School Integration of Children with a Disability in Provinces and Territories in Canada

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[English translation by Statistics Canada.]

Abstract

The purpose of this report is to review the status of school integration of children with a disability (CWD) in various provinces and territories in Canada. Two approaches are currently proposed: mainstreaming integration, with a full range of services, and inclusive integration in regular classes, with the necessary retrofitting. While various school integration policies are undergoing changes currently, the vast majority of provinces and territories seem to favor the first approach, with a full range of services (also called Least Restrictive Environment).

However, there are shortcomings in the availability and reliability of statistical data, common indicators, and information regarding some priority target groups.

There are various ways to measure the results of school services. According to several evaluative studies, the regular class would be preferable to any other service. However, systematic studies are few.

Regarding success factors of school integration in regular classes, several works identify a systemic set of conditions divided in ten general categories: values, attitudes, social and legal factors, school organization, course program, education and learning, support services, interaction with the environment, supervision and follow-up, and training of representatives. Again, however, general studies are few.

The budgetary and financial aspects are numerous and include factors affecting economic conditions and financial support, material and human resources, transportation and physical access, and ratios.

Finally, at the end of our review, we draw broad research suggestions or questions, including: reviewing the indicators used by Statistics Canada and provinces and territories by comparing the indicators used in the United States and in the Organisation for Economic Co-Operation and Development (OECD); carrying out comparative studies on integration policies in provinces and territories related to statistics and results; studying the benefits for children resulting from integration in a regular class in high school and the school capability to implement successful prerequisites for integration; assessing the impact of various factors on the quality of social integration of CWD in a regular class: the level of social skills of CWD, their level of disability as well as actions taken by educators to assist in the integration.
Introduction

The integration of children with a disability (CWD) in regular classes is an evolving controversial issue, subjected to various interpretations and applications. In the United States, 70% of CWD spend 40% of their day in school in a regular class (McDonnell, McLaughlin and Morison, 1997), while, in Italy, most have been integrated (OECD, 1998). In Canada, all authorities seem to have opted for integration of CWD, but the level of integration varies between provinces and territories (and within these jurisdictions).

This report reviews the school integration of CWD in the various provinces and territories in Canada by identifying related policies; by reviewing the attendance of various schooling services; by cataloging the current schooling approaches and mechanisms and their results; by identifying success conditions for integration in regular classes; and by reviewing the costs of these services. Finally, we propose subsequent research avenues.

Nevertheless, we wish to warn the reader that our study is limited due to the short timeframe and to our far from complete knowledge of the whole situation in Canada.

1- Main Concepts and their Interpretations

We will begin with a short review of definitions for CWD and this area of expertise before examining notions of integration and inclusion in detail.

Children with a disability and the school system

One of the main problems facing special education policies and practices is the fluctuating nature of concepts and terminology. The designation children with a disability was chosen by the Canadian society and the Quebec Committee for International Classification of Impairments, Disabilities and Handicaps (ICIDH): “A disability includes any disruption resulting from an impairment to physical or mental activities considered normal for a human being” (Fougeyrollas et al., 1991:23). However, this generic definition, subject to interpretation, is not shared by all education authorities in Canada. As we will see later in this document, the concept of “exceptional children”, including gifted children, is still used in some environments, while the terms “children with special needs” and “underprivileged groups” are used tentatively by the OECD (1998:234).

As well, the special education concept and its organizational configuration is not consistent in all schools.

Integration and inclusion concepts

Two main approaches to school integration are being proposed currently: the mainstreaming integration and the more recent inclusive integration, which rely on differing philosophies and educational organization methods. These two concepts constitute a radical departure from education practices for several of the targeted children for which, until recently, the right to education or to quality education was being denied or neglected.

Mainstreaming integration results from a standardization principle which aims, as much as possible, at making available for socially challenged individuals similar living conditions and models as those experienced by individuals in a given environment or society (Bank-Mikkelsen, 1980; Council for Exceptional Children, 1976, in Rosenberg, 1980; COPEX, 1976; Kaufman, 1988, 1989; Kaufman et al., 1975; Lakin et Bruininks, 1985; Nirje, 1969, 1980; Pedlar, 1990; Rosenberg, 1980; Wolfensberger, 1972, 1980). This principle is implemented through various actions varying according to the targeted populations and the field of activity or service involved. A synonymous expression, “the valuing of social roles” (Wolfensberger et Thomas, 1983, 1988) focuses on the standardization objective: to support valued social roles for targeted individuals.

In the schooling system, this standardization principle and its related proposal, mainstreaming integration, bring forward dramatic changes: access to education for CWD must be translated by training adapted to their needs (including individual service plans), in an environment as close to “normal” as possible. The integration process is then implemented through a variety or a complete set of services, from teaching in a regular class to education in hospitals. Such a structure, called “streaming system” is supposed to include, in all stages of segregation, gateways allowing integration to the regular programs or to a regular class (Council for Exceptional Children, 1976, in Rosenberg, 1980; COPEX, 1976). However, its major ambiguity remains precisely with the fact
that some specific segregation practices (at school or elsewhere) seem compatible with the desired standardization goal.

On the other hand, a second approach called “inclusion” challenges dramatically not only the policies and the organization of special education, but also the concept of mainstreaming integration. The inclusion concept promotes a more radical and systematic integration, and highlights practical integration applications. Several definitions have been coined as a result. Stainback et al. (1992) use terms such as “total inclusion” to refer to the fact that this concept rely on the education of all students in classes and neighbourhood schools. According to their definition: “all children must be included in the social and educational life of their neighbourhood schools and classrooms and not only put in the mainstream school framework.” (TRANSLATION), which results in making obsolete the word integration since it is no longer necessary “to reinsert a student or a group of students in the mainstream framework of the school and in community life, after being excluded” (TRANSLATION) (p. 3). The authors add that inclusive schools bring “a change of perspective, since the goal is no longer to assist only children with difficulties but rather to take into account the support needs of each school member (the staff as well as students) to help them succeed in the regular educational activities” (TRANSLATION) (ibid.).

By proposing a whole range of support activities to the regular class, such a definition suggests completely eliminating segregated services and transferring all resources to the regular class.

* The distinction between these two major approaches is not supported by all. For example, there is a tendency to use inclusion and inclusive education in a generic form in English (Andrews, 1996). Moreover, there are other conceptual variations such as the “least restrictive alternative” concept, initiated in American law (Rutherford Turnbull III, 1981; Scheerenberger, 1987). This concept includes the right to receive an education in the least restrictive environment (LRE), as well as proposing a whole range of services such as the streaming system.

Despite differences in these two fundamental approaches, the results of studies (as well as the available empirical data) suggest that school systems are leaning towards the “inclusion” of a greater proportion of students (Doré, Wagner et Brunet, 1996; Kelly, 1985; OECD, 1995).

2- School Integration Policies and Court Rulings

The acts, policies and regulations governing school integration are rapidly changing and have been recently affected by court rulings interpreting the Charter of Rights.

Acts, policies and regulations

Five reviews have been produced concerning the provincial and territorial acts, policies and regulations regarding school integration. Csapo et Goguen (1989) write about the history and direction of services to CWD, but it is difficult to compare legislation and practices. Winzer (1990) offers a broad description of the policies. Another study (TAAC, 1993) identifies ten education rights for “handicapped students” for which implementation in each provincial and territorial legislation is being verified. Finally, updating a study by Smith and Lusthaus (1994), Smith and Foster (1996) compare the policies and legislation of each province and territory and propose a rating system based on 25 standards divided in five themes (Table 1): 1) non-discrimination, 2) access to education, 3) assessment and placement, 4) implementation of services, 5) promotion of rights. These studies are however limited in their comparisons and completeness, they are sometimes contradictory, and focus more on the state of the law rather than adopted models and practices. Finally, it should be added that the acts, policies and regulations for all provinces and territories are not all available on the internet.

Table 1

Ratings converted according to equality standards of CWD, and ranks for provinces and territories in Canada (the average for provinces and territories is 40%).
There are three key aspects for legislation and policy: a) the right to public education, b) the right to a regular class with necessary retrofitting or to the services continuum, and to the LRE, and c) the right to an individual education plan.

a) Students with severe disabilities do not have access to public education in Alberta nor in Newfoundland and Labrador, while Nova Scotia has promulgated an act authorizing the exclusion of all CDW (Smith and Foster, 1996). Nova Scotia is about to adopt regulations to give universal access to public education while Alberta has since amended its legislation by introducing such a protection (AESEB, 1997).

b) One fundamental aspect of the legislation regarding integration is the recognition of the right to regular classes with all necessary retrofitting or of the right to services continuum (regular class, special class and segregated school) or the right to the LRE (least restrictive environment). These two mutually exclusive options rely respectively on mainstreaming integration, and inclusive integration. Courts in Quebec, in the Marcil and Rouette rulings, discuss and favor either of these services systems as being the equality standards for CWD. This is also the option being proposed in Prince Edward Island (Mackey & Associates, undated). This implies that provinces and territories will be called to adopt one or the other of the options and by adopting the right to services continuum (or to the LRE), the generalized right to the ordinary class is excluded. This position is shared by Smith and Lusthaus (1994:7). Smith and Foster (1996:92 and 98) claim the opposite.

- The provinces and territories providing explicitly the generalized right to regular class are: British Columbia, New Brunswick and the Northwest Territories (Smith and Foster, 1996).
- The following provinces have adopted the services continuum without reference to the LRE: Alberta (AESEB, 1997), Quebec (public education act, 1998), Ontario (Crawford and Porter, 1992; Csapo and Goguen, 1989), Manitoba (Csapo and Goguen, 1989), Prince Edward Island (DEPEI, 1997), Newfoundland and Labrador (Csapo and Goguen, 1989) and Nova Scotia (Csapo and Goguen, 1989) Finally, Saskatchewan and Yukon have explicitly adopted the LRE (Smith and Foster, 1996).

On the other hand, in British Columbia, the right to regular class is conditional to the assessment of the needs of the CWD, which leads to subjective interpretations and eventually differing placement practices. It should also be noted that, in several provinces and territories, the wording of the legislation and policies is so broad that, in the same province or territory, one can find a total integration of all CWD in some school jurisdictions, and their attending special schools in other jurisdictions (Crawford and Porter, 1992).

c) The individual education plan (IEP) is an essential tool for planning and assessing education and services, as well as performance to the CWD. It is therefore important to render IEP mandatory by legislation. According to Smith and Foster (1996) and our update, this right to IEP is recognized in nine provinces and territories: British Columbia, Alberta, Ontario, Quebec, Prince Edward Island, New Brunswick, Nova Scotia, Northwest Territories, Manitoba and Yukon. It is not recognized in Saskatchewan, nor in Newfoundland and Labrador.

Thus, it seems that all provinces and territories can notably improve their policies to grant equal opportunities to CWD, and that the vast majority of provinces and territories have opted for the services continuum (or the LRE) to date.

**Recent rulings by the Supreme Court**

Since 1982, courts are authorized to promulgate rights according to the equality sections of Canada’s Charter of Rights and Freedoms. Therefore, their rulings — particularly the rulings of the Supreme Court of Canada — have an impact on integration policies (Crawford and Porter, 1992). Two rulings rendered recently should be noted.
Emily Eaton, a 12 year-old child, (suffering from cerebral palsy, a visual disability, unable to talk nor communicate efficiently, and bound to a wheelchair) attended regular class for the first three years of schooling, benefiting from major support services. Teachers then judged that the regular class was prejudicial and recommended her placement in a special class. The Supreme Court approved the placement, while mentioning the benefits of integration and recognizing the regular class with necessary retrofitting as the equality standard. The Court added that there is no presumption favoring the regular class, the best interest of the child being the basis for the choice of school service. If this ruling recognizes the special class as an appropriate service for some students, it also means that before considering such a placement, school authorities should consider integration with a regular class with all necessary retrofitting. (Peacock, 1996; Massy, 1997).

In the Eldridge case, the Supreme Court recognizes unanimously the right of three individuals born deaf to interpreter services, at the government’s expense, to communicate with health professionals. The Court considers that failure to provide the necessary arrangements (sign language interpretation services when these services are necessary and not excessively costly for the government) constitutes an infringement of their rights under the Charter.

Therefore, in Canada: 1) the primary school service criterion for CWD is the best interest of each student, 2) regular class must be considered from the beginning of schooling, 3) reasonable but not excessive adaptations must be made to ensure a true equal opportunity. A review of school integration policies and practices in light of these rulings would probably cause major changes in several provinces and territories.

3- Statistical Data and Basic Indicators

Statistics regarding the schooling of CWD constitute basic pieces of information and a key element of appreciation of the situation and policies. However, after reviewing research papers, consulting internet sites and asking questions to provincial and territorial authorities, it becomes clear that there is a lack of comparative and reliable data for Canada as a whole. Still, it would be necessary to know the number and the characteristics of the population requiring special education or considered CWD, its breakdown through the school system, the integration rate related to the identified disabilities, their evolution, etc. Paradoxically, it seems that the difficulty to obtain such data or their unavailability results from the integration policies, and especially inclusion, that have been progressively implemented since the 1960s. Indeed, several compilations of specialized services have been stopped or do not cover all the young individuals involved. Moreover, the enumeration difficulty increases when integration is viewed as a process, as a mixed concept in terms of significance, and very dynamic when tracking of integrated children is lost. This problem is not, however, typical of Canada, as revealed by an OECD comparative study on services for children with special needs in which it is admitted that “it is difficult to set comparative statistical tables... due to significant variations between countries regarding classification, terminology and methods, as well as the integration concept” (TRANSLATION) (Evans, Evans and McGovern, 1995:33).

- Statistics Canada. An overview of the statistics made available by Statistics Canada shows the extent to which this federal agency has not made the necessary updates in this field. For example, the agency does not provide basic statistics on the state of the situation.

On the other hand, accurate information is available on “visual and hearing impaired” individuals in special schools devoted to their needs (table 2). Unfortunately, these data, probably originating from a question being asked for decades, do not provide any information on students partially or totally integrated in regular classes.

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<tr>
<td>105</td>
<td>7</td>
<td>828</td>
<td>580</td>
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- **Provincial and territorial data.** Data on student with visual or hearing disabilities are available for some provinces, to our knowledge: Alberta (R. Morrow, personal communication, December 22, 1998), New Brunswick (OECD, 1995:42), British Columbia (B. Standeven, personal communication, December 15, 1998), Ontario (MEO, 1997), and Quebec (Ouellet, 1997), but we do not know if these data were collected using the same definitions.

However, it would be important to know the status for all “disabilities” according to age, level of education, and according to the percentage and level of integration. For example, the data from Quebec comprise information about students with difficulties (table 3), and provide information about the evolution of integration with time (table 4).

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<tr>
<td>3,735</td>
<td>1,963</td>
<td>748</td>
<td>462</td>
<td>1,611</td>
<td>2,178</td>
<td>6,629</td>
<td>41,053</td>
<td>44,095</td>
<td>24,558</td>
<td>127,032</td>
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(Source: Ouellet, 1997)

Thus, integration in regular classes is progressing (table 4) (except, for example, regarding the integration rate in regular schools for children with a severe intellectual impairment), but varies according to disabilities. Still, the integration rate seems higher in grade school than in high school, a level for which researches have not been conducted often (Doré, Wagner, Brunet and Dion, 1998; Doré, Wagner and Brunet, 1996).

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<tr>
<td>84-85</td>
<td>16%</td>
<td>5%</td>
<td>3%</td>
<td>74%</td>
<td>50%</td>
<td>56%</td>
<td>14%</td>
<td>94%</td>
<td>36%</td>
<td>38%</td>
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<tr>
<td>96-97</td>
<td>24%</td>
<td>17%</td>
<td>2%</td>
<td>76%</td>
<td>66%</td>
<td>64%</td>
<td>22%</td>
<td>77.5%</td>
<td>39.7%</td>
<td>54.2%</td>
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(Source: Ouellet, 1997)

**Some problem aspects**

- **Lack of common pan-Canadian indicators.** While it is possible to consult accurate and comparative statistics, they are not available for Canada as a whole. Essentially, the challenge resides in adopting common designations for “disabilities”, and for the kind of services available. To our knowledge, the most appropriate work carried out in this direction is the “experimental indicator” of the OECD regarding “students with special educational needs (due to disabilities, learning difficulties and handicaps)” (OECD, 1998:234). Another option is to adopt or adapt the indicator of the U.S. Department of Education which publishes a detailed annual chart of “educational environments for CWD”. This chart identifies, for each major age group and for each of the 12 identified disabilities, the educational environment in two broad categories: 1) segregated school, and 2) regular school, further divided in three subsets: a) less than 40% per day in a regular class; b) between 40% and 79% in a regular class; and c) at least 80% in a regular class (U.S. Department of Education, quoted in McDonnell et al., 1997:93).

- **Natives and Francophones outside Quebec.** To this day, generic studies about school adaptation have not identified priority target groups — perhaps because some groups often do not appear in global statistics for Canada. However, some statistical data indicate major learning difficulties among two significant groups within Canada’s society: First Nations and Francophones outside Quebec.

In the case of First Nations, this data shows the significance of the issue: in 1991, 57% of Natives 15 years of age and older had achieved grade 9 or less, or had not completed high school
— compared to 57% for non Natives (CRPA 1997a). As for Francophones in Canada, two Statistics Canada surveys on literacy indicate that they can be found in larger numbers than their Anglophone counterparts in lower levels, and in lesser numbers in the upper levels of education (Statistics Canada and HRDC, 1996). As well, two secondary studies indicate that Francophones in New Brunswick (Statistics Canada, 1998b:24) and in Ontario (Garceau, 1998:42) have lower reading skills than Anglophones in Canada, as well as in these two provinces. The lower “literacy” performance of Francophones outside Quebec also seems supported by the published results of the School Achievements Indicators Program (SAIP) of CMEC, Francophones students from Manitoba, Ontario and New Brunswick lagging in reading and, particularly, in writing (CMEC 1994).

Of course, it would be simplistic and misleading to blame poor achievements from First Nations and Francophones outside Quebec on school adaptation, since other fundamental factors are involved, such as cultural identity, access to education reflecting the culture, the language and the values of these communities, the low number of students or their remoteness which, in some cases, limits access to specialized resources. Nevertheless, several of these young people need “support programs for students having difficulties”, and such programs seem to be currently lacking (RCAP, 1997b).

- **Language variable.** Statistics on special education often do not include a variable on language of education or mother tongue. (Even in Quebec, where, as we mentioned earlier, statistics are detailed.) In an officially bilingual country, with a strong percentage of allophones, such data would be extremely useful. Many are wondering if Statistics Canada, for example, should not be legally responsible to supply data based on the two official languages in the country (Statistics Canada, 1998c).

- **Review of various statistics.** Finally, it would be desirable that a review be conducted of the various statistics related, closely or not, to education, in terms of school integration issues. We already mentioned the International Adult Literacy Survey (IALS) and the School Achievements Indicators Program (SAIP). There is also the School Leavers Survey (which includes the rates of achievement, diploma obtained) and the National Longitudinal Survey of Children and Youth. In regards to various surveys, the task is twofold: first to identify the data relevant to youths with difficulties, and then to identify changes to the design of the surveys so they can produce more information on issues related to integration.

### 4- Measurements and Results

What should be measured to assess services or programs for CWD? What are the achievements of CWD in regular class compared to those in other school services?

**Measurements for integration and programs for CWD**

The assessment of services for CWD is a program assessment issue and has two main objectives: to develop accountability or to improve programs (Olsen, 1994). Hereafter is a review of the input of some studies on the possible framework, indicators and models.

The assessment of services or programs for CWD must be carried out taking into account the general framework of principles and established relationships between inputs and contextual components, and results and effects (Olsen, 1994; Schalock, 1995). As to useful data, they fall in three categories: input (resources and student characteristics), process related data (learning opportunities, integration of CWD in regular classes), and results (school and functional skills, generalization of school learning in everyday life, student and parent satisfaction) (Ysseldyke and Thurlow, 1994).

Efficiency and results indicators for education provided to CWD must be defined in the context of results for all non disabled students (Olsen, 1994; Schalock, 1995); at the conceptual and statistical levels, they should also be related to indicators generally used for education (Ysseldyke and Thurlow, 1994).

Essentially, three methods and approaches seem appropriate: the first, more open, is proposed by Ysseldyke and his team at the National Center on Education of the University of Minnesota, and specifically relies on results in education; the second, predetermined, is put forward by Schalock
In collaboration with the school community, Ysseldyke et al. (1993) developed two types of indicators for students leaving school: a) indicators for results of education: satisfaction, personal and social adaptation, school and functional achievements, community and civic contribution, responsibility and independence, and physical health; b) enabling indicators: participation, attendance, adjustment and adaptation.

Considering the particularities of each program, Turlow et al. (1994) indicate that it is necessary to know the underlying principles of a program, and to regroup various jurisdictions interested in the assessment to produce their own results and indicators model. To this end, they propose the following four-step approach: 1) establish firm bases; involve decision-makers; define the reasons for assessing the results; define the terminology, establish the assumptions, solve the major assessment issues; 2) develop, adopt, and adapt a model; select an approach, define the fields for the results being assessed, identify the results and indicators; 3) establish a data collection system; determine the origin of results, develop data collection and analysis mechanisms, determine the approach for data collection and analysis; 4) implement the system; create incentives and support functions, prepare staff and public for the change and assess the system after implementation.

Schalock (1999) favors a closed model for the assessment of the quality of human services based on results integrating efficiency and values standards, and with an organizational and individual perspective. He identifies critical performance indicators based on the individual, and organization outputs meeting the following criteria: valued by individuals, multi-dimensional, objective, measurable, logically linked to the program and assessed over time. He proposes four types of analysis: cost-benefits, impact, efficiency and participating. However, the proposed indicators are not closely related to schooling.

In their conceptual model to assess services integrating students with behavior difficulties, Grosenick et al. (1990) propose eight components: vision, student needs evaluation, goals, curriculum and teaching methods, community involvement, service program design and management, leaving procedures and assessment.

Therefore, there are various proposals to measure the results of school services. To our knowledge, no comparative analysis of the various models has been carried out.

**Results of Integration**

Integration results are mainly assessed by comparing achievements in special and regular classes rather than by measuring learning in regular classes.

Madden and Slavin (1983) have reviewed the research on schooling and social benefits for students with a mild disability in a special class, in full-time regular class and in regular class with access to a resourcing class. There are some benefits for CWD integrated full-time in a regular class.

After studying all researches on the efficiency of special classes compared to regular classes, Epps and Tindal (1987) conclude that benefits are inconsistent with achievements. Some studies favor special classes while other do not indicate any difference or benefit for regular class. Two studies indicate that students with mild disabilities benefit more from regular class. As for resourcing classes, even though achievement benefits have not been clearly established, in some studies, the benefits are higher than full-time placement in a regular class.

On the other hand, in a meta-analysis based on 264 studies, Wang and Baker (1985-1986) conclude that CWD placed in regular classes consistently obtain better achievements than CWD in special classes, and this, for all categories of disabilities. These results are at odd with Carlberg and Cavale (1980) who conclude that students with learning or behavior deficiencies benefit more from special classes.

Affleck et al. (1988) compare the achievements of students with a mild learning disability in regular class to similar students in a resourcing class and the cost effectiveness of these two services. There is not significant difference between CWD integrated in a regular class and those in
a resourcing class. Finally, judging that services in a regular class are less expensive, they recommend placement in regular classes.

Wondering about CWD learning in regular classes, Hunt et Goetz (1997) studied 19 researches on inclusion programs, their practices and results for students with severe disabilities to conclude that these student can learn, be accepted and interact with other students in this environment.

From three different integration models for students with learning disabilities in regular classes in six schools, Zigmond et al. (1995) conclude that, for many, the increase in learning opportunities resulting from regular classes does not achieve expected results. For more than half the students of this study, achievements were insufficient.

Studies that do not face methodological difficulties are few. Research work is often limited to descriptions and impressions (O’Neill and DeBruyn, 1984). Moreover, few researches cover high school programs.

All in all, integration in regular classes seems somewhat more beneficial than other services. However, there could be more better defined researches in terms of methodology to cast more light on service model options.

5- Success Factors and Conditions for Integration

By carefully reviewing literature from Canada and the United States regarding factors favoring the success of integration of CWD in regular classes, ten critical conditions can be identified (Doré, Wagner and Brunet, 1996).

- **Values**. The fundamental value in school integration is “equality amongst individuals” (Baker, 1987; Baker and Gaden, 1992; Booth, 1988; Mittler, 1992). This value does not deny differences between individuals (Baker, 1987). It includes three specific principles (Baker and Gaden, 1992): “respect of the individual”, the “right to meet basic needs”, and “equality of opportunities”. This last principle can be expressed in two different ways: an “equal and fair opportunity” for all and “equal and equalitarian opportunities” for all, “equalitarian” meaning the right for all to have access to necessary developmental resources.

Finally, community spirit is a necessary condition for meeting equality principles (Forest, 1984, 1985, 1987; Lusthaus et al., 1992; Richler, 1993; Solomon et al., 1992; Stainback and Stainback, 1990).

- **Attitudes**. Administrators, educators, parents and students in the regular schooling system sometimes have mixed attitudes towards CWD and their integration, as indicated by Bunch (1992), Vlasiu (1983) and Winzer (1987). While all agree that integration should occur as early as possible, several doubt that it is feasible, particularly for students with a severe disability. These attitudes, resulting from concerns regarding the youth’s capabilities to operate in regular classes, often disappear once integration is underway (Hayes and Gunn, 1988). Generally, negative attitudes from educators and students in the regular schooling system can be modified through real-life experience with CWD.

- **Legal and social factors**. Some provincial and territorial laws in Canada have an impact on policies and practices in the school environment (Garon, 1992). We reviewed this issue earlier. Moreover, the positions of several education stakeholders associations and lobbying groups can influence the conditions in which ingression experiences occur (ACIC, 1994; COPHAN, 1995). Finally, public opinion, (through the media, particularly) has an effect on integration experiments.

- **School organization**. Broad policies regarding integration should be operational and used at all levels of the school organization. A new co-operation framework should be in place throughout the school system, including its administration. Integration structures should be created: resourcing classes, preference services (Evans, 1990), resourcing educators (Porter, 1987; Porter and Collicott, 1992) or integration facilitators (Halvorsen, 1992) or interaction facilitators (Porter and Collicott, 1992) etc. Administrative and financial support must be ensured and maintained. Finally, consistent care and means should be in place to improve educational practices at school (Fox and Williams, 1991).
- **Curriculum.** Integration often requires changes to the general curriculum, and this, taking into account the type of disability. For example, for students with an intellectual disability, three options have been identified: the complete elimination of standard curricula, the implementation of a single common curriculum for all students, or the implementation of special programs for CWD. In this latter situation, various approaches are proposed: by content level (Browder and Snell, 1987; Saint-Laurent, 1994), ergonomical (MEQ, 1993a, 1993b, 1993c), by activity or by subject matter (OSSTF, 1985; Ward, 1991).

- **Teaching and learning.** The integration of CWD also demands for the adaptation of teaching and learning methods. Various existing methods seem conducive to integration: individualization and personalization of teaching and individual or personalized programs (Fox, 1987; Goupil, 1991), teaching in a multiple programs class (Collicott, 1992), co-operative learning, mastering education (Crawford and Porter, 1992), learning through activities, learning from peers and tutoring (Thousand and Villa, 1990). Moreover, required adaptations seem to benefit to all students (Hegarty, 1991).

- **Support services.** Another key condition to integration is the implementation of support mechanisms for CWD and their teachers (Crawford and Porter, 1992). There are various ways to apply this: teams of colleagues, resourcing class, consulting with experts, input by volunteers (Falvey et al., 1990), technical or educational assistance, and creation of circles of friends (Forest and Lusthaus, 1989). Sometimes, it is also necessary to create community services to assist families and individuals (Snow, 1989).

- **Interaction with the environment.** Several provincial or territorial acts and regulations allow parents to participate in the development of the educational plan of their CWD (Smith and Foster, 1996), as partners with teachers in the education of the child (Doré, Wagner and Brunet, 1996). However, according to Lipsky (1989), parents do not receive due recognition in the school. Stakeholders in the education community must change their attitude and their perceptions regarding parents of CWD. Also, it is also desirable to enhance the relationship between the school and the community.

- **Supervision and follow-up.** The Individual Education Plan (IEP) as the recommended supervisory and follow-up mean is the basic component for planning and action with CWD (Goupil, 1991).

- **Preparing stakeholders.** Stakeholders are seldom prepared for integration of the CWD. Usually, preparation takes the form of information sessions. Haring and Billingsley (1984) highlight the need to act out directly and personally situations putting stakeholders in contact with CWD. In the case of stakeholder playing a more active role in the integration process, the authors recommend more significant action: discussion with specialized teacher, meetings with the parents of the CWD, viewing of informative films, participation to team meetings, visiting schools where integration is in place (Fox and Williams, 1991).

All these conditions should be viewed in a systemic perspective. Too often, integration experiments have an effect on only a few success factors (Doré, Wagner and Brunet, 1996).

Finally, the documentation on this issue is mainly prescriptive, texts resulting from systematic studies are few. On the other hand, these studies focus mainly on experiments in grade school. We will discuss this later.

6- **Budgetary and Financial Dimensions of Integration**

Budgetary and financial dimensions are a key element of integration, but are neglected (Smith, 1992). Several factors mentioned earlier differentiating provinces and territories could be repeated here: variation in funding methods (Jefferson, 1989), in defining special education, in integrating clientele (Kelly, 1985), etc. However, it should be noted first that it is difficult to establish the cost of special education throughout Canada, despite the budgetary weighting of this field across Canada (Lawton, 1987; Kelly, 1985). Data from Statistics Canada regarding specialized education ($169.8 millions, table 5) seem unreliable since they are gathered from the following education costs: handicapped individuals outside of the public schools, correspondence courses from provincial
governments, recovery schools, education services in prisons and federal penitentiaries. Obviously this accounting of expenditures is limited when compared to the cost of “education of children with difficulties” evaluated at almost ten times this total ($1,634,737,000) by the CMEC, 11 years earlier, in 1983 (Kelly, 1985:20).

Table 5

<table>
<thead>
<tr>
<th>Provinces</th>
<th>Nfld&amp;L</th>
<th>PEI</th>
<th>NS</th>
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<th>Que.</th>
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<th>MB</th>
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<th>BC</th>
<th>YU</th>
<th>NWT</th>
<th>Canada</th>
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<tbody>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>2.8</td>
<td>9.3</td>
<td>81.2</td>
<td>11.1</td>
<td>4.6</td>
<td>27.4</td>
<td>15.4</td>
<td>-</td>
<td>0.3</td>
<td>169.8</td>
<td></td>
</tr>
</tbody>
</table>

(http://www.statcan.ca:80/english/Pgdb/People/Education/educ10b.htm; Statistique Canada, publication 81-2208)

While it seems impossible to have an overview of expenditures for Canada, publications provide relevant information on several aspects of the financial support for integration.

- Economic factors and financial support. Several authors note that the trend towards integration was affected by major economic factors, particularly the fact that the movement towards integration began as financial constraints were applied in education (Gerber, 1981; Paquette, 1992). This resulted in competition between the various sectors and stakeholders. Moreover, many would have opted for integration, figuring that it less costly than the segregated model (Rawlyck, 1977:47). Others thought that it would result in cost increases (Kelly, 1985; Smith, 1992, for example). One of the paradoxes of inclusion is the fact that budgets previously committed to children with difficulties are now integrated in regular education programs. According to several people, it is important to identify the increase in resources as being now devoted for children with special needs.

Consequently, Evans (1990) estimates that integration efforts are under-funded, schools being unable to ensure the range of necessary services to meet all identified needs, while Crawford (1992) claims that integrated education does not benefit much from the significant amounts devoted to special programs. Large amounts of money are lost due to the keeping of barriers between specialized education services and regular education services (CDPQ and OPHQ, 1991; Stainback and Stainback, 1990). By eliminating the specialized system, these funds could help promote a system for “total inclusion”. Therefore, Crawford and Porter (1992) recommend reviewing, for savings or reallocation purposes, resources allocated for teacher or student support. In their eyes, each school board should provide a funding method for integration support services ant they suggest adopting a local policy under which funds allocated for technical assistance or any other form of integration support would be committed to this end.

- Material and human resources. Human as well as material resources play a vital role in maximizing the positive effects of integration. Even a well-designed project can fail without sufficient resources supporting both teachers and students (Simpson and Myles, 1990; Wade and Moore, 1992). Thus, the creation of an education support or interpretation service could assist learning for some students and produce interactions between youths (Crawford and Porter, 1992; Simpson and Myles 1990). According to Crawford and Porter (1992), users from the school adaptation sector need speech therapists, occupational therapists, physiotherapists and other health professionals.

Crawford (1992) adds that the ministries of education, school boards and schools must protect resources allocated for the support of teachers and students.

- Transportation and physical access. Students must be able to use transportation that takes into account their condition, in particular for children with physical or sensory impairments to access education institutions. Several students require public transportation to go to school. For example, according to Crawford and Porter (1992), among youths aged 15 to 19 with an intellectual impairment and who attend regular classes in high school or at the postsecondary level, 32.1% have problems obtaining or using community transportation services. Among those that do not attend regular classes, 51.9% face similar barriers. Therefore, the availability of public transportation significantly reduces access to regular classes for some individuals. Public transportation is surely a significant factor to accessibility in rural and urban areas. Generally, it is
estimated that several funding programs do not take enough into account additional costs incurred for the integration in less populated areas (Smith, 1992, for example).

- **Ratios.** The commitment towards quality education and successful integration cannot neglect taking into account the number of students per group or class. While their results are sometimes challenged (Robinson, 1990), several studies indicate that in groups of 25 students and less, there is a wider diversity of teaching methods, better class management, less disciplinary problems, and better attitudes both for students and teachers (Simpson and Myles, 1990). These positive effects are even greater when the number of students is less than 20 or 15 (Smith and Glass, 1980). For Crawford and Porter (1992), educators are responsible for studying the impact of the size of classes on their teaching and to make recommendations consequently to their school management.

- **Principles and criteria.** Ultimately, funding considerations must be assessed in relation to principles and criteria. Regarding principles, there seems to be a consensus concerning the right to fair and quality education for all children. These principles are likely to produce additional costs for youths with special needs (for example : Kelly, 1985; Smith, 1992).

  In this light, to be assessed, these principles must be reviewed against certain criteria. Benefiting from previous studies, Smith (1992) attempted to build a model based on 10 criteria applied to Quebec society. Some criteria might seem to present a problem (such as the interpretation for “cost-benefits”), but it is regrettable that the model is not more thorough nor applied to other jurisdictions in Canada.

7- **Research Questions and Projects**

At the end of this review, we draw five research projects or questions based particularly on some shortcomings in the knowledge and existing data previously identified.

1) **Operational definitions and common indicators**

   It seems to be a priority to begin a project concerning the definitions used for CWD and the statistical indicators used in the prognosis of the situation for Canada as a whole. Indicators from Statistics Canada and those used in provinces and territories could be compared to indicators from the U.S. or the OECD.

2) **Comparative studies of policies and precedents impact**

   Studies regarding the integration policies in provinces and territories seem limited (or obsolete in regard to the evolution of theses policies). Thus, comparative detailed studies (for example according to identified disabilities) linked to attendance statistics for various services, and results, would be useful. Moreover, it does not seem that the impact of court rulings have been subjected to detailed research.

   Researches could generate documents about “good policies” (in the same vein as publications on good practices).

3) **Result measurement and inclusion mainly at high school level**

   Few studies have been carried out at high school level, which presents particular challenges (Schumaker and Deshler, 1988).

   It is absolutely necessary to study further the benefits for students in regular class integration in high school, considering challenges as well as benefits or profits for students, feasibility, i.e. the capacity to create in high school required success conditions.

4) **Success factors for integration**

   Integration in regular classes for CWD can benefit social development if integrated CWD interact frequently and positively with their classmates or, in other words, if CWD are socially integrated in their peer group. (Guralnick, 1982; Guralnick and Neville, 1997). However, this is not always the case. Quality of social integration varies widely from one student to the other, some being well integrated, others facing problems (Siperstein and Leffert, 1997). Unfortunately, the understanding of these differences is limited and there are no effective action strategies to improve the quality of social integration.
There is a need to assess three factors regarding the quality of the social integration of the CWD in a regular class: the level of social skills of the CWD, the disability level as well as the actions used by the educator to assist in the integration. One can assume that the impact of the level of social skills and disabilities on the quality of social integration will vary according to the actions of the educator. If this assumption is true, it could have a significant impact on integration strategies for CWD in regular classes.

5) Other questions

Finally, here are some questions that could lead to field surveys.

a) How to operate the transition from a system with special schools and special classes in regular schools, to a system providing for integration in regular classes? What is the impact on the development of students with special needs?

b) How to solve the paradox resulting from the implementation of a standardized provincial curriculum while promoting an individual approach for each and one of them, to take into account student diversity?

c) How are students identified as having special educational needs in the various school systems (the issue of operationalizing clienteles)?

d) What types of partnerships between the school, the family and the community can assist in the success of integration?

e) How is it possible to provide for the integration of students with special needs in a fiscal constraint environment?
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