if they were in an English class. If placement in French immersion does not hinder the students' progress, then it would be to their benefit to enroll in French immersion because they had the extra advantage of learning a second language they may not be able to obtain in core French. Reports from Bruck's clinic indicate that students with LD cannot succeed in core French programs. Many of these programs are based on methods incorporating memory work, repetition of language out of context, and the learning of abstract rules, possibly exploiting, the weakness of language disabled students (Bruck, 1978).

One caution to report when reviewing any of these studies is the probable differences from the whole environment of a child who enrolls in and stays in French immersion. The parental support and background may be significantly different and should have to be included as a possible variable in any study.

In a later report for a workshop on learning disabilities, Bruck expanded the notions she had concluded in her previous study. She reported children who were removed from immersion programs showed that:

1. the learning problem continued;
2. the skills in the second language deteriorated;

3. those who switched and then received remedial services not provided in the immersion fared better (Learning Disabilities Association of Ontario [LDAO], n.d.).

Many parents claimed their children fared better when switched to the English program, but when tested the children were not found to have any improvement (LDAO, n.d). Bruck believes the process of taking a child out of FI is a very personal decision but there are three levels on which the decision should be made:

1. each parent's perception of the importance of the language learning opportunity;
2. the trust in the school system and the teacher;
3. the parent's knowledge about their child and the amount of stress involved in keeping the child in the program (LDAO, n.d.).

The ideal environment is one were a child can learn French and receive remedial services in French. From this idea Bruck relates five points that are useful for both parents and educators:

1. if the services are available only in English, then the student should develop his/her French skills to a strong level before starting the remedial work in English;
2. classroom teachers can also learn general remedial techniques to assist their immersion children;

3. money should not be a stumbling block to effective remedial work for children in immersion programs. It is not expensive to institute a common sense remedial program;
4. the best remedial materials are ones teachers adapt themselves from existing materials applied to individual cases;
5. the decision on repeating a child in French immersion should be based on each individual (LDAO, n.d).

Many debates occurred over the conflicting opinions of Bruck (1978) and Trites (1976). Cummins (1979) refuted Trites' results and noted the negative consequences of transferring out of French immersion. Cummins indicated that Trites' interpretation is not only invalid, but his data provides some support for the opposite conclusion. He reported the study actually reveals those who transferred out fell further behind. Studies done by Trites were attacked at two levels. First, the interpretation of non-significant differences are invalid and secondly, the failure to point out many of the students who transferred out dropped back or repeated a grade, therefore being compared to the grade behind the others in the study. In Cummins' opinion the analysis of the data actually conclude children are better off staying in immersion. More importantly, it is easy to lose sight of the fact when children encounter difficulties in FI, each child should be judged on individual merit (Cummins, 1979).

In a newsletter address for Canadian Parents for French (1983), Cummings produced a Parent's Guide he created from research findings from French immersion programs across Canada. There are a number of factors that must be considered when

helping a student with difficulties in French immersion. This guide is helpful in addressing the many issues:

1. parents and teachers should not assume the French immersion program is to blame for the child's learning problem. There is no greater incidence of learning difficulties in FI than in other programs and children with difficulties would also experience problems in English programs;
2. if a child is unhappy for a long time and wishes to switch, then he/she should do so. However, one should consider the reasons for the unhappiness. If the child is having difficulty with a certain teacher and the year is almost over, then switching may not be necessary;
3. transferring a student to an English program may damage the child's self-image and the stigma of failure may add to the learning difficulties;
4. in the case where a child transfers to an English program in the early years of elementary school, he/she will probably fall further due to not yet having any formal English instruction. Teachers in the regular programs may resent the extra work of bringing the child up to the class level;
5. despite problems in academic subjects, the child experiencing difficulties in immersion will usually develop relatively fluent French speaking skills. This not only boosts the child's esteem because they have a skill that many don't, it is also of future benefit in a country such as Canada (Cummins, 1983, p.2).

In summary, Cummins (1983) stresses the point many children in immersion will experience difficulties as they would in a regular program, and teachers should

individualize their program accordingly instead of taking the easy route and transferring the student out. He believes intact cognitive skills are cross-lingual and difficulties in one language transfer to the other.

Trites responded to his critics, especially Cummins. He reported he made it clear most of the results were insignificant. The results were seen by Trites as conservative due to small numbers, and even though Cummins reported those who remain in FI come from a different population than those who drop out, this artificial condition should not be imposed on his study (Trites, 1979). The criticisms did not alter Trites' opinion.

Assessment Research

As French immersion expanded so did this concern over learning disabilities in French immersion. Cummins (1983) alluded to the fact first and second language learning are interdependent, so if difficulties arise in one language they will surface in the other language also. Wiss (1987) felt children require an assessment to determine their needs. She sees problematic areas including questions about the suitability of immersion for students with LD, and expressed the need within the immersion programs for valid and reliable diagnostic instruments to assess learning in those children who may experience academic problems. She cited Trites as suggesting screening for those at risk should take place prior to program entry as those students with a maturational lag may catch up by the end of elementary school, and would therefore benefit from late immersion. Wiss (1988) expressed concern that assessments may be dangerous if inaccurate and lead toward a shift to late immersion rather than early.

Wiss (1988) examined assessment in French immersion programs and through a case study presented various difficulties in testing the French immersion child. She stressed examining the learning profile of one child helps illustrate the trend in clinical studies. The assessments included testing mental abilities, cognitive abilities, oral language, reading, spelling, written formulation, arithmetic and nonverbal abilities. Through psycho-educational assessments a learning profile showed in the case study the child's auditory processing skills were interfering cross-lingually with normal acquisition of reading and spelling skills. This is in agreement with Cummins and the theory that intact cognitive skills underlie cross-linguistic competency. Underlying deficits in cognitive skills should result in cross-linguistic learning disabilities. Even though Wiss believed the cross-linguistic theory, she still reported it was premature to suggest psycho-educational assessments of FI should be done in any one language. French skills may not be developed well enough for clear diagnosis using an instrument presented in French, but English is not the "instructional language" of the child.

This issue should be clear in order to make accurate assessments of students in FI. Reasons for the continued skepticism include:

1. the relationship between English oral skills and French academic skills has not been quantified for children in FI;
2. there is no assurance that the English language tests are valid for the evaluation of FI children since they were not included in the normative sample.
3. case studies cannot be extended to the entire population (Wiss, 1987).

A question of fairness arises in the assessment of French immersion students in English. Conversely, is it fair to assess them in French when it is not their first language? These are important questions for educators and parents alike.

In a later paper, Wiss (1989) continued to emphasize the need for appropriate assessment procedures. Educators would benefit from a method enabling them to distinguish between children who have problems in either unilingual or bilingual situations from those who might have problems in a bilingual situation only. She believed early identification and distinction between the two groups experiencing difficulty in immersion would allow us to treat these groups differently. Those with specific learning disabilities could receive the remedial support they need to acquire reading and spelling skills while remaining in immersion. While students with LD could receive remedial support, those students with the maturational lag could take advantage of middle or late immersion when they are cognitively and linguistically ready to meet the demands of a bilingual academic environment. However, she warned that Trites' evidence to support the existence of a subgroup of students who did not succeed in French immersion was tenuous at best (Wiss, 1989). This did not mean that all students could succeed in French immersion, but the learning disability label did not seem to be accurate. Developmental immaturity characterized some students, and may be the true reason for failure in early immersion.

The author reported the results in agreement with Trites, showing that some children do not work well in FI; however, this is because of maturational lag, and not learning disabilities. Wiss continued her case study methodology and used another

psychoeducational assessment to try and validate the idea of the importance of assessments in determining the correct route for children who are experiencing difficulties in school. Considering there is a group that may not achieve well in French, the importance of appropriate assessments is even more valid. Developmental immaturity suggests a maturational lag will diminish with time and the child will have difficulties in early immersion only, and not in the English program. Specific learning disabilities differ from maturational lag in that the underlying deficits are in basic cognitive processes intrinsic to the child, and will remain throughout the child's life presenting difficulties in learning whether it is uniligual or bilingual. Students with LD with specific difficulties can handle linguistic demands, but may have trouble with academic demands. Developmentally immature children cannot handle the interactive effects of linguistic and academic demands (Wiss, 1989).

Wiss (1989) suggested it is a challenge to educators and researchers to provide reliable and valid methods so that all children who desire biliteracy skills can have access to them. Researchers (for eg., Cummins,1983; Trites, 1976) should continue to seek models for early recognition of potential learning problems and the best way to handle them is on an individual basis. In conclusion, Wiss feels it is important not to counsel children with LD out of early French immersion, as this may be the only opportunity for bilingualism. However, it is equally important those who may not benefit from early FI be identified and given alternatives for bilingual education (Wiss, 1989).

The concern over appropriate assessment measures is well documented by Wiss in the literature. Wiss (1989) lists three factors that should be considered when considering French immersion placement:

1. the attitude toward immersion of the child with LD;
2. parental attitudes and support; and
3. the geographical context; it may be more important for an Anglophone child in a French or bilingual environment to strive for bilingualism than it is for an Anglophone in an English environment.

In summary, Wiss (1989) concludes most importantly, educators should not be trying to avoid failure in French immersion by eliminating those with difficulty. They should try to provide the best opportunity possible to all Canadians who desire an immersion experience. FI is not only for those who learn quickly and easily.

As educators we need to look at each case individually and provide the best education for each child. With this comes the task of deciding how best to evaluate children with difficulties in French immersion.

Demers (1994) has studied and worked with many students with LD in French immersion. He cautions educators to use appropriate testing for these students. The protocol for the psychometric or psychoeducational evaluation of a learning disabled child in FI will differ from the evaluation of the regular program students or the Francophone students. Each and every case warrants a different protocol of evaluation. The major problems lies in the fact the relationship between the child's first language skills and the skills of academic instruction is not fully understood (Wiss, 1987). French

tests are equally invalid since the students are not Francophones. Reliable and valid assessment needs to account for the interactions of cognitive and linguistic variables across language. Developmental aspects of age-related variables also need to be included. Since none of the French only, or English only, tests seem reliable, we must be careful not to label a child inappropriately (Lapkin, 1984). To solve this dilemma we need more research into the assessment of these bilingual populations (Demers, 1994).

French Immersion Learning Disabilities Program Research

Educators such as Cummins (1983) have recommended remedial services for children with difficulties in FI. Rousseau (1999) initiated a two-year research study aimed at evaluating the effectiveness of a French immersion learning disabilities program as critiqued by children, parents and teachers. The program is a short-term, transition program for students in French immersion with learning disabilities. The expectations are the students will be taught strategy instruction, developing awareness of one's learning style, and promoting self-esteem. After two years in the program the student is, hopefully, returned to the regular immersion classroom. Three questions were addressed in this article.

1. What is the child's perception of his/her schooling experience in the French Immersion Learning Disabilities Program (FILDP)?
2. What are the parents' perceptions of their children's schooling experience prior to entry and one year into the French Immersion Learning Disabilities Program?

3. Are the teachers, and parents satisfied with the French Immersion Learning Disabilities Programs, if so, in what ways (Rousseau, 1999)?

Thirteen students were place in a transition classroom for a year and received instruction containing four major components:

1. strategy instruction was based on the child's needs incorporating a strong emphasis on organization, study habits, peer-assisted learning, problem solving, and proofreading;
2. sessions on promoting awareness of LD occurred weekly;
3. English reading intervention comprising early Reading Intervention Program, flashcards, Lindamood Auditory Discrimination, phonics, dictations and reading aloud; and
4. initial emphasis on communication between school and home included an introduction to the program, a review of the strategies to be used and instruction on how the parent could maintain and encourage the strategies. Parents were also given the opportunity to ask questions (Rousseau, 1999, P.18).

Data collection included a parental interview and survey, teachers' perception and survey, child interview, participant observation and learning disabilities program review, and parent and teacher surveys. One year into the program Rousseau stated all participants were very satisfied. All participants reported an increase in the child's achievement and self-concept. Children also seemed more apt to cope with their learning disability. Parents indicated their pleasure in seeing their children do better in school and

the increase in a positive self-image. Teachers and teachers aides were encouraged by the results and saw the program as an effective way of helping students in French immersion with learning difficulties (Rousseau, 1999).

Other programs in Canada have indicated success in learning disabilities programs within French immersion. Holyrood School in Edmonton initiated a two-year pilot project based on the rationale parents wanted their children to remain in French immersion even though they needed assistance for a learning disability. The program involved: assuring staff received proper training including bilingualism, experience in the Lindamood Auditory Discrimination Program, experience in early reading intervention, knowledge of learning disabilities, good communication skills, successful teaching experiences and good knowledge of phonemic awareness. Teachers were encouraged to promote self-assurance in the students, and to give them enough knowledge of themselves so that once they leave the program they can be their own advocate. Role-playing and self-esteem work were regular entities in the class, emphasizing who they were as learners and understanding their strengths and weaknesses. The development of coping strategies was felt to be essential to move them around the roadblocks they have encountered in the past (Aubin, 2000).

Many colleges in the Unites States have a foreign language requirement for university graduation. Arries (1999) addressed this issue in an essay concerning foreign language difficulties in the university setting. Through his research he claimed foreign language (FL) instructors will find it futile and even misleading to search for publications on LD's and FL acquisition in an attempt to identify the key method or best instructional

strategy. Through his research he reported there is no consensus on any single approach or method for teaching a second language to students with learning disabilities. In his opinion the best method is an inclusive classroom that addresses some of the learning disableds' needs as foreign language learners. It is felt inclusion not only accommodates the learning disabled, but helps all students. Separate classes for people with learning disabilities is not only expensive but also viewed as discriminatory, and not helpful for the overall student (Arries, 1999). He identified three strategies used to help students with various learning styles acquire the second language requirements:

1. enhance phonological processing: a mnemonic, colour-phonics system using vocabulary flash cards. Each vowel is drawn with distinct and consistent colour. Also, appropriate is a modification of oral reading assignments that reduces student embarrassment by assigning specific paragraphs the day before the students are to read aloud, allowing practice and therefore fluency;
2. facilitate memory: using pictures from magazines or hand-drawn images accompanied with colour-coded subtitles and repetition. Also, multisensory kinesthetic exercises is useful in acquiring and retaining grammar. Drill, repetition, multisensory (non-language) reinforcement of speech, sequential learning objectives, and explicit attention to metacognition are effective strategies for educating students with learning disabilities (Oakland, Black, Stanford, Nussbaum & Balise, 1998). Organizing study time and peer tutoring were also included;

3. reduce anxiety: using paired work groups, modeling, encouragement, low risk mini quizzes and software for learning disabilities (Arries, 1999).

Many of these techniques are actually accommodations used for students with LD, but in this case are used with adults in a foreign language environment. If these techniques work in college, there is no reason to doubt their use in French immersion classrooms. A student-centered curriculum requires the student to invest more of himself or herself than in a traditional classroom. Arries (1999) felt that these approaches would be beneficial to all types of students, and with all environments.

French Immersion Research in New Brunswick

Given the scarcity of research concerning French immersion and learning disabilities close attention should be paid to New Brunswick's policies, research and articles. New Brunswick, only officially bilingual province in Canada, can be used as a focus on current issues relating to French immersion. Over the last few years French immersion in that province has reportedly been under attack by the media for being an elitist program and the appropriateness of the immersion program for at-risk students questioned (Le-Lien-editorial, 2001). The Second Language Education Centre (SLEC) at the University of New Brunswick has responded to such criticism. They defended the findings of Bruck (1978), Wiss (1987) and Genesee (1992) by stating students with learning disabilities can not only learn a second language, but some actually excel in the area of language. Many students who are auditory learners express themselves much better orally than in written expression and can benefit greatly from the class. Effective

language learning programs build social skills, develop effective learning and communication strategies, and create environments where diverse cultures and views are embedded in the curriculum (Le-Lien-editorial, 2001).

Success after graduation for a student with learning disabilities may emerge from the development of bilingual skills. While the editors felt that it may be a challenging process to teach a second language to the student with LD, it can be achieved with a pro-active approach. Part of this approach can be addressed through the following (Fitzgerald, 1999):

1. read the cumulative reports to see students strengths and weaknesses, as well as recommendations as to how to help them;
2. use the resource teacher whether he/she is unilingual or bilingual;
3. get to know the Special Education Plan (SEP)/Individual Education Plan (IEP);
4. adapt the student's report card in accordance to the SEP;
5. know your teaching style. Teachers along with students have strengths and weaknesses, and can accommodate their own weaknesses;
6. incorporate the four learning styles in class activities. There are four principle learning styles: visual, auditory, kinesthetic and tactile. In most classes the focus is on visual and auditory learning. However, there are some students who learn better through kinesthetic (movement) or touch. By offering all four activities the teacher will not only help the learning disabled, but also all students with various learning styles.

7. maintain weekly meeting with the parents (Fitzgerald, 1999).

The attitude of the teacher can make or break the student with LD in French immersion, as in all classes. The teacher can either lessen or increase the chance of failure by using or excluding the above strategies (Fitzgerald, 1999). These tips for the learning disabled hold true for any group of people in the learning environment. In a bilingual province, it is to the students' advantage he/she learns French and the SLEC felt the learning disabled can achieve in this environment and some excel. Early French immersion is the program providing the greatest potential for bilingualism for the widest range of students and in a rebuttal to the "elite" criticism, Dicks (2001) stated unequivocally it is not true only above-average students can succeed in this program. As with all programs, flexible classrooms can be built to incorporate all four learning styles, therefore utilizing all students' strengths.

Future Research

This review indicated the need for recommendations for future research in learning disabilities and French immersion.

1. Educators and researchers need to provide reliable, valid methods and materials for educating and assessing all children (Wiss, 1989).
2. Researchers should continue to seek models for early recognition of potential learning problems in French immersion and the best way to handle these on an individual basis (Wiss, 1989).

3. Researchers should to find appropriate remedial services (in French) for students who encounter difficulties in immersion (Wiss, 1989).
4. Educators should ensure appropriate dissemination of information to other educators and parents about the research data showing that neither immersion itself nor bilingualism contributes to childrens' academic problems (Bruck,n.d.) .
5. Research should include the examination of teacher and student needs, emphasizing the key role of the teacher in diagnosing students' linguistic needs and how to accommodate learner diversity (Hartley, 1998).
6. Researchers should continue to seek the development of assessments specific to French immersion students (Demers, 1994).

Summary

In the relatively short time since the placement of students with LD in French immersion has been studied, researchers have arrived at differing conclusions. The common thread emerging from research is that answers, if there are any, are individually based on the needs of the child. Bruck (n.d.) and Cummins (1983) assert the premise a LD child will have no greater difficulty in FI than in the English stream. On the contrary, Trites suggests some have difficulty and will achieve better in English programs. All agree, however, each child should be considered separately. This leads to assessments and resource help for students with LD. It appears the special resources are not as prevalent in FI as they are in English. Investigations should include how to best assess

the child with LD in French immersion and how to support them. To have a truly inclusive environment, more research needs to be completed.

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Paper 2

The Nature and Characteristics of Learning Disabilities: Implications for French Immersion Placement

Table of Contents

Introduction

As a society we are becoming more sensitive to the diversity of our population. Throughout Canada we see a wide variety of cultures in our workplace, communities and schools. Along with the cultural diversities we see physical, social, emotional and intellectual challenges, and just as we celebrate cultural diversity, so should we embrace individual differences (LeLien-Editor, 1997). Over recent years there has been much emphasis on inclusion of all students into a mainstream program. This inclusionary perspective helps the learner with mild, moderate and severe disabilities to be successful in the heterogeneous classroom, and therefore, be a genuine member of the learning community (Sanacore, 1997). With provincial education dominated by public school systems, equal access to all programs such as French Immersion should exist. One group of students with diverse needs are those with learning disabilities .

Over the last 30 years researchers (for eg., Bruck, 1978; Trites, 1976) have been studying the learning disabled and French immersion to try and see if it is an appropriate placement for children with LD. French immersion has been seen as an elitist program available to the above average child without learning difficulties (Dicks, 2001). New Brunswick (the only truly bilingual province) has been under attack recently on this very issue. Once identified, an attempt was made to hinder students with learning disabled from remaining in French immersion, (Majhanovich, 1993). If French immersion is seen as the best way to learn a language, are there groups unable to achieve? To this end, educators, counselors and parents need to be aware of relevant research to enable us to help support these students within the program they are placed. To do this we need to see

each child as an individual, and become informed of the various aspects of education in order to be an advocate for his/her best interests.

Within an inclusive society defined in part by multiculturalism and bilingualism, the need to maximize language instruction for all children, including those with special needs, is crucial. Subsequently, exploring the topic of accommodations for learning disabled students enrolled in French immersion classes is equally crucial. What are the nature and characteristics of learning disabilities that may complicate the placement of students in a French immersion program? What are the nature and characteristics of French immersion programs that may support or limit the inclusion of students with learning disabilities?

Learning Disabilities

The definition of learning disability has evolved since its initial introduction. In 1963 concerned parents attempted to organize, on a national basis, in hope of helping their children who had eluded traditional definitions of exceptionality (Learning Disability Association of Canada [LDAC], 2001). Earlier, in 1917, an eye surgeon, Dr. James Hinselwood attempted to correlate people with brain trauma and children with reading problems. He coined "word blindness", the term is still used in England when referring to dyslexia. In the 1930's Dr. Samuel Orton, an American psychiatrist, refused to believe that the readily accepted theory of emotional maladjustment was the root of many learning problems. He believed that children with learning problems often displayed a "mixed laterality". These students had difficulty with awareness of two sides of the body that arose from the failure of one side of the body to be dominant over

another. Concurrently, an encephalitis epidemic, following World War I, gave rise to many cases of brain damage leading to erratic hyperactive behaviour. A German neurologist and psychiatrist, Alfred Strauss, acknowledged this syndrome in children and correlated the accompanying perceptual and abstract reasoning deficits. During this time, "brain damaged" and brain injured" were the terms used in relevant literature (LDAC, 2001).

In 1959, researchers in the field of cerebral palsy and other neurological handicaps noted perceptual and learning similarities in their patients and proposed the term "cerebral dysfunction" to cover cerebral palsy, mental retardation, previously hyperkinetic behaviour disorder. Irritability, short attention span, purposeless activity and poor schoolwork in reading, arithmetic and handwriting characterized this disorder. The term "perceptually handicapped" was then used to describe what we now know as learning disabilities (LDAC, 2001).

Since 1962 the term "learning disabilities" has been used, but a single universal definition does not exist. Different organizations and committees have adopted their own definitions with common features. These definitions are not consistent, nor are they written in a language readily understood and used by those who have learning disabilities, their families and relevant helping professions. It is because of this lack of a consistent definition that the Promoting Early Intervention for Learning Disabilities (PEI) Project was created. The first task for the project was a new definition of learning disabilities (LDAO, 2001).

Definition

In November 2001, the Learning Disability Association of Canada presented a new draft definition.

> Learning disabilities refer to a variety of disorders that affect acquisition, retention, understanding, organization or use of verbal and/or non-verbal information. These disorders affect learning in individuals who otherwise demonstrate at least average abilities essential for thinking and/or reasoning. As such, learning disabilities are distinct from global intellectual deficiency.
>
> Learning disabilities result from impairments in one or more processes related to perceiving, thinking, remembering or learning. These include, but are not limited to: language processing; phonological processing; visual spatial processing; processing speed; memory and attention; and executive functions (e.g. Planning and decision-making).
>
> Learning disabilities range in severity and may interfere with the acquisition and use of one or more of the following:
>
> - oral language (e.g. Listening, speaking, understanding);
> - reading (e.g. decoding, phonetic knowledge, word recognition, comprehension);
> - written language (e.g. spelling and written expression); and
> - mathematics (e.g. computation, problem solving).

Learning disabilities are lifelong. The way in which they are expressed may vary over an individual's lifetime, depending on the interaction between the demands of the environment and the individual's strengths and needs. Learning disabilities are suggested by unexpected academic under-achievement, or achievement that is maintained only by unusually high levels of effort and support.

Learning disabilities are due to genetic and/or neurobiological factors or injury that alters brain functioning in a manner affecting one or more processes related to learning. These disorders are not due primarily to hearing and/or vision problems, socio-economic factors, cultural or linguistic differences, lack of motivation or ineffective teaching, although these factors may further complicate the challenges faced by individuals with learning disabilities. Learning disabilities may co-exist with various conditions including attentional, behavioural and emotional disorders, sensory impairments or other medical conditions.

For success, individuals with learning disabilities require early identification and timely specialized assessments and interventions involving home, school, community and workplace settings. The interventions need to be appropriate for each individual's learning disability subtype and, at minimum, include the provision of specific skill instruction, accommodations, compensatory strategies and self-advocacy skills (LDAO, 2001).

The LDAO (2001) include new information pertaining to the psychological processes in the new definition. To date, learning disabled people are said to have weaknesses in one or more of the following psychological processes (LDAO, 2001).

Phonological Processes refer to the use of speech-sound information used in processing both written and oral language. Problems in reading and writing arise from difficulties in any of these phonological processes. Phonological processing may include three major areas (LDAO, 2001).

1) Phonological awareness involves the explicit knowledge of individual sounds (phonemes or allophones) that make up spoken language, and are expressed as the ability to identify or manipulate the constituent sounds in words.
2) Phonological coding involves the retention and manipulation of information in verbal form that is measured by the recall of numbers, words and sentences dealing with the sound structure of verbal stimuli in memory.
3) Phonological recoding involves the ability to retrieve from long term memory, phonological codes or sounds associated with letters, word segments and whole words, along with the translation of verbal information into a sound-based system in working memory that is used to decode unfamiliar words in reading processes (LDAO, 2001).

Memory and attention can be divided into five separate components aiding the learning and retrieval of information. Difficulty with any of the following produces a

disruption in the encoding and retrieval necessary for learning. Memory and attention processes include five areas:

1) short-term memory processes the passive storage of small amounts of material for a short period of time. If the material is not rehearsed or organized it is lost;
2) working memory allows the information to be held in short-term memory while other mental activities are performed;
3) long-term memory is the permanent storage of somewhat infinite amounts of information and requires the activation of multiple cognitive abilities such as perception, thought, language, prior memories, and most importantly the use of strategies to process and organize the information in a meaningful way;
4) retrieval involves using cognitive strategies that both efficiently and effectively access information stored in memory; and
5) attention involves the ability to selectively focus on some activities while ignoring others, to sustain concentration, to resist distraction and to shift focus among tasks. Attention can be passive, or active, and is a necessary but not sufficient condition for learning (LDAO, 2001).

Processing speed is the ability to rapidly and efficiently perform simple cognitive or perceptual tasks. The Learning Disabilities Association of Ontario (2001) suggests that a deficit in processing speed may contribute to some reading difficulties. The see research in this area is indecisive. One view is that slow performance on naming tasks

reflects impaired phonological processing while the other believes that this deficit is a separate entity (LDAO, (2001). However, individuals who have both phonological processing and rapid naming deficit make up the most severely impaired readers.

Language processing primarily relates to the semantics of the language and can be seen as receptive and expressive language. Language processing includes two areas. First, receptive language processing refers to the individual's understanding of oral and written language. Deficits in this area involve difficulty understanding meaning and word structure. Secondly, expressive language refers to the ability to express ideas orally and in written form. Difficulties may involve in recalling and using vocabulary, word and sentence structure and conveying ideas across sentences (LDAO, 2001).

Perceptual-motor processing refers to an individual's ability to use sensory feedback to guide physical movements, relying on the integration of the sense with the co-ordination of the eyes, hands and both sides of the body (LDAO, 2001).

Visual-spatial processing refers to an individual's ability to organize visual information into meaningful patterns. Sub-processes of this ability include the perception of spatial orientation and the ability to analyze, interpret and make sense of visual stimuli. There are three components considered to be key visual-spatial skills (LDAO,2001). Figure-ground discrimination refers to the ability to differentially attend to a specific aspect of a visual stimulus and be able to distinguish it from the visual field or ground. Perception of constancy refers to the ability to recognize that objects have invariant properties regardless of how and where they are seen. Lastly, perception of position of

refers to an object in space and its visual relation with the other objects and stimuli (LDAO, 2001).

Executive functions describe specific proactive mental-control processes, the key functions of which include five areas. Planning refers to the conscious or deliberate specification of a series of actions leading to the accomplishment of a specific problem or goal. Monitoring refers to observing and evaluating one's own performance in problem solving situations that require goal-oriented intentions, and the application of strategies to achieve a desired outcome. Regulation or self-regulation is comprised of three components; motivation, cognition and affective skills. Organization can be described as the development and implementation of logical plans of action that anticipate alternate outcomes. The last area is metacognition which refers to the awareness and understanding of skills and strategies. This includes knowledge and understanding of thought and learning processes (LDAO, 2001).

Attention Defict Disorder

Students with a learning disability constitute 5-10% of all students, a group that comprises 52% of the population receiving special education services in schools (LDAC, 2001). A similar condition, Attention Deficit/ Hyperactive Disorders (AD/HD), is characterized by developmentally inappropriate impulsivity, attention, and in some cases hyperactivity. AD/HD is a neurobiological disorder that affects 3 - 5 % of all children (LDAC, 2001). Individuals with AD/HD can be very successful in life, however, without multimodal treatment they may suffer many consequences including school failure, social problems, conduct disorder, depression and substance abuse. Children and Adults with

Attention-Deficit/hyperactivity Disorder (CHADD) identified three primary subtypes of attention deficit disorder.

1. AD/HD primarily inattentive type (AD/HD-I):
    a. fails to give close attention to details or makes careless mistakes;
    b. has difficulty sustaining attention;
    c. does not appear to listen;
    d. struggles to follow through on instructions;
    e. has difficulty with organization;
    f. avoids or dislikes tasks requiring sustained mental effort;
    g. loses things;
    h. is easily distracted;
    i. is forgetful in daily activities.
2. AD/HD predominantly hyperactive-impulsive type (AD/HD-HI):
    a. fidgets with hands or feet or squirms in the chair;
    b. has difficulty remaining seated;
    c. runs about or climbs excessively;
    d. difficulty engaging in activities quietly;
    e. acts as if driven by a motor;
    f. talks excessively;
    g. blurts out answers before questions have been completed;
    h. difficulty waiting or taking turns;
    i. interrupts or intrudes on others;

3. AD/HD combined type (AD/HD-C) is comprised of individuals meeting both sets of inattention and hyperactive/impulsive criteria. Children with AD/HD often have a two to four year developmental delay that makes them appear less mature than their peers. As with learning disabilities AD/HD often coexists with other conditions such as depression, anxiety, or learning disabilities. With coexisting or comorbid conditions, the academic and behavioural problems may be more complex (CHADD, 2001).

Comorbidity

As mentioned above, comorbidity is a situation where two or more distinguishable conditions tend to occur together. LDAO (2001) estimates a correlation range between a high of 70% and a low of 30% for a comorbid relationship between learning disabilities and attention deficit disorder. While the two conditions may occur together, interventions are not the same for both. It is, therefore, important to accurately diagnose the conditions so the appropriate accommodations can take place (LDAO, 2001).

Some social, emotional and behavioural difficulties also coexist with learning disorders (LDAO, 2001). A comorbidity of between 24% and 52% exists between LD and the group consisting of conditions such as conduct disorder, oppositional defiance disorder and social adjustment disorder. LDAO (2001) indicates a comorbid relationship between LD and tourettes, schizophrenia, epilepsy, language and communication disorders, hearing impairment, visual disorders and developmental coordination disorder.

Treatments and Accommodations

LDs are often not identified until a child enters school. The disability may not only affect school-based skills, but also social and life skills. This is especially evident in non-verbal learning disabilities. Difficulties in social skills may be due to processing deficits; however the LDAC indicates that a social skill problem by itself should only be viewed as a learning disability when it is accompanied by one or more traditionally recognized processing deficits (LDAC, (2001).

Incorporated in the new definition of LD are the necessary treatment and management requirements to help cope with the disability so students will become successful. The LDAO (2001) explains the four components necessary for students to overcome barriers and achieve their goals. Specific skill instruction, compensatory strategies, self-advocacy training and accommodations are all methods that can be used to help the student live effectively with their disability.

Specific skill instruction is built on individual strengths and helps develop compensatory strategies in areas where the disability interferes with the learning process. The instruction must be individualized so that it relies on the student's strengths and learning styles. Examples include differentiated teaching strategies such as reducing the number of tasks without reducing the standard, allowing for extended learning time to achieve mastery, re-teaching skills in a variety of different ways, and emphasizing the importance of compensatory strategies (LDAO, 2001).

Compensatory strategies employ coping skills to assist in surmounting the impact of the learning disability. Without these strategies the individual will have to rely on

others for help in achieving many goals. Examples of successful compensatory learning strategies include colour coding; applying visual cues such as highlighting, drawing arrows; using a notepad, palm pilot or tape recorder to make sure all directions are remembered; learning a format for approaching certain complex tasks; and many more.

Self-advocacy training involves empowering the students to ask for accommodations and advocate for their own best interest. Students need to learn to understand their strengths and weaknesses and to build on these strengths. The acceleration and utilization of their strengths will lead them toward their full potential (LDAO, 2001).

Accommodations can be defined as alterations and changes in the way individuals with disabilities are enabled to function, demonstrate and apply their skills and knowledge (LDAO, 2001). They allow the students to express that learning has taken place without altering the validity of the work. Successful accommodations include adaptive technology, assigned a note taker or scribe, extra time for tasks such as test, and many others depending on the person's strengths and weaknesses. Students with learning disabilities often have an individual education plan (IEP) that sets out the accommodations for that individual. This plan can help the student achieve while attending a regular classroom.

Categories of Learning Disabilities

The new definition of LDAC reflects the latest research on the psychological processes but many different organizations and locations categorize learning disabilities

differently. One well-known classification involves grouping learning disabilities into five categories; visual, auditory, memory, non-verbal and social skills (ldpride, 2001).

Visual learning disabilities involve difficulty processing and/or interpreting visual information. Visual problems may include impaired visual perception and discrimination involving difficulty in making visual stimuli meaningful, and seeing differences between two similar objects. Examples include distinguishing between such letters (b.d.), words (sam, saw), and everyday objects such as houses, signs or faces. Also, figure-ground discrimination problems occur arising in difficulty distinguishing the foreground from the background. Examples would include locating somebody in a crowd or picking out a line of print from a page in a book. Poor visual sequencing problems lead to difficulty recalling a sequence of item presented visually. This can create problems in copying patterns or arranging blocks in a series. It also causes considerable problems with reading and writing. Visual tracking problems include difficulty following along a line, or a sequence of words. It may even seem to the individual that the lines slip or move. Lastly, depth perception problems lead to difficulty perceiving distances. People with this problem have difficulties in determining distances (ldpride, 2001).

Auditory learning disabilities involve difficulty processing and/or understanding information communicated orally. This does not include physical hearing problems. It can affect all areas of language development including reading, spelling, speech, and the ability to understand verbal instructions. Auditory problems may include impaired auditory perception and discrimination including recognizing and interpreting stimuli that is heard, including each separate sound and the sequence of these sounds. This can create

problems distinguishing between sounds such as "th" and "f" or "m" and "n". Words such as "pan", "pin", "pen" can cause problems as well as perceiving orders or sounds correctly such as *spaghetti*, which may be discriminated as *psghetti*. People with an auditory discrimination problem may have trouble distinguishing between tones of voice such as when a speaker is making a joke or being serious. Auditory closure problems involving difficulty blending sounds and identifying sounds and words from incomplete auditory input. People with auditory figure-ground difficulties may find it hard to sort out what sounds to focus on and what sounds to tune out. An example of this would be if a fan were running in a room where a lecture was being given, the sound of the fan would be dominant over the speaker. Finally, auditory sequencing problem lead to difficulty hearing sounds in the correct order. People with auditory sequencing problems may hear "nine-four" instead of "four-nine" and may have difficulty following a sequence of auditory instructions (ldpride,2001; LDAC, n.d.).

Memory problems include difficulty with short-term memory. They have trouble remembering names, numbers, facts, and even things they did a few minutes ago. These difficulties present significant problems in academic study. Such a person might study hard for a test or exam and think they know the material extremely well, but then have forgotten it the next day. The difficulty can arise with information presented auditorily and/or visually, for example:

1. poor visual memory – difficulty in recalling dominant features even when the object has been viewed many times. We rely on our visual memory

throughout the day, when we use familiar landmarks, when we copy a word or symbol, and when we socialize; and

2. auditory memory – difficulty retaining and recalling experiences received auditorily (ldpride, 2001; LDAC,n.d.).

Non-verbal learning disabilities (NLD) are a neurological syndrome affecting the right hemisphere of the brain. These disabilities often go undiagnosed because reading ability is high. Typically people with NLD show:

1. excellent memory for things they hear;
2. poor memory for things they see;
3. good reading ability;
4. very poor arithmetic ability;
5. excellent verbal expression and verbal reasoning;
6. problem with written expression (often because of poor hand writing);
7. problems with sense of direction, estimation of size, shape and distance;
8. problems reading facial expressions, gesture, social cues, tones of voice (ldpride, 2001; LDAC,n.d.).

Social skills deficits, stated previously, involve difficulty using and understanding social information and conventions. People with social skill deficits may experience difficulties in one of the following areas:

1. understanding social convention people use in their daily lives. They may laugh at the wrong times and interrupt conversations. They may have difficulty monitoring their own behviour and may speak without thinking.

They may take things very literally. For example if somebody asked, "How are you?" they may respond by telling him or her exactly how they are;

2. body awareness – difficulty situating their body at comfortable distance from others (ldpride, 2001; LDAC, n.d.).

As a result of these psychological processing deficits, the affected student will present one of the following diagnoses of LD. Dyslexia – inability to read is divided into areas; dysetidetic (visually based) and dysphonetic (auditory based) reading difficulties. Dysgraphia is a written output deficit. Dyscalculia is a math disability and non-verbal LD include social and visual motor problems (Learner, 2003).

Within the diverse manifestations of learning weaknesses comes an equal set of concerns for the students' placement.

French Immersion and Language Learning Difficulties

Learning Disabilities Expressed Equally

Many researchers (eg. Bruck, n.d.; Cummins, 1983; Wiss, 1998) share the belief that children with learning difficulties should not be transferred out of French immersion. These educators feel that the child will exhibit the same difficulty in an English program and that French immersion is good for self-esteem and future employment. Bruck (n.d.) reports that there has been more anxiety regarding the learning disabled child in French immersion than those who progress equally slowly in the English stream. People seem to blame the French element for the problems rather than dealing with the learning disability

within the French immersion context. Transferring out of FI then becomes the rule not the exception.

Bruck (n.d.) summarizes her research and concludes that when the child is removed from French immersion the learning problems continue and the skills developed in the second language deteriorate. The children who transferred out and received remedial help in English fared better than those who had no help. This led her to the conclusion that it is remedial help that is needed and this should be provided in the French immersion context. If the problem is that the help is not available in French then this should be examined at a school and board level. If, as Bruck suggests, there is no help then classroom teachers can make some remedial changes, as in the English program.

Cummins (1983) supports Bruck's research and conclusions. He believes that learning disabilities are cross-lingual. In addition to this theory FI may be the only way that learning disabled children can learn French. Language disabled children experience extreme difficulty in core French programs because of the method of instruction. When placed in early French immersion these children perform relatively well. Cummins suggested that (a) reading skills may be easier to acquire in French than in English; and (b) the language disabled student's self-esteem may be boosted by the fact that he/she is acquiring relatively fluent French skills, something that other siblings or peers may not have. Overall, Cummins feels it still not clear whether there are some children who are not suitable for French immersion, but research has not provided any evidence suggesting it is the learning disabled students who are not appropriate.

Researchers and educators in Canada (eg. Bruck, n.d.; Cummins, 1983; Dicks, 2001; Fitzgerald, 1999; Wiss, 1988) agree that students with LD should have equal access to French immersion. Students can learn in this environment, and some such as nonverbal learning disabled actually excel. In this increasingly global environment it is important that French is part of the curriculum. If a student has difficulties in the French immersion class then remediation should be given as it is in English classes. The strategies for overcoming difficulties can be used in any classrooms and will help not only the learning disabled but all students.

Specific Processing Difficulties in French Immersion

Over the past thirty years there have been some researchers and educators who do not feel that all students are suitable for French immersion (e.g. Demers, 1994; Trites, 1976). The idea that French immersion is for all is met with some skepticism and transferring out may be seen best for the individual student.

Almost thirty years ago Trites (1976) studied students who were experiencing difficulty in French immersion. He believed that students could have learning difficulties due to a maturational lag and this could lead to difficulties in the French immersion classroom. He believed that students should be screened and identified prior to entry into the classroom. This caused wide debate and researchers such as, (Bruck, n.d.; Cummins, 1983; Wiss, 1998) felt that Trites was wrong and students would have the same difficulty in English.

Demers (1994) has written extensively on this topic and has developed guidelines he believes will help determine which students should transfer out of French immersion. He believes that each case should be examined individually and subjectively, however, there are characteristics found in successful and unsuccessful French immersion learners. He outlines the successful student as one who is verbal, imitates easily, self-corrects, readily accepts challenges, shows strength in first language, is attentive, has good auditory discrimination, has good memory and has parental support. The unsuccessful student in French immersion is often a reluctant speaker, imitates with difficulty, has a defeatist attitude, often has poor first language skills, is inattentive, has poor auditory discrimination, has poor memory and has poor parental support (Demers, 1994).

Demers (1994) continues that any change in the placement of the child must be in the interest of the child and transferring will not solve all the problems. There are, however, the few who will benefit from the transfer to English. Demers (1994) believes there are difficulties that all students encounter in learning a second language. Rules of syntax, their approximations, phonemic awareness and phonetic idiosyncrasies are integral parts of any language. The process of combining them can be frustrating for all.

Transfer, interference, cognition and meta-cognition are all characteristics of second language learning (Demers, 1994). Transfer refers to the transferring of learning processes to new situations and languages. Interference is imposing the phonological and grammatical systems of one's one language on a second language and over-generalizing the rules. Cognition refers to the awareness by the learner of the processes being acquired. Metacognition involves the knowledge and manipulation of cognitive

processes. According to Demers (1994), students with LD have difficulty in metacognition but they also have extreme difficulty with the similarities and differences between the two languages. All these components need to be addressed in a program for second language learning especially if the student is learning disabled.

Lastly, Demers states that a good indicator of success in a second language has been the competence in their first language. The acquisition in the second language (L2) is facilitated by the systems established in the native language (L1). If L1 is weak, the acquisition of L2 will be affected because as building on a weak base leads to a shaky structure (Demers, 1994). The resultant frustration that such a child exhibits further sabotages success.

In summary, Demers presents a profile of a student who would do poorly in French immersion. This person tends to be less frustrated when transferred into the English program. In creating this profile, strengths or weaknesses in certain abilities in a psycho-metric evaluation under the rubric of 'Verbal sub-tests" (Wechsler Series-III or Stanford Binet) can be good predictors for French immersion success or failure. Low scores on the 'performance' sub-test such as visual perceptions and general awareness usually represent a student who would show no improvement when transferred to the English program. It is also believed that students with a test profile showing verbal strengths, in areas such as short-term memory, reasoning and auditory skills, and showing lower scaled scores on measures such as visual and performance focus can work well in a modified French immersion program. Remediation and IEP's are important components. So, Demers (1994) isolates the students who have difficulty in

French immersion as children who have low scores in the verbal and auditory sub-test of psychometric measures.

By examining Demers' chart it would seem, as he posits, that children with poor auditory skills, memory skills and poor attention would have difficulties in French immersion. If this is true then students with learning disabilities in auditory, phonological and attention deficit disorder would also not do well in French immersion. The visually based and non-verbal learning disabilities would not be a detriment to successful French immersion and may actually be beneficial, as these students may have high verbal and good auditory skills.

The British Dyslexia Association [BDA] (2001) has similar opinions to Demers. They believe that the main areas in which dyslexic or language disabled children have difficulties are those necessary for second language acquisition (e.g. phonological processing, auditory discrimination, syntax, auditory sequencing, speed of processing information, attention span, automaticity). They report good language learners compared to poor language learners as differing mainly in phonology/orthography (sound/symbols) discrimination. They are in agreement with Demers regarding those who have difficulty in their native language will have greater problems learning a second language. While it can be said these students did learn a first language properly they point out that the situations are not entirely similar. Both the British Dyslexia Association and Demers (1994) emphasize when learning the second language you do not have the same opportunity to practice and correct your grammatical mistakes. Your native language is constantly being used outside the classroom, leading to expansion and remediation. The

British Dyslexia Association also reports that students with dyslexia have slower speeds of information processing and working memory difficulties make learning vocabulary arduous.

Interestingly, the BDA arrive at the same conclusion as Demers. They believe when learning a second language the more similar the language is to your native language the easier it will be to learn. This would be in agreement with Demers' interference component. If the languages are more similar it would be logical there would be less interference. They then continue to report that it may be slightly easier to learn Spanish if you are English than it would be to learn French, as Spanish is more similar to English.

Sparks and Javorsky (2000) explain their Linguistic Coding Deficit Hypothesis states that difficulties in learning a foreign language stem from subtle or overt differences in native language skills compared to those who are successful in second language learning. They speculate that: (1) foreign language learning occurs along a performance continuum from very strong to very weak; and (2) some learners have stronger skills in the components of language including phonological/orthographic, syntactic or semantic. While this is similar to the BDA the researchers suggest the profiles of foreign language learners with learning disabilities is no different based learning disabilities should come out.than non-learning disabled students who also have difficulty in foreign language learning. They therefore suggest remediation for not only students with LD, but all students leading to an inclusive classroom where all learning styles are incorporated. There is no literature to indicate that students with non-verbal LD's, dysgraphia,

dyscalculia or visually based learning disabilities should be removed from French immersion.

Summary

The research on this topic has been divided onto two camps. Researchers such as Bruck (n.d.) and Cummins (1983) believe that language learning is cross-lingual and that those who have difficulty in FI would also have difficulty in English programs. On the contrary, Trites (1976) and Demers (1994) are examples of those who feel some children would benefit from being transferred out of FI and placed in the English stream. The real point to consider is that all children are unique as are all schools and teachers, and while all the research will help us make choices the child's profile and context should be considered.

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Paper 3

The Nature and Characteristics of French Immersion: Implications for Students with Learning Disabilities

Table of Contents

Introduction

Historical Overview: Canada

French immersion began in Canada in 1965. A small group of Anglophone parents in St. Lambert, Quebec were disillusioned with traditional methods of language instruction and began lobbying the Protestant school board of the region to start an immersion class. As the idea of French immersion was relatively new they met with opposition from the school board. Following opposition from the school board the parents established private language classes. These gradually grew in popularity and following significant media interest the school board assumed responsibility.(Murphy, 2000).

In 1969, the Official languages Act made English and French the official languages in Canada and by 1970 the Official Languages in Education Program through the federal government, moved to institutionalize bilingualism by funding programs like French immersion. Its objectives were to enable children to be educated in the language of their choice and create a vehicle for the adoption of a second language. Following its inception French immersion has shown rapid growth throughout the last three and a half decades, but not without controversy (Murphy, 2000).

French Programs: Types and Benefits

French curriculum became increasingly important following the recognition of French as an official language in Canada. This second language learning is valuable for a number of reasons. Students can strengthen their first language skills, enhance their

creative and critical thinking abilities and become more tolerant and respectful of other cultures. Second language skills also provide a distinct advantage in obtaining careers both in Canada and internationally. (Ministry of Education, Ontario, 2000).

This early beginning received national support and French programs grew rapidly. In Ontario and much of Canada, French curriculum comprises three programs. In core French, students take all courses in English with the exception of French. A student enrolled in extended French may receive a certificate if they have successfully completed a sequence of four courses in extended French and a minimum of three courses in other subjects taught in French. The immersion approach to foreign language learning differs from the other approaches in that the foreign language is used for regular curriculum instruction for a substantial portion of the students' elementary/secondary education (Ministry of Education, Ontario, 2000).

The rationale behind French immersion is that second/foreign (L2) language proceeds more effectively if the L2 language is used for meaningful and real communication instead of the traditional method where it is presented as a separate subject. Although immersion students receive some direct instruction in the target language most of the foreign language learning takes place incidentally without formal instruction (Genesee, 1992). There are three major variants of the French immersion programs that seem to follow the above rationale.

Early immersion begins in Kindergarten or occasionally Grade one; middle immersion starts in Grade four or five, and late immersion usually starts in seventh grade. Cummins (2000) reports all variants are characterized by at least 50% instruction through

the target language (French) in the early stages. Early immersion usually involves 100% French in Kindergarten and Grade 1, leading into one period of English in Grade 2, 3 and sometimes 4. In Grades 5 and 6 the instructional time is divided between the two languages and by Grades 7, 8 and 9 French can decline to 40%, with further reductions in high school. The high school decline is usually a result of the greater variety of courses offered in English than in French (Cummins, 2000). The most widespread variety is total early immersion and this is the type of program that has received the most attention from an outcomes and a process-oriented perspective (Harley, 1998).

Cummins (2000) reports there are consistent findings from evaluations completed across Canada. Early immersion programs reportedly produce students who gain fluency and literacy in French at no apparent cost to their English academic skills. Within a year of the introduction of formal English language arts, students catch up in most areas of English standardized test performance. Extra time is often needed to catch up in spelling, but by Grade 5 there are virtually no differences. Cummins does state the limitation to these studies is standardized testing does not assess all aspects of English academic skills. The French immersion students have stronger receptive skills than expressive skills when compared to native learners. By the end of Grade 6 students are close to the native counterparts in understanding and reading French but lag behind in spoken and written French.

Characteristics and Objectives

French immersion has many characteristics important in its success and need to be adhered to if French immersion is to benefit all students. The four most important of these characteristics are listed below:

1. it is an optional program to which every student has access in principle;
2. the program serves a primarily unilingual Anglophone population;
3. in total immersion, teachers use only French;
4. students study the same curriculum content as their peers in regular English programs (Murphy, 2000).

Genesee (as cited in Murphy, 2000) outlines the aims of French immersion programs as follows:

1. to provide the participating students with functional competence in both written and spoken aspects of French;
2. to promote and maintain normal levels of English language development;
3. to ensure achievement in academic subjects commensurate with the students' academic ability and grade level;
4. 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 appreciation for English- Canadian culture (Murphy, 2000, P.1).

Classroom Characteristics

Carey (1984) reflected, after a decade of French immersion, on the difficulty in drawing any conclusions on the process in French immersion classrooms until more research is completed; therefore, research needs to move from a product orientation to a process orientation. Inherent in the pedagogical processes is the role of the teacher in the classroom. The teacher is the key actor in the learning environment by using instructional strategies such as: modeling, echoing, extending, prompting, directing action, etc. The types of and varieties of teaching strategies are instrumental in the success of the program as well as the appropriateness of learning disabled children within the French immersion classroom.

Canadian schools are adopting more informal pedagogical practices, while French immersion programs remain much more traditional (Halsall &Wall, 1992). Proponents of child-centered pedagogical practices believe their philosophy allows for differences in the learning style of each child. Responding to the recent criticisms regarding the French immersion environment Halsall &Wall investigated the claim that there is a difference in the pedagogical practices between French immersion programs and regular programs. More specifically, the authors researched the differences between child-centered programs in both the French immersion classroom and the regular programs with the hypothesis stating that the programs would be the same.

The design of the study combined qualitative methods involving information taking and codifying that knowledge through quantitative methods. A consultative group developed a child-centeredness dimension scale, including: direction, physical

organization, active learning, subject integration, assessment/evaluation, choice, curriculum flexibility, initiative, individualization, language, classroom management and a global dimension. Two observers visited one French immersion and one regular English program for each grade from Kindergarten to Grade 6. A group of judges rated the observations using percentage ratings. The means of the judges rating indicated that overall, only two grades, Grade 1 and Grade 5, in the regular English program have higher means than in the French immersion program for most dimensions. In all other grades, the means tend to be higher in the French immersion program for most dimensions. Halsall &Wall (1992) indicated that while French immersion classes were judged overall significantly higher in child-centeredness than the regular program classes, this cannot be generalized to indicate all French immersion classes are more child-centered than regular classes. Because the French classes were recommended by teachers as a very special group and seen as pioneers of child-centered pedagogy in French immersion, they may not be a true representation of all French immersion classes. The selection of the groups may not indicate that child-centeredness is universal in the French immersion environment; however its success can reflect the appropriate use of this methodology in this specific environment. This may lead to more teacher training in the area and then an increase in child-centered education (Halsall & Wall, 1992).

Halsall (1998), in a conference for French immersion in Alberta, discussed the characteristics and dynamics of the French immersion environment. She reports that in the early years, of immersion, class size tended to be smaller. This perception tends to exist today, however, according to a Carleton Board of Education report in 1994, this is

not always accurate (as cited in Halsall, 1998). Halsall reported the differences found between the two class types in one large school district where 50% of the kindergarten students were enrolled in French immersion. She compared the French immersion and English programs. The English program showed more multigrade classes, streaming at Grades 7 and 8, and the youngest and least experienced teachers assigned to core French. Also found in the English stream were lower staff morale, a perception of being second best and the need to accommodate students who dropped out. English programs had more mobility in students, and were responsible for a large proportion of exceptional students (Halsall, 1998). For the immersion program, the effects included difficulty in finding staff, younger teachers at the high school level, lack of special education classes, and a tendency for students to take few courses in French in high school (Halsall, 1998). Since the report in 1994 some of the differential impacts on the two programs had eased, especially the multi-aged classes and the class size (Halsell, 1998).

In a New Brunswick French program evaluation report, recommendations were made to the government regarding differences perceived in comparisons of French immersion and English programs. The perception by parents regarding larger class sizes in the English program was reported and needs to be addressed. Also, many parents of French immersion children expressed concern with the lack of specialist resources in French immersion, including students with learning disabilities who were unable to receive remediation in French immersion and were counselled out of FI. Lastly, parents were concerned with the large number of behaviour problems in the non-immersion

classroom and its impact on learning. These issues need to be researched and addressed (Government of New Brunswick, 2000).

Different Classroom Environments in French Immersion and Non-Immersion

Few programs in Canada have been reviewed more thoroughly than the immersion program. Educators and researchers (for eg., Swain & Lapkin, 1981; Swain & Lapkin, 1982; Stern, 1984) have evaluated many aspects of French immersion ranging from the study of the students first language skill to French immersion and learning disabilities. There have been few questions left unanswered that deal with the outcomes of the immersion program and these appear similar whether the students' were tested in Newfoundland, Ontario or British Columbia (Edwards & Rehorick, 1990).

While there is mounting research (for eg., Swain & Lapkin, 1981; Swain & Lapkin, 1982; Stern, 1984) regarding the outcome of FI much less has been written about the processes of learning in a French immersion class. In 1986 a group of educators from New Brunswick reflected on the French immersion learning process and questioned how it compared to what was taking place in the regular classroom. They loosely organized into the Research Consortium representing the Department of Education, the Teachers' Association and the University of New Brunswick. It was hoped with the analysis of the possible differing processes the results may shed light onto the question of whether one type of environment may be more beneficial to the learning disabled. Edwards & Rehorick (1990) undertook this study examining the differences between immersion and non-immersion classrooms. They examined the social climate of the classroom including

interpersonal relationships among pupils, relationships between pupil and teacher, relationships between pupils, the subject studied and the method of learning, and finally, pupils' perceptions of the structural characteristics of the class.

Edwards & Rehorick's 1990 study included participation from 10 English school districts. A total of ninety-five classes and 2,032 students took part in the study. The distribution of classes in the sample was comprised of Grade 6 early and non-immersion classes, Grade 7 early, late and non-immersion classes and Grade 9 early, late and non-immersion classes. Edwards and Rehorick used two different instruments for evaluation. The Grade Six classes used My Class Inventory (MCI) was developed by Fraser, Anderson and Walberg (1982). The Classroom Environment Scale (CES) was used for the Grade Seven and Nine classes. The dimensions of the MCI scale are defined in Table 1.

TABLE 1: Scale Description Item for MCI Scale

Cohesiveness	Extent to which students know, help and are friendly toward each other.
Friction	Amount of tension and quarrelling among students.
Difficulty	Extent to which students find difficulty with the work of the class.
Satisfaction	Extent of enjoyment of classwork.

Competitiveness	Emphasis on students competing with each other.

Table 2 outlines the CES dimensions.

TABLE 2: CES Subscale Descriptions

	Relationship Dimensions
Involvement	Measures the extent to which students have attentive interest in class activities and participates in discussion.
Affiliation	Assesses the level of friendship students feel for each other.
Teacher Support	Measures the amount of help, concern, and friendship the teacher directs towards the students.
	Personal development Dimensions
Task Orientation	Measures the extent to which it is important to complete the activities that have been planned.
Competition	Assesses the emphasis placed on student's competing with each other for grades and recognition.
	System maintenance and Change Dimensions
Order	Assesses the emphasis on students behaving in an orderly and polite manner and on the overall organization of assignments and classroom activities.

Rule Clarity	Assesses the emphasis on establishing and following a clear set of rules and on students knowing what the consequences will be if they do not follow them.
Teacher Control	Measures how strict the teacher is in enforcing the rules, and the severity of the punishment for rule infractions.
Innovation	Measures how much students contribute to planning classroom activities, and the amount of unusual and varying activities and assignments planned by the teacher.

(Moos & Tricket, 1987:2-3)

Edwards & Rehorick (1990) report that there are no significant differences between Grade 6 French immersion and non-immersion classes. All groups compare equally with regard to cohesiveness, difficulty, friction, satisfaction and competition. They offer two explanations for the results. Either there is virtually no difference in students' perception of their school environment in immersion and non-immersion classrooms, or the instrument used was not sensitive enough to reveal any discrepancies that may exist.

At the Grade 7 level the subjects in the study included immersion students who have been in the program for six years, students who only started immersion in Grade 7, and non-immersion students. The results indicated children who were in immersion in Grade 7 were more attentive and interested in class activities than the non-immersion students. Immersion classes had a higher level of friendship and helped each other with schoolwork, enjoy working together, and generally got to know each other better than

children in the non-immersion classes. There was more emphasis on completing activities and staying on task. The emphasis on establishing and following a clear set of rules and knowing the consequences of infractions was stronger in immersion than non-immersion. In this regard the students felt the teacher was more consistent in dealing with students who broke rules than were the teachers in non-immersion. In the non-immersion classroom children see their teachers as very strict, and punishment was more severe. Both groups judged the innovation characteristics equally. These results may imply a more positive learning environment in French immersion which would be conducive for all students, but may be especially beneficial for the learning disabled and AD/HD children who need clear and concise rules and a positive learning environment (Edwards & Rehorick, 1990).

If the two immersion groups were examined separately there appears to be a significant difference between late immersion and non-immersion classes with regard to order and organization. If late immersion were not included in the study there would be no difference between French immersion and non-immersion. When examining Grade 9 results, the only significant difference is reported in the affiliation measure. No other significant results were recorded (Edwards & Rehorick, 1990).

As reported earlier the Grade 6 results showed very little difference between the two groups. This group used a different instrument than did the later grades and Edwards & Rehorick (1990) feel that this may have had an effect on the results. The Grade 7 results were the most prominent. This is where late immersion comes into play. The large number of students coming from late immersion may account for much of the

difference. Late immersion teachers have a more difficult challenge than do other teachers. They must try significantly harder to communicate ideas. This would foster more involvement all and a much higher level of order and organization. Edwards & Rehorick intimated that by Grade 9 a lot of the students' courses were taken in English, and therefore many differences would have disappeared.

It should be noted the types of students in each class group may have an enormous effect on the results. Generally, immersion students, especially late immersion students, are more positively oriented towards school (Edwards & Rehorick, 1990). These personal attitudes of the students may have more of an affect on the classroom than the teachers' approaches. Despite the reason, a more positive environment is beneficial to learning especially for students with LD. However, consideration of this must be balanced with the difficulties of a new language and other factors. The social-emotional aspects of the late French-immersion can been seen as a lesson for better social-emotional involvement at all levels.

Unaccounted Variances Within And Between Classrooms In French Immersion

Educators realize despite common curriculum, classrooms are run differently. However, Netten & Spain (1989) of Memorial University of Newfoundland report a tendency for the variance in achievement levels in the French immersion classrooms to be greater than that of the regular English comparison classes. This seems to occur even

though immersion classes appear to be more homogeneous in cognitive ability scores at the beginning of the school year.

Netten & Spain (1989) investigated this phenomenon in a study of classroom processes. They studied high and low achieving pupils hoping they could shed some light on the question of instructional processes influencing language learning. The study included 23 Grade 1, 2 and 3 classrooms and interviews with teachers. Within each classroom six students were chosen, three high level achievers and three low-level achievers. The teaching style was examined showing the way teachers conducted their classroom, dealt with verbal and non-verbal messages, cognitive and affective content, type of lessons used and general classroom organization.

The results indicated different processes are evident in different classrooms, and these processes bring about very different results. Even though the teachers had a common curriculum they conducted their classes very differently resulting in a wide range of achievement levels. Opportunities to learn a second language were quite different for high or low achieving pupils, as well as different between classes. The findings suggested there is a considerable probability struggling students may receive less attention in some classes. In some classrooms these students have a better chance for communication than in others. The analysis of process differences in three classes produced interesting findings. The class that did better than expected in French had more student-initiated conversation or messages than did the other two classes. The pupils were constantly using and experimenting with the second language in an academic and social nature, both with teachers and peers. The other classroom had a more formal

approach to teaching and the results were not as positive. This created a very different learning atmosphere (Netten & Spain 1989).

The results of the above studies lean towards an experiential type of learning as a more appropriate method of language instruction. Activity-centered immersion programs, especially those that focus on individual choice of learning activity, achieve high levels of second language proficiency. Geneesee (1995) reported that the success of the activity-centered classes can be attributed to two main factors: 1) students had regular opportunities for extended discourse; and 2) students were highly motivated because they use target language in situations of personal choice.

While these studies have shown that various types of instruction have different effectiveness on second language learning, each class does not always use the appropriate method. Some methods would actually benefit the child with LD , however, there is no set approach in which French immersion is instructed. Placement of a learning disabled child needs to consider the type of environment, be it FI or English, and also which schoolis more suitable and with which teacher.

French Immersion Difficulties

Over the thirty years of French immersion, educators still report some difficulties with the administrative aspect of their programs. While these may not directly affect the students the frustration experienced by the teachers can transfer over into the classroom. One of the reported difficulties involves the fact that many principals of schools with French immersion do not speak the French language. Also, many of the French

immersion teachers are Franchophones. Many times conflict arises from a lack of communication between people speaking the same language. The difficulty that may occur between two individuals who have differing cultural codes, social status, professional interests, amounts of power, and native language is understandable (Safty, 1992). All of this can lead to a difficult work environment that may pour over into the classroom.

Murphy (1996) agrees with the difficulties occurring in French immersion. She points out that many principals of French immersion have little knowledge or training in the area of FI. They have the added responsibility of answering parents' concerns, completing correspondence in French, promoting the program and finding sufficient resources. Resource-based learning in itself can become an issue of time, money and cost. It should be noted that French immersion can have unique difficulties that may affect even the best learner.

A Framework for Instruction in Immersion Programs

Cummins (2000) suggests the two problems that have characterized French immersion are inaccurate production skills and high dropout rates. He believes these can be traced to the transmission-oriented pedagogy that has often been practiced in immersion. He suggests a framework that will promote second language learners' linguistics and cognitive development as well as their mastery of content matter. The basis of the framework include:

1. activating students' prior knowledge and building background knowledge;

2. modifying instruction to build sufficient redundancy into the instruction (e.g. through paraphrase, repetition, demonstration, gesture etc.);
3. use of graphic organizers;
4. hands-on activities;
5. creative use of technology; and
6. integration of reading and writing (Cummins, 2000).

As stated in his report, these activities are of use in education in general and even to the workforce. Teacher training and emphasis on learning strategies can help general education.

Summary and Conclusions

Classroom characteristics and philosophies invariably have great impact on the success of the learning disabled child in the French immersion classroom. If the classrooms follow the methodology of many language experts (Cummins, 2000), then the French immersion environment may actually be conducive for the student with LD. The pedagogy outlined by Cummins reflects all of the elements needed by children with LD as well as students with differing learning styles. Prior knowledge, paraphrasing, repetition, graphic organizers, cooperative learning and technology are all part of a group of learning strategies that have been known to enhance learning (Weinstein & Mayer, 1986). These strategies and metacognition are part of the psychological processes that can be lacking in children with LD (LDAO, 2001). If lacking, then education and instruction of the use of the strategies could be beneficial. If used, then the FI

environment may be a more appropriate spot for the child with LD than an English environment where it may be lacking.

Halsall & Wall (1992) report the skepticism of many with regard to the child-centered environment of many FI classes. The child and activity-centered classroom may have an appeal for the learning disabled and the AD/HD child. If the activity is centered on the student, then it would also focus on their individual learning styles. Auditory learners may use one method, while kinesthetic learners need a more hands-on approach. While Halsall &Wall acknowledge the use of child-centered methodology in some cases, it is unknown how universal the approach is. Further teacher education could help facilitate child-centered methodologies and this would be good news for the student with LD. As for now, there seem to be as many teaching methods in French immersion classrooms as there are in the English stream.

The student with LD quite often learns better in smaller groups. It may therefore, all other things being equal, be beneficial for the student to be in a FI environment. However, there has not been enough research to determine if there still is a class size discrepancy. New Brunswick has a great concern for their French immersion program as the only bilingual province in Canada and the Second Language Education Centre at the University of New Bruswick is constantly evaluating the province's French immersion program. Dicks (personal communication, September 14, 2001), a professor with the program, does not believe that class size or teacher qualifications are reasons learning disabled children may learn better in French immersion. He feels it is the teaching strategies in immersion that make the difference, particularly in early years where

approaches are comprehension based, and the use of repetition, visual aids, redundancy, and a slower pace may be of great importance to students with learning disabilities. He also feels that on a psychosocial level immersion does level the playing field somewhat since students who are verbally advanced in English cannot monopolize or participate to a higher degree than less verbally advanced students in the early stages.

The positive environmental results reported in late immersion by Edwards and Rehorick (1990) contain all of the elements beneficial to children with LD. Rule clarity, order, involvement, innovation and teacher control are essential for any child but are of particular importance for those with learning difficulties. If these come mainly from late immersion it may be beneficial to look exclusively at that environment and understand how students with LD may fit in.

Parents often perceive the English stream as having behavioural and social problems, factors distracting from learning (Government of New Brunswick, 2000). Cummins (1983) identified reading skills may actually be easier to acquire in French. Not only will this enhance reading, but will also boost self-confidence as they meet success in a program held in esteem by family member. Self-confidence from these events may then run over to other subject areas and result in higher achievement (Hampton Herald, 1999).

Future research is needed in helping the students with LD in French immersion. With research come ideas and methodologies available to assist in a more inclusive classroom. Further research would lead to more accurate ideas and suggestions involving the French immersion classroom and if it is conducive for the learning disabled. Also,

further research needs to include class size, classroom resources and behavioural issues in the French immersion environment compared to the regular classes (Halsall, 1998 & Government of New Brunswick, 2000). A review of the literature compiled from French immersion and learning disabilities shows there are many options for the student with LD. Individual education program planning teams who are inherent to special education decision making, might well be aware of these options.

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