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# Educating Children and Young Adults Who Are Deaf or Hard-of-Hearing in Canada: Challenges for the Nineties

## *Education des enfants et des jeunes adultes sourds ou malentendants au Canada: Les enjeux des années quatre-vingt-dix*

Mary Ann Warwick Bibby, PhD  
Department of Educational Psychology  
University of Alberta

Key words: schools for the Deaf, residential, mainstreaming (inclusion), Deaf community, curriculum, teacher education, oral education, hard-of-hearing, Canadian education

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### Abstract

This article provides an overview of education as it relates to deaf and hard-of-hearing children and young adults. The field of deafness has a long and very interesting history in Canada. Change in educational trends affecting people with hearing losses is affected by geographical environment, along with social and cultural issues. Historical background, present conditions, and issues which will provide challenges for the current decade are addressed.

### Abrégé

*Ce document fait un survol rapide des méthodes d'enseignement destinées aux enfants et aux jeunes adultes sourds ou malentendants au Canada. Il a été rédigé au début des années 1990. L'étude de la surdité a une longue et fort intéressante histoire au Canada. Ce domaine a subi l'influence des conditions ambiantes particulières au Canada et des problèmes sociaux et culturels qui affectent l'ensemble de la population. L'auteur retrace l'historique de l'étude de la surdité, fait le point de la situation, et présente les dossiers qui pourraient devenir des questions d'actualité au cours de la prochaine décennie.*

The Canadian Charter of Rights and Freedoms of 1982 has become one of the most important legal documents in Canada's history. At least two issues appear to be of paramount concern to Canadians in the 1990s: minority rights and linguistic/cultural freedom. Minority groups and individuals are demanding recognition and equality in every area of society, including that of education.

Against this background, Canadian educators working with people who have hearing losses are also being forced to examine educational principles and practices. The Deaf, meaning those who align themselves with Deaf culture, see

themselves differently from those who are hard-of-hearing. The Canadian Deaf population views itself as having minority status and, as such, has largely been ignored. In the past, "prejudice perpetuated Deaf people's isolation from one another and from the general community" (Winzer, 1983, p.156). Now, Deaf people are becoming more actively involved in the social structure of their communities and country. They have become leaders in education, hold high-level government positions, and have more access to interpreters in the courts, on television, and as needed in social situations. Hard-of-hearing people and those who use spoken or written English or French as their main language of communication are also defining the special needs of their group. People who have a hearing loss are becoming increasingly involved in developing educational policy and improving educational systems.

It has been estimated that there are over 200,000 profoundly deaf people in Canada and an additional 1,500,000 with milder hearing impairments (Rodda & Hiron, 1989). This article will describe the Canadian system which is presently in place for educating deaf and hard-of-hearing people and will also address issues, concerns, and accomplishments which are distinctly Canadian.

### A Brief History

The most comprehensive article which addresses the historical developments of the education of deaf and hard-of-hearing people in Canada was written by B. Clarke and M. Winzer in 1983. Clarke, then director of a university program for training teachers, and Winzer, a teacher and historian, describe in some detail the people, events, and conditions which gave rise to the present day situation. The reader is referred to their comprehensive article for further details.

The earliest immigration and settlement growth in Canada took place on the Eastern seaboard; the early history of education of the Deaf focuses entirely on this part of Canada. It was not until the early 20th century that the railroad opened the West to new populations, which in turn allowed for the creation of new programs for deaf students.

The eastern region was the home of the first school for the Deaf. It opened in 1831 in Champlain, Québec, but closed five years later due to a lack of funds. Operating costs became a crucial issue for many of the schools and classes which opened throughout the 19th century, as schools in Prince Edward Island, New Brunswick, and Québec lived rather short lives. In many cases these new endeavors were entirely dependent on the goodwill and financial assistance of private benefactors, although by the 1860s some provincial governments were awarding grants.

The practice of formally training teachers outside the boundaries of Canada existed for close to 130 years. The Québec school mentioned above was started by Ronald McDonald who was sent to visit schools for the Deaf in New York and Philadelphia; he was trained and supervised by Thomas Hopkins Gallaudet and Laurent Clerc, well-known educators of deaf children. Both the United States, due to its close proximity, and Britain, because of its cultural, historical, and Commonwealth ties, were instrumental in influencing early trends and policies through these teacher education contacts. Canada now has its own well established training programs, but the early American and British influence can still be found in the schools.

By the early 1970s, 14 schools for the Deaf existed in Canada. Many of these had their beginnings 100 years earlier and were founded by someone with a vested interest in educating deaf children, either parents of deaf children or deaf people themselves. The oldest Canadian school for the deaf still in existence was opened in Montréal in 1848. In Nova Scotia, the private institution that opened in 1856 in Halifax was replaced by the Atlantic Provinces Special Education Authority Resource Centre for the Hearing Impaired (APSEA-RCHI) in Amherst, a facility that served the four Atlantic provinces with on-campus and outreach programs. Deaf people were instrumental in establishing these early schools and in most cases manual communication was used by the teachers. After visits to schools in Europe and the Milan Conference (1880) changes occurred and oral instructional methods became predominant.

In Vancouver a day school for deaf children opened in 1888, which was in operation for only one year. Almost 30 years later, another day class was established by the Vancouver School Board. This class grew to become known as the Jericho Hill School for the Deaf. Now sharing facili-

ties with Burnaby South Secondary School, Jericho has a great deal of support from the government and the Deaf community. It is one of the most up-to-date educational facilities available anywhere in the world, incorporating the latest in technological advances, including the use of captioning and video screens in all classes. Sharing resources and facilities with hearing children, the elementary school opened in the fall of 1992 and the secondary school opened in 1993.

Schools were consequently established in other western provinces: Saskatchewan in 1914, Alberta in 1955, and Manitoba in 1958. In Ontario, the Milton school opened in 1963 and in 1972 there was enough demand in Southern Ontario to open a school in London. The Saskatchewan school closed in 1991.

Historically, the 14 schools that were in existence in the early 1970s all provided some kind of residential facility, an arrangement which assisted in solving the rather serious transportation problems that existed in the earlier years. Students in the Maritime provinces travelled many miles to the Halifax institution, some even resorted to attending the schools in Ontario and Québec. For many years, students from the west coast travelled the 1,500 miles to the Saskatchewan and Manitoba schools, while students from Alberta travelled even further to Montréal. Today students have the option of using educational services much closer to home, in their own province. However, this option is not available to students from the Yukon and the Northwest Territories. If these students wish to receive their education in a residential school, they must leave their homes and travel to live at the schools or in foster homes in one of the provinces to the south. The northern situation is unique and receives further attention later in this article.

In addition to residential schools, Canadian provinces also opened day classes for students. The first province to make a deliberate and systematic attempt was Ontario, in the cities of Toronto (1924), Ottawa (1928), and Hamilton (1944). Eventually, the Metropolitan Toronto Board established the largest Canadian day school for deaf children in 1964. During the 1960s, increased parental pressure called for locally accountable school boards taking more responsibility for the education of children with special needs, and, as a result, programs sprang up across Canada. Amongst them, at least three distinctive types of programs were developed (Clarke & Wizner, 1983, p.44):

1. *Special classes for hard-of-hearing children.* These were often organized on the basis of partial or gradual integration of the hearing impaired child into the regular classroom, operating predominantly at the elementary level but sometimes extending to the secondary level. Teaching methods were mainly oral.

2. *Special classes for deaf children.* These tended to function more as separate classes although permitting a degree of integration and were essentially an alternative to special school placement. Instruction was carried out by either the oral or combined method.

3. *Special services.* Speechreading, auditory training, speech teaching, tutoring, remediation, counselling, and interpreting were made available to hearing impaired children in regular classes, generally on an individual basis.

Today, as in the past, most day classes use auditory/oral or Signed English approaches to communication, whereas the schools for the deaf are now strong proponents of sign language. The Montréal Oral School, begun in 1950 by a small group of English-speaking parents, is perhaps the largest in Canada, with approximately 200 day students and a staff of 25 to 30 classroom teachers, supervisors, and itinerant teachers yearly. The Québec Catholic school board also offers special French oral options to a large number of students. In British Columbia, the Vancouver Oral Centre, which was established in 1960, has grown to meet the auditory/oral needs of over 60-70 families in various programs throughout the city. In 1981, this school received the Alexander Graham Bell Award for excellence in auditory/oral programming. Many other Canadian cities operate smaller oral programs.

It is interesting to note that many of the earliest teachers in deafness education in Canada were immigrants from the United States or from Britain and, in a country as undeveloped and isolated as Canada in the 19th century, a great deal of success of the programs was due to their unstinting and enthusiastic efforts. "The outstanding contributions of these teachers in the early days of Canadian education of the deaf are not well chronicled and these highly distinguished achievements have generally not received the acclaim they warrant" (Clarke & Winzer, 1983, p. 40). In the early 1970s, teachers decided to form a national organization that would provide at least a partial solution to the problem of how to foster and develop useful and worthy communication across 5000 miles of country. The Association of Canadian Educators of the Hearing Impaired was established in 1973.

By the early 1970s, Canadian children were being provided with a variety of educational options. Students could learn in manual or in oral settings; they could be integrated into regular classes or they could attend a residential school for the deaf. Provincial governments took more responsibility for the education of these students. At the same time, teacher training opportunities were increasing. If the years leading to 1970 could be described as years of building, then perhaps the next twenty could be described as years of change and development. These years

were strongly influenced by a number of things, some distinctively Canadian, some international: a) the incredibly strong growth within the culturally Deaf communities, and their cohesive support for their assertive leaders; b) the recognition by leading linguists that American Sign Language (ASL) is a language in its own right; c) the appearance of legislation requiring students to be educated within the least restrictive environment and the following push for integration in special education; d) the growth of specialized telecommunication devices and medical improvements; and, e) specifically in Canada, the impact of the Canadian Charter of Rights and Freedoms of 1982. As part of Canada's Constitution, the Charter deals with such significant issues as mobility rights, equality rights, and minority language educational rights. While the Constitution does not mention sign language specifically, it does guarantee that all deaf people will have the right to an interpreter in the courts. The following sections examine the current Canadian situation and how it has been influenced these important forces.

## The Present Situation

### Schools for the Deaf

There are now eight residential schools for the Deaf in Canada: Jericho Hill School for the Deaf in Vancouver; the Alberta School for the Deaf in Edmonton; the Manitoba School for the Deaf in Winnipeg; the Belleville, Milton, and London schools in Ontario; the Atlantic Provinces Special Education Authority Resource Centre for the Hearing Impaired in Amherst, Nova Scotia; and, the Newfoundland School for the Deaf. These schools offer students an opportunity to live in dorms or family-like homes during the week, and to either return to their respective homes or stay with foster families on weekends. In certain places, some students remain in the dormitories. Except for the Vancouver School, which has recently come under the jurisdiction of a local school board, these schools are operated by their respective provincial governments.

Influenced by major funding problems and government cutbacks, some of these schools have become incredibly expensive to operate, as the cost per student has increased significantly in recent years. Provincial governments are continuously investigating the feasibility of maintaining these expensive facilities, while the schools are constantly finding themselves providing rationales for their existence. In 1991, the Saskatchewan school lost its battle and was forced to close. By the fall of 1995, the school in Amherst, N.S. will have closed its doors and moved to Halifax as part of an amalgamation of services. The school in Edmonton is undergoing an extensive government review and by 1995 will have been taken over by a local school board.

### The impact of inclusive education

The move to close residential schools for deaf students was facilitated by the concurrent move in the field of education to place students with special needs in the least restrictive environment. In most instances, this concept was equated with integration (now termed inclusion) within the public schools systems and a strong wish for 'normalization', to absorb special needs students into the mainstream of society. Educators were encouraged to open regular classrooms so that special needs students could function within them but, although adequate support services were often recommended, the reality of inclusive education proved otherwise. Many students were placed in educational situations without appropriately trained teachers, consultants, or adequate communication services in place.

In British Columbia and in the Prairies for example, most of the population is concentrated in the southern regions. In the middle and northern areas, communities are isolated by great distances, and serving the needs of students within these communities is very difficult. Many deaf students might have been better served by being placed in a larger centre, where access to support services and educational options are more readily available. On the other hand, living away from family and community can often be a great hardship.

There are, however, large numbers of students still being served in their home communities throughout the provinces. For example, the school for the deaf in Vancouver has appointed a program consultant for Outreach Services to attend to the needs and concerns of these students and their teachers; other provinces offer similar services.

### The influence of the Deaf community

It is essential that the move towards integration and inclusive education be seen in juxtaposition with the move towards cultural unity within the Deaf community. The protests against the school closures have been loud and strong, and in some cases the outcry has prevented other schools from closing. The schools are seen as the home of the Deaf culture and language, and as essential units for the organization and delivery of services to the Deaf community. Deaf Canadians are determined to maintain their cultural heritage within these educational boundaries. It is not surprising to see that there are many parallels between what is happening in Canada and what is happening in the United States. Until recently when Canadian post-secondary education began to improve and provide better access to students with disabilities, many of the best educated Canadian deaf students were graduates of Gallaudet University in Washington, D.C.. The bond between Deaf communities on both sides of the border is strong.

There are parallels too, between the Deaf and other linguistic and cultural minorities. The Deaf community in Canada wants to have American/Canadian Sign Language recognized as a true language in all the provinces; this is often seen as a civil and fundamental rights issue. In similar ways the First Nations and French communities demand cultural and language rights unique to their own heritage. All minority groups, including the Deaf, feel passionately about these very critical problems. Promoting "the efficacy of bilingual education in the Canadian context should of course strike a resonant chord for many citizens who should be very sympathetic to this apparently reasonable objective" (MacDougall, 1989, p.8).

On May 12, 1989, the Deaf community across Canada staged the first ever massive protest against the system of education in Canada and demanded that the schools for the Deaf remain open. They asked that their fundamental rights be recognized, made an emotional plea for recognition of ASL in the school system, and demanded a greater voice in decisions which directly affected their future (MacDougall, 1989). In 1990, the provincial legislature in Ontario called for a thorough review of Ontario educational programs for deaf and hard-of-hearing students; this resulted in a 205-page report which scrutinized the system and suggested recommendations (Rodda, 1990). It is perhaps the "most significant document in education of the deaf in Canada to be published since the early 1950s" (Rodda, p. 43). Even though it deals only with one province, the document provides more information on Canadian systems of education than has ever been available before and, as such, deserves a brief elaboration.

In 1989 an advisory committee was established under the Canadian Hearing Society. An internal and an external review team were responsible for data collection and analysis. Of the 38 recommendations made by the internal reviewers and the 57 made by the external reviewers, most differed "only in focus and emphasis" (Rodda, 1990, p.44). There was wide consensus on the issues involved. A direct result of this report was that ASL was recognized by the Ontario legislature as one of the official languages of instruction in Ontario. Alberta passed similar legislation in the spring of 1990 and several other Canadian provinces are following suit. Beginning in the fall of 1990, the province of Ontario also established a pilot program using ASL as the language of instruction in what is being called a "bilingual, bicultural" educational setting.

Most Canadian provincial schools for the Deaf are at this time reviewing their policies on communication systems employed in their classrooms. Because of the scarcity of information on the efficacy of using an English as a second language approach, schools are attempting to meet the

challenge of providing the right balance between the use of English and ASL. Until recently, total communication has pervaded, with emphasis on the use of English in the classroom as the only language of instruction. Educators are adamant in wanting to provide deaf students with the best education possible. At the same time they are cautious about making profound changes before the research data are in.

There are at least three areas where schools are implementing immediate change: the recruitment of deaf teachers, the upgrading of sign language skills for their professional staff, and the incorporation of Deaf Studies courses into the curriculum. All provincial schools have deaf teachers on their staffs. Some provinces also have mandatory sign language skill testing evaluation for all their teachers, and all provide in-services and workshops on an on-going basis.

### The Public School Systems

In Canada, responsibility for education is a provincial rather than a federal responsibility. Technically speaking, the federal government has no responsibility for educational policies or programs at the elementary and secondary levels. This results in a diversity of provincial services and contributes to the growth of innovative and creative solutions to meet the very different needs of diverse areas in the country. On the other hand, this decentralized administrative control has contributed to a lack of continuity and cohesive development across the country. Each province depends on its own government for the establishment of educational funding policy and legislation. As a result, facilities and systems differ greatly. Although the provincial governments directly control a few schools, including provincial schools for deaf students, most educational facilities are run by local school boards. The positive and negative conditions created by this diversity have a direct impact on the area of special education as a whole, as can be seen upon closer examination of the education programs for students with a hearing loss.

The public school systems are also undergoing change, although the situation seems to be somewhat more stable. In all major centres in Canada, students have options. In all provinces, both oral and English sign language or total communication classes can be found. At the school age-level, students can access special classes most frequently taught by a trained teacher of the Deaf and hard-of-hearing, and students can be integrated according to their capabilities. Some students are fully integrated into their home school situations and are seen by an itinerant teacher certified to work with deaf and hard-of-hearing children on a weekly or a monthly basis, depending on their needs and the availability of staff. Other students may be partially integrated for some subjects while others remain in the special class for all their academic work.

Many of the students using either oral or signed communication need to have access to qualified educational interpreters. Interpreters are in great demand across Canada, and it is becoming increasingly evident that working in classrooms requires a number of very important skills. These people are often called upon to become tutors and support personnel. In some educational settings, students are able to access well-trained oral or sign interpreters; unfortunately, the majority of students are learning with the assistance of minimally competent teacher aides. The existing interpreting training programs are finding that the need to define responsibilities and fill interpreting needs is becoming a big challenge in the 1990s. In Alberta an advisory group of the Premier's Council on the Status for Persons with Disabilities has developed guidelines to set standards specific to the education system in Alberta (The Premier's Council, 1994).

This variety of educational options and services exists only in the larger populated centres of Canada; the situation in rural areas is somewhat different. If trained educational consultants are hired, they are usually based in communities where facilities and support systems are at a minimum and their responsibilities vary widely. They may be required to consult with teachers, work with students on an individual basis, or provide and arrange access to testing and educational resources. In some instances, a trained teacher may be hired if there are more than two or three hard-of-hearing or deaf students in a school and establishing a class is a feasible alternative.

A consultant outside the major centres of any province may have as many as 100 students on their case load, with no more than one or two deaf or hard-of-hearing children in any one school. A recent survey in Alberta (Alberta Education Response Centre, 1991) has provided the most comprehensive and up-to-date information about students who have a hearing loss. Researchers contacted school administrators, teachers, and parents, and compiled an early account of the "number and location of students with impaired hearing and a broad sampling of the characteristics of the schools in which they are taught" (p.4).

The total number of students with a hearing loss amounted to 1,413, which is a rate of 3.0 per 1,000 Alberta students. The researchers state that this rate is lower than expected. One reason for this may be the under-reporting of cases of middle ear infection (otitis media), which is very common in the province. Although distribution of students varies by geography and chronology, most students attend classes with no other student similarly impaired (p.2). Of the 505 teachers who completed questionnaires on a total of 878 students with hearing loss, more than two-thirds (68.7%) had one hearing impaired student in their classrooms. Forty-nine (9.7%) had two students, so nearly four out of five teachers



had one or two students with a hearing loss in their classes. It must be remembered that a hearing loss for these student ranges from mild to profound, with the majority of students functioning through the use of hearing alone. This distribution of students clearly indicates the need for designing appropriate teacher education programs, for developing support systems for isolated teachers and students, and for maintaining options in educational programs.

It would be unfair to give the reader the impression that all students with a hearing loss are being adequately served. This is not the case. Services provided to these students depend entirely on several factors: (a) whether or not an identification process is in place and its success rate, (b) the abilities and willingness of the school personnel to recognize the needs of these students, (c) the funding available for service provision, and (d) the availability of trained and competent teachers, consultants, and support staff. Across Canada these factors vary a great deal. At the very least each province has a coordinator for these special services.

## **Northern Education**

Canada is an extremely large country and much of this article has dealt with educational concerns in the 10 southern provinces. However, a vast region stretches out to the north, divided in two parts. The Northwest Territories encompass four time zones and cover 3,376,698 square kilometres. The population consists of 51,744 people, with 13,400 students registered in the K-12 educational system (Donahue, 1989). The other territory, the Yukon, is the seventh largest Canadian land area, and its population of 26,000 is distributed among 25 communities. A population of 20,000 is concentrated in the capital of Whitehorse.

The northern region of Canada has a very high incidence of hearing loss. Many of these deficits are the result of recurring and untreated middle ear infections. In a study in the Baffin Divisional Board of the NWT (Donahue, 1989), 100 students out of 3,144 were identified as having hearing losses. These students attended 14 different community schools and were spread out over more than 500,000 square kilometres. In a school in Keewatin, 60 out of 100 students were found to have a hearing loss. Thirty of these had moderate to severe losses (Donahue, 1989, p.35). Over three-quarters of the school population is Native. The educational system is especially cognizant of the very different cultural needs which influence both the content of the curriculum and the service delivery model. For children in northern communities English is already a second language, as their first language may be any one of a number of different native languages. This means that educators must be especially sensitive to complex needs of students

who have hearing problems, and who might need to learn yet another language, ASL.

In addition to the cultural concerns, the school population itself is often in flux as the economy vacillates. In certain communities, the school population may double one year but face declining enrolments the next, as families move, looking for employment. Students may have already lived in several communities by the time they are six or seven years old. In addition, teachers must be aware of the devastating effects of alcohol. A recent study indicated that "the incidence of Fetal Alcohol Syndrome in the general population is 1.90 per 1,000 births, whereas in the Yukon the incidence is 46 per 1,000 births. The resultant degrees of mental handicaps form a significant number of students" (McFarlane, 1989, p.16), and many of these students have a hearing loss.

In recent years, the fact that students should be encouraged to stay at home and be educated within their own family and community schools has gained recognition. Previously, students with special needs were sent to residential schools in the southern provinces. In many instances the financial cost is much less when provision is made for students to be educated with their peers, and this remains one of the factors which has influenced the design of the educational system. Many students with a hearing loss are often not identified; those who are recognized, are often found to be fully integrated into the regular classrooms where they are taught by regular teachers of hearing children. Depending on their specific needs however, they and their teachers will have access to various kinds of support: FM systems, in-services, and access to special needs consultants. It is often difficult to hire trained teachers to work with hard-of-hearing or deaf students in the north; as a result, the existence of qualified personnel varies greatly. People who are hired may act as itinerants and provide consultation, programming, or access to other support services. Universities often send faculty to give additional short courses and in-services as needed and requested. Because of the geographical isolation and adverse climatic conditions, providing support to teachers becomes an essential component of this system.

## **Curriculum**

To this point in the article, the needs of deaf or hard-of-hearing children who have additional disabilities have not been addressed. MacDougall (1988) reports that "over one third of deaf children have an additional disabling condition [and there appears to be] a primacy of deafness over any other disability" (p.99). He suggests that with these children there is a special need for the involvement of persons

working in the various rehabilitation professions. Although educational awareness of the needs of these children is receiving more attention, these "multi-disabled children have not received optimum service up to the present" (p.99). It appears that the curricular needs for these children will best be met by the involvement of other specialists both in rehabilitation fields and in other areas such as learning disability. Although these children are often labelled deaf or hard-of-hearing, one must remember in the following paragraphs that many of these students will have other problems which challenge both them and their teachers in the school systems.

Taking into account the need for multi-disciplinary involvement, at least two concepts characterize the curricular aspects for educating deaf and hard-of-hearing students in Canada: individualization and the provision of options. In all provinces, deaf and hard-of-hearing students are provided with individual educational plans (IEPs) where both long- and short-term goals are established with parental input. In worst case scenarios, parents must, at the very least, meet with the teachers to sign the plans. In best case situations, parents are directly involved in setting educational goals from the beginning. For the most part these plans are supposed to cover all areas of the child's development - physical, intellectual, and socio-emotional. However, there is a tendency for the plans to emphasize only the remediation of the specific deficits of the student such as the incorporation of speech and language goals and the statement of any behavioural changes which might be required. One might assume that this is a fairly typical failing in deaf education, where the student is placed in settings which focus on remediating deficits. Again, only in best case scenarios does one see goals which build on the strengths and abilities of these students.

In most cases, our educational settings do provide curricular options for students. For those students who are capable of doing work that is age- and grade-appropriate and who prefer to be integrated into the regular school system, the curricular needs and expectations are the same as for hearing students. Some students require additional help, and a modified or slower-paced curriculum can be provided when a trained teacher of the deaf acts as a consultant or as a part-time teacher. In schools for the Deaf, programs often provide a variety of streams - advanced academic, regular academic and vocational - which can be tailored to fit needs of the students.

The special needs of one group of students, those who are gifted, are being overlooked in Canadian education at this time. No formal identification procedures are in place, nor are there any special programs or curricular guides available to meet their needs (Yewchuk & Bibby, 1988). Since

education of gifted students is a relatively new field, investigating the needs of gifted students who also have a hearing loss is also just beginning. Individual teachers who are sensitive and aware of the special talents of their students are very often extremely adept at providing opportunities and challenges which go beyond the published curriculum. Further research is necessary to ensure that these students are not being neglected.

Curricular materials designed and adapted to the needs of deaf children are widely available and resources continue to be developed. Computer programming, on-screen video captioning, and various technological advances are being used in classrooms. For an overview of materials and programs which might be found in Canadian schools, the reader is referred to Bunch (1987). This book focuses primarily on programs specifically developed for deaf students.

One of the newest areas of curricular development is taking place in the area of sex education. A recent study by Sobsey and Varnhagen (1988) has enabled us to recognize that the incidence of sexual abuse among disabled students is many times higher than that among the general population. This population includes people who are deaf. At the same time as educators of hearing children are reassessing their sex education school programs, questioning whether or not these courses should be mandatory, some Canadian educators are adapting and developing materials especially for use with deaf students. In Nova Scotia for example, the Cumberland County Family Planning Association completed a video on sexuality for deaf and hard-of-hearing teenagers and their families (Franchi & Bangs, 1989).

There is at least one weakness in our educational system regarding curricular development: as teachers of deaf and hard-of-hearing students, we are extremely lax in keeping up with research which cites advances in work with hearing students. In general, we do not make time to read journals in other fields and, as a result, we can become somewhat isolated and unaware of exciting changes which are happening in regular education and in language development. These advances often have direct implications for the education of deaf and hard-of-hearing students. Given the many demands faced by teachers this tendency is not surprising; it is, however, a situation which is cause for concern and, once again, provides a challenge for teachers in the field.

### **Infant and Pre-school Education**

Children with a hearing loss are most often diagnosed in medical facilities. Routine infant screening programs exist in well-baby clinics and health units throughout each province but there are still significant numbers of children who are not

diagnosed or provided with intervention programs prior to entry into the school system. Every effort is being made to rectify this situation.

For those who are identified, a variety of services is provided across Canada. Facilities and options differ, as do the quality of the programs. Within the major centres parents have access to informed and trained personnel who can answer questions not only about their child's hearing loss, but also about services which they might access. All provinces provide the following services in one form or another with the method of delivery varying according to the geographical situation: (a) parent education classes and support services; (b) home training programs; (c) access to professionals working specifically with deaf and hard-of-hearing children such as audiologists, speech-language pathologists, trained teachers, and counsellors. At the age of three, most children are able to attend specialized half-day programs which focus on child development, stressing early childhood needs in addition to the development of remedial skills. In some cases these children are able to access the regular day care programs where integration with hearing peers takes place. When families are not living in densely populated areas itinerant services are often available but continuing and ongoing support systems are sometimes difficult to maintain.

Home training programs are also faced with the need to service people across large distances. Some Canadian families make use of programs like those available from the John Tracy Clinic correspondence courses, while some provinces have developed their own programs. The province of Newfoundland, for example, has developed an outreach program which provides a distance education package for parents of pre-school deaf and hard-of-hearing children; the program makes use of video units and speech trainers. In addition, support is provided by a trained teacher of the Deaf who does home visits and provides telephone support and on-campus workshops. Developments in computer technology will soon provide distance education with exciting options.

All provinces offer options to families in terms of communication methods. Programs are available using auditory-oral methods, as well as a total communication base. Recently, several Canadian cities have developed programs where ASL is supported as a first language.

During recent years, educators have also encouraged parents to meet and talk with hard-of-hearing and deaf adults as an integral part of their growing understanding of deafness. In some instances, home training programs encourage deaf parents to work closely with hearing parents as they help their child develop communication skills. At

least three provinces, British Columbia, Alberta, and Manitoba, have also developed programs that specifically recognize the needs of hearing children of deaf adults. These children can access language and speech play programs which address their needs for verbal rôle models and the deaf parents of these children can become involved in support groups.

Financial support for early childhood programs comes from each provincial Department of Education for children between the ages of two years, five months, to five years, five months. The provincial departments of Health fund early intervention programs for children from birth to three years of age. Perhaps one of the most critical issues facing these programs today is the need for specially trained personnel. Since communication is one of the key issues, it is critical that the specialists involved have a good understanding of the impact of hearing loss on the child and family. Furthermore, they must have the skills needed to help develop audition, speech, and language so that this critical time is not lost and the child has an opportunity to reach the fullest expression of his or her potential. Counsellors, speech-language pathologists, and early childhood teachers are readily available, but few have the background in deafness that can meet the specialized educational demands of these children and their families. Some university training programs are attempting to meet these needs by offering degrees which allow specialization in both early childhood and special education, but as yet these are few.

Parent counselling is seen as a critical component of early childhood intervention systems, and services are developing rapidly in most provinces. Courses are offered through universities, and in-services and summer camps for families have gained recognition for providing supportive environments for learning. The camps provide parents and children with the opportunity to share time with each other and with other families who share similar experiences. All age groups may participate in short courses, discussion groups, and seminars which are offered daily throughout week-long camps.

### **Post-secondary Education**

In 1989, the first International Conference on Post-secondary Education was held in Edmonton (Wolf-Schein & Schein, 1991). The conference was a joint venture between the University of Alberta and Gallaudet University, and grew out of an urgent need to allow formal opportunities to discuss the concern about issues related to upgrading and furthering academic educational opportunities for deaf and hard-of-hearing students.

Because of the lack of federal control over educational policy, Canada finds itself hard-pressed to meet the needs of



young deaf adults as they attempt to gain further training, education, and experience as they prepare for future jobs. In the last ten years there has been a tremendous growth in program development at the community college level. These programs have been established to explore the needs of the adult Deaf. They often provide tutorial support, appropriate learning assessments, liaison, advocacy and in-service for any adult student enrolled in any of the community's post-secondary programs. A program in Victoria has set up offices in a less intimidating storefront setting in a nearby mall, thus promoting its philosophy of increasing the need for the development of useful literacy skills.

In Manitoba, the Deaf Human Services Worker Training Program project (Evans & Mitchell, 1991) was a joint venture of the Manitoba Government and the Children's Home of Winnipeg. Established in 1986, this project trained 12 deaf adults in human service occupations and did a complete evaluation of its successes and failures, its training model, the use of ASL, and its impact on other agencies. Future recommendations were also made.

The quality of post-secondary programs across Canada is inconsistent, due mainly to the fact that each province is responsible for meeting its own educational needs. The sources of funding, the method of delivery, and availability of delivery vary greatly (Rodda & Hiron, 1989).

For many years, students who graduated from Canadian schools went to Gallaudet University for further education. In 1984 over 100 students were enrolled at Gallaudet and only about 30 were attending post-secondary placements in Canada. In the early 1980s, increasing parental advocacy, increased legislated opportunities for all students with handicaps, and the focus on human rights led the federal Department of the Secretary of State to create three centres of specialization in Canada, in Alberta, Ontario, and Nova Scotia. They were mandated to "address barriers facing deaf students in each region of the country and to improve post-secondary education opportunities for disabled Canadians through research, development of support services, and innovative programming" (Rodda & Hiron, 1989). The University of Alberta in Edmonton has concentrated its efforts on seeking ways to improve access to universities and has specifically focused on post-secondary educational opportunities. The University of Western Ontario has concentrated on addressing the educational problems associated with communication difficulties, while St. Mary's University in Nova Scotia has dealt with support services available to all handicapped students, including those with impaired hearing.

Many Canadian universities are now offering special services to students with all types of disability. Deaf and

hard-of-hearing students usually have access to trained oral and sign language interpreters, note-takers, and necessary amplification devices.

### Teacher Education

There are now only three teacher training programs in Canada, two in the western provinces of B.C. and Alberta, and one in Ontario. In 1994, the Nova Scotia education program was closed pending results of a provincial investigation into the feasibility of moving the services to the provincial capital, Halifax. The remaining programs are a minimum of one year in length, and provide basic course work and practica which enable teachers to apply for professional certification through the Canadian Association of Educators for the Deaf and Hard-of-Hearing (CAEDH). This association was previously known as ACEHI, the Association of Canadian Educators of the Hearing Impaired. CAEDH has set minimum certification standards for training teachers, incorporating course work in language, speech, audiology, curriculum, and sign language. A specified number of hours of supervised practice teaching is mandatory.

All training programs are university-based, meaning that students are able to obtain either a Diploma or a Master's degree after completion of an undergraduate degree. The University of Alberta offers course-based and thesis-based Master's degrees, the University of British Columbia offers a thesis-based Master's program, and York University in Ontario offers a Master's degree in Deafness Studies. All the universities mentioned offer studies at the Doctoral level.

In order to teach in any of the provinces, regular teacher certification is mandatory. Most teachers specializing in deafness education have therefore already completed undergraduate education degrees and are pursuing this as an area of specialization. Some of them already have several years of experience teaching hearing children while others are just beginning their careers. Each of these students has specialized in one of three areas: pre-school education, elementary education, or secondary education.

University faculty in charge of the training programs are professors in education faculties who have specialized training and experience in working with deaf and hard-of-hearing people. In some cases, faculty in other departments such as audiology, linguistics, reading, and speech rehabilitation are invited to instruct or assist with instruction of some courses. All university programs invite both deaf and hearing teachers in the field to participate in guest lectures and, in some instances, to offer specialized courses as guest instructors. Deaf instructors have been hired in Canadian universities both as adjunct and tenure-track professors, and several deaf and hard-of-hearing people in

the educational system are actively involved as members of advisory committees.

All training programs are extremely dependent on trained teachers in the field, because these are the people who act as co-operating and supervising teachers for students placed in classrooms for practica. These practising teachers provide feedback to the students and share their knowledge and experience on an ongoing basis. These teachers take their responsibilities very seriously and provide excellent rôle models for the students.

Teacher education faces many challenges. Perhaps the most daunting is that of providing a comprehensive basic training in a one-year period. In order to ensure that basic competency requirements are met, the University of Alberta, for example, requires that students enter the program with the equivalent of an "introduction to deafness" course and basic course and skill development in sign language. Issues regarding exit criteria are being discussed in conjunction with the professional organization CAEDH. All university programs are involved in attempting to balance basic training with the need to provide some specialization in areas such as reading, behaviour disorders, multi-handicapped students, team teaching and consulting, and communication development. The role of the teacher is changing as students' needs increase and as models for integration attempt to provide for these highly specialized needs.

### Research

A Chair of Deafness Studies, the second in the world, was established in 1988 at the University of Alberta; the other Chair is at Gallaudet University in Washington, D.C.. The Alberta Chair was established through a \$1.2 million endowment in honour of Dr. David Peikoff, a famous Canadian Deaf leader. Its purpose is to encourage the undertaking of research and related projects that will be of benefit to deaf and hard-of-hearing Canadians.

Under the leadership of Dr. J. Schein and Dr. D. Stewart, two holders of the Chair of Deafness, research has been undertaken in the areas of sign language development, mediated communication (VLI - visual language interpreting and communication aides) and post-secondary education. In addition, extensive national and provincial demographic information has been collected. Under contract from Statistics Canada, the Chair analyzed data on hearing impairment from the Health and Activities Limitation Survey (HALS), a post-censal study of Canada's disabled population conducted in 1986-7. The Chair has also established the Alberta Disability Database in response to a need for accurate and up-to-date information (Report from the David Peikoff Chair of Deafness Studies, 1991, 1993).

In 1991 a government grant provided opportunity for a research seminar to be held in conjunction with the ACEHI Convention in Calgary. Twenty guest participants discussed the status and focus for research in hearing disabilities in Canada and suggested proposals and ideas for future directions which included the following (listed in alphabetical order): assessment, communication technology, disability statistics, educational interpreting, language and cultural issues, literacy, language development and linguistic competence, mental health, post-secondary education and adult learning, teachers and researchers in schools, teacher education, and classroom settings.

In addition to these specific ideas for the direction of future research, ongoing projects at the various universities across Canada involve investigation into issues related to inclusive education, teaching and learning English as a second language, the impact of ASL as a first language of instruction, bilingual/bicultural education, the prevalence of hearing loss among the Northern Native population, gifted hard-of-hearing and deaf students, sexual abuse, mother-child interactions with deaf infants, the effects of congregated facilities among staff and students (both deaf and hearing), hearing children of deaf parents, and the impact of new technologies involving cochlear implants.

### Conclusion

Canada is facing challenging times in the area of educating deaf and hard-of-hearing individuals, both children and adults. Faced with a wide variety of options, the opinions and perspectives of educators can differ greatly; perhaps this is Canada's special strength. Diversity of perspective encourages change and growth. The common goal is to improve the educational environment so that each deaf and hard-of-hearing student can develop to the best of his or her potential.

### Acknowledgments

I am indebted to several Canadian colleagues, both deaf and hearing, who provided feedback and suggestions for improvement for this article. My colleague, Dr. Bill Brelje, suggested that I write this article and I am grateful for his request. My research assistant, Leslee Bruce, provided superb editing skills and general feedback.

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