Adults with Hearing Impairments: Present and Future Educational Opportunities in British Columbia.

Discussion Paper 02/84.

British Columbia Dept. of Education, Victoria.


Dec 84

46p.

Information Analyses (070) -- Reports -- Descriptive (141) -- Collected Works -- Serials (022)

Because of limited appropriate educational opportunities, most adults in British Columbia with hearing impairments do not continue their education beyond the age of 19. Conservative estimates indicate that hearing-impaired adults participate in colleges and provincial educational institutions at a rate that is 10 to 15 times smaller than that of the general population. Efforts to meet the needs of adult learners with hearing impairments both in British Columbia and elsewhere were reviewed. This review indicated that the following actions are particularly needed to eliminate the major barriers to participation in postsecondary education by adults with hearing impairments: development of clearly articulated policies regarding funding guidelines and the provision of educational opportunities; provision of support services, including trained interpreters, tutors, counselors, and notetakers; development of individualized admission and assessment procedures; and formulation of community-based planning strategies. (This report includes detailed examination of the resources and gaps in the current provisions to meet the needs of hearing-impaired adults.) (MN)
ADULTS WITH HEARING IMPAIRMENTS:

Present and Future Educational Opportunities in British Columbia

December, 1984
Canadian Cataloguing in Publication Data

Main entry under title:
Adults with hearing impairments:

(Discussion paper, ISBN 0-928-46-074-6; 07/88)

Bibliography: p.
ISBN 0-7736-0096-7


87-079:164A 88:1086 87-1311:06/74 89-3095 38-9
PREFACE

The Ministry of Education initiated the development of a series of Discussion Papers in the general area of Adult Special Education. The papers are intended to stimulate discussion with regard to the implementation of the Ministry's policy on Adult Special Education in specific areas or with specific target groups. In part, the Ministry's Policy states that:

The Ministry of Education views adult special education as an integral part of the total educational enterprise within public education institutions. It is the policy of the Ministry of Education that those disabled adults whose needs can be met by a public educational institution will have reasonable access to appropriate learning opportunities.

When reviewing this paper, the reader should be aware that there is already in place a multitude of policies which guide the Post-Secondary system and within which all program areas must function. For example, the concept of local programs has evolved from the assumption that in most cases individual institutions are best able to determine the educational needs of their respective communities. In order to operationalize this principle there is a consensus that block grants are preferable to designated funding schemes. In addition, new course proposals originate with the institution and are put forward via the regular program approval process.

It is hoped that this paper will generate informed discussion of this important program area.

[Signature]

Lorne Thompson, Executive Director, Program Services.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>1</td>
</tr>
<tr>
<td>RECOMMENDATIONS</td>
<td>11</td>
</tr>
<tr>
<td>PROJECT ADVISORY COMMITTEE</td>
<td>iv</td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td></td>
</tr>
<tr>
<td>A. A FOCUS ON EDUCATIONAL POLICY</td>
<td>1</td>
</tr>
<tr>
<td>B. HISTORY OF THE PROJECT</td>
<td>2</td>
</tr>
<tr>
<td>C. PURPOSE OF THE REPORT</td>
<td>4</td>
</tr>
<tr>
<td>D. GLOSSARY</td>
<td>5</td>
</tr>
<tr>
<td>2. THE NEEDS</td>
<td></td>
</tr>
<tr>
<td>A. THE POPULATION AND ITS EDUCATIONAL NEEDS</td>
<td>7</td>
</tr>
<tr>
<td>B. OBSTACLES TO EDUCATIONAL OPPORTUNITY</td>
<td>9</td>
</tr>
<tr>
<td>C. NECESSARY CONDITIONS FOR IMPROVED LEARNING OPPORTUNITIES</td>
<td>10</td>
</tr>
<tr>
<td>D. SUMMARY</td>
<td>17</td>
</tr>
<tr>
<td>3. CURRENT PROVISIONS IN BRITISH COLUMBIA: RESOURCES AND GAPS</td>
<td></td>
</tr>
<tr>
<td>A. OVERVIEW</td>
<td>18</td>
</tr>
<tr>
<td>B. VANCOUVER COMMUNITY COLLEGE</td>
<td>18</td>
</tr>
<tr>
<td>C. OTHER COLLEGES</td>
<td>20</td>
</tr>
<tr>
<td>D. WESTERN INSTITUTE FOR THE DEAF</td>
<td>21</td>
</tr>
<tr>
<td>E. VOCATIONAL REHABILITATION SERVICES</td>
<td>22</td>
</tr>
<tr>
<td>F. MINISTRY OF HUMAN RESOURCES</td>
<td>23</td>
</tr>
<tr>
<td>G. SERVICE CLUBS</td>
<td>23</td>
</tr>
<tr>
<td>H. SUMMARY</td>
<td>23</td>
</tr>
</tbody>
</table>
Adults with hearing impairments have a full range of educational needs, and, with adequate provisions, are able to successfully complete almost all educational programs available to their hearing peers. However, because of the paucity of appropriate educational opportunities most adults in British Columbia with hearing impairments do not continue their education beyond the age of nineteen. By conservative estimates, such adults participate in colleges and provincial institutes at a rate which is ten to fifteen times smaller than that of the rest of the population. As a result, hearing impairments become limiting handicaps which severely reduce the possibilities for independent and productive living.

In this paper it is recommended that more appropriate, adequate, efficient and effective educational provisions be established for adults with hearing impairments. On the basis of a review of significant efforts elsewhere and the currently limited provision in the province, it is suggested that a provincial centre be established at one public educational institution in the lower mainland. This centre would have a comprehensive range of special programs and services. It would also be mandated to provide assistance and support to other colleges and provincial institutes, upon request, as they attempted to establish more limited, basic services for individuals or small groups.

The keys to providing proper educational opportunities are seen as (1) the development of clear policies, (2) the use of consultative, community-based planning methods, and (3) most importantly, the recognition of adults with hearing impairments as full partners in the planning and delivery of educational service and programs.
RECOMMENDATIONS

On the basis of the information contained in this report, it is recommended that the Ministry of Education take the following steps:

1. Recognize the right of adults with hearing impairments to enjoy full access to appropriate public educational opportunities.

2. Designate a central resource for the education of adults with hearing impairments at an existing public educational institution in the province, giving this institution a mandate for the provision of (a) a comprehensive high quality group of special programs and services, and (b) assistance, resources and special services to other public educational institutions in the province wishing to offer basic services, as appropriate.

3. Form a consultative committee, including persons with hearing impairments as well as educators and representatives of other governmental and service agencies, to advise on all matters relating to the education of adults with hearing impairments.

4. Initiate a provincially available training and upgrading program for interpreters which will provide the basis for quality and professional interpreting services.

5. Develop models and resources for training programs for notetakers and tutors for adult students with hearing impairments.

6. Issue policy guidelines on the education for adults with hearing impairments while encouraging the development of complementary policies in other ministries.

7. Formulate a three-year provincial development plan for the education of adults with hearing impairments.
7. Develop and implement a method of assessing the educational needs of and recommending educational options for adults with hearing impairments as they leave the school system and prepare to enter the post-secondary system.

8. Provide for much greater coordination between the schools and the post-secondary systems—and within the post-secondary system—in relation to concerns such as the transition of students between the systems and the sharing of special equipment as well as information.

9. Actively pursue and take responsibility for a coordinated inter-ministerial approach to the provision and funding of educational counselling, interpreter, notetaking and tutorial services in colleges and provincial institutes, as required.

10. Conduct and participate in research into matters such as relevant instructional methods, recently developed special equipment and vocational opportunities for adults with hearing impairments.
PROJECT ADVISORY COMMITTEE

The Ministry of Education takes sole responsibility for the contents of this paper. It has requested and appreciated the advice of an active and broadly based advisory committee. The committee contained, by design, many diverse views. Because of its dedication and thoughtfulness, it was able to reach consensus on most aspects of this report. The Ministry of Education takes this opportunity to thank the committee. Special thanks go to Mr. Jake McInnis, the chairperson, and Ms. Diana Ellis, the researcher. The membership was as follows:

Jake McInnis, Chairperson
East Kootenay Community College

Bill Bain
Western Institute for the Deaf

Bradford Bentley
Public Service Commission
Government of Canada

Wayne Bottlinger
Vancouver Community College

Eric Cardinall
Gibsons, B.C.

Randi Duke
College of New Caledonia

Don Hume
Ministry of Labour

Gladys Loewen
Douglas College

Maida Long
Vancouver Community College

Lynn Siddaway
Western Institute for the Deaf

Frank Cassidy, Project Coordinator
Ministry of Education
1. INTRODUCTION

A. A focus on educational policy

Education has long since ceased to be a luxury or a privilege for most British Columbians, yet for adults with disabilities, particularly those with hearing impairments, any form of education or training is indeed a privilege that few can hope to enjoy.

The Ministry of Education's recent policy statement on Adult Special Education (March 1987) states:

It is the policy of the Ministry of Education that those disabled adults whose needs can be met by a public educational institution will have reasonable access to appropriate learning opportunities.

Many of the educational needs of adults with hearing impairments could indeed be met by public institutions if relevant policies were developed and adequate support services and programs were provided. To date, such services have been available only on a very limited basis. As a result, adults with hearing impairments cannot be said to have "reasonable access" to appropriate learning opportunities in the public educational system.

The Ministry of Education's policy statement on adult special education (ASE) deals with much more than reasonable access. It encourages public educational institutions to coordinate their activities with other agencies, develop appropriate curricular resources, create innovative programs, provide needed support services, and ameliorate the full range of often hidden obstacles which can exclude adults with disabilities from participation in public education. The policy indicates that public educational institutions have an important role to play in helping adults with disabilities to achieve greater independence. In sum, it lays a basis for a much more appropriate and adequate
commitment by the province to the education of adults with hearing impairments as well as other kinds of disabling conditions.

This paper is intended to provide a focus for the discussion of what that commitment might be. It is not a policy statement on the part of the Ministry of Education. Rather, it is an examination of those policies which might be articulated and implemented if adults with hearing impairments are to have greater educational opportunities in the near future.

B. History of the project

This paper represents several years of widespread discussion in the province. It is based upon a wide variety of research and background study, including:

1. The discussions of a broadly-based advisory committee with membership from public education, other governmental agencies, community support services and the hearing impaired community itself;

2. The work of a travelling team of resource people from the province who visited eight prominent centres for the education of adults with hearing impairments in several regions of North America;

3. A review of relevant literature;

4. A one-day conference on the topic, which provided ample opportunity for discussion and participation on the part of the lower Mainland hearing impaired community, and an update on the progress of the project;

5. Discussions with other concerned groups, initiated by college-adult special education (ASE) coordinators throughout the province, followed-up by workshops at ASE professional development events;
6. Many other formal and informal discussions throughout the province.

The origin and highlights of the process of development are outlined below.

In 1977 the Ministry of Education established an Advisory Council on the Education of the Hearing-Impaired in British Columbia. The Council formed a sub-committee on post-secondary education in June, 1978. During the summer of 1978, a research student conducted a survey of provincial universities, colleges and institutes regarding education and training opportunities (Maciborski, 1978). In July 1981, the Council asked the Ministry to study the educational needs of adults with hearing impairments. Eventually, the Council and the Continuing Education Division of the Ministry embarked on the project which has culminated in this report. Since that time, the Council has ceased to exist, but many of those who were active on the post-secondary sub-committee continued to be active on the advisory committee for this project.

In the spring of 1982, work on the project commenced when four persons from British Columbia visited eight outstanding centres for the education of adults with hearing impairments in North America. They were Lynn Siddaway, Executive Director of the Western Institute for the Deaf; Henry Vlug, a representative of the Greater Vancouver Association of the Deaf; Byrl Kalk, interpreter at the Western Institute for the Deaf; and Jake McInnis, Principal of East Kootenay Community College. This group visited post-secondary educational institutions in the cities of Toronto and Winnipeg and the states of New York, Minnesota, Washington and California. Subsequently they made a report on their visits, recommending that a centralized, continuous and comprehensive vocational training program be developed in the province (Vlug, 1982).

In the winter of 1983, the advisory committee to the project was formalized and expanded to include representation from colleges, the Western Institute for the Deaf, the Vocational Rehabilitation Services of the Provincial Ministry of Labour, the Greater Vancouver Association of the Deaf and the Federal Public Service Commission. Jake McInnis continued to serve as chairperson.
1. Ellis of Vancouver was retained as a project researcher with the primary responsibilities of assisting the advisory committee as it discussed relevant questions, and drafting a report.

2. In April 1983 the Ministry of Education, the Western Institute of the Deaf and Vancouver Community College co-sponsored a one-day workshop at the college's King Edward Campus. This workshop, entitled "Post-Secondary Educational Opportunities for Adults with Hearing Impairments," was attended by approximately seventy people. It provided an opportunity to discuss the present situation in British Columbia; consider a report on provisions elsewhere from the group who had travelled outside British Columbia; and hear the concerns raised by the many adults with hearing impairments and others in attendance. In the months following the conference, this report was completed.

3. The provision of more adequate and appropriate educational opportunities for adults with hearing impairments in British Columbia will continue to be discussed and explored. The paper is a contribution to that discussion.

C. Purpose of the report

This report is intended to

1. describe and clarify the post-secondary educational needs of adults with hearing impairments in British Columbia;

2. examine current provisions in British Columbia and elsewhere;

3. examine the most likely options for future development; and

4. propose specific recommendations for Ministry of Education action.

Section 2 examines the educational needs and the learning conditions required by adults with hearing impairments. Section 3 describes current educational opportunities in the province. Section 4 summarizes the lessons
which can be learned from an analysis of special provisions elsewhere in North America. Section 5 discusses some alternatives for future developments.

D. Glossary

The following list of terms is intended to clarify their use in this discussion paper.

Hearing impairment: a generic term which describes all levels of hearing loss that result in significantly reduced access to educational opportunities. As used here, this term applies to all deaf persons and only those hard of hearing persons who have very significant impairments.

Deafness: a hearing loss so severe that the person can only understand speech primarily by means of visual cues (i.e., signing and/or speech-reading).

Hard of hearing: a person who is hard of hearing can understand speech primarily auditorily, with or without a hearing aid and with minimal necessity for visual cues. The hearing loss may or may not interfere with full access to educational opportunities.

Oral hearing-impaired person: a hearing-impaired person who does not use sign language, but who uses residual hearing in conjunction with speech reading in order to understand speech, and who communicates orally.

Sign: a unit of sign language which represents a concept. A sign is made with either one or both hands formed in distinctive handshapes. A sign has a location, orientation and movement which are peculiar to it.
American Sign Language: a visible language that is linguistically independent of English. Its signals are handshapes and movements that represent words, concepts or letters of the English alphabet. It is also known as ASL and Ameslan.

Fingerspelling: the spelling out of words and sentences one letter at a time on the hands, using the manual alphabet.

Signed English: the use of signs from American Sign Language within an English syntactic order.
2. THE NEEDS

A. The population and its educational needs

All of the evidence collected for this report indicates that adults with hearing impairments have a full range of educational needs. Depending on their goals and present skills, they may require vocational and career training, academic as well as adult basic education and continuing education. Available information tends to indicate that vocational training is the need most strongly felt by the hearing impaired population itself. Adult basic and preparatory education is also a priority. Adequate provision is necessary in every area of educational concern.

Because of the paucity of appropriate educational opportunities in British Columbia, most adults with hearing impairments do not continue their education beyond the age of nineteen. Those that do often leave the province to pursue their educational goals at places such as Gallaudet College in Washington, D.C.

It is difficult to estimate the number of adults with hearing impairments presently living in the province. Figures obtained from many sources in the course of this project indicated that there are from 6,000 to 10,000 people so affected. Much of this population is located in the Lower Mainland. Additional population pockets are located in the Victoria, Prince George and Kamloops areas.

As of June 1983, the Vocational Rehabilitation Services of the Ministry of Labour knew of 49 B.C. students with hearing impairments attending post-secondary educational institutions and participating in credit programs in the province, in other parts of Canada and the United States. Because the Ministry of Education does not keep similar figures, this is
the best available figure concerning the participation of adults with hearing impairments in post-secondary education.

If the figure of 7,500 adults is taken as a conservative population estimate and the Ministry of Labour's statistics are used as a base estimate of participation by adults with hearing impairments in the public education system, it can be seen that the estimated participation rate of adults with hearing impairments is considerably less than that of the population as a whole. By these conservative estimates, it is ten to fifteen times lower.

Successful educational programs elsewhere in North America indicate that this situation is not related to any innate incapacity on the part of adults with hearing impairments to learn and function successfully in educational settings. The source of the problem lies elsewhere. It lies in the nature of the available educational opportunities. It is not a matter of potential, it is a matter of opportunity. Adults with hearing impairments in British Columbia have much less of an opportunity to gain access to educational opportunities than the population as a whole. For such adults, hearing impairments have become limiting handicaps severely affecting their chances of leading independent and self-determining lives.

Estimating the number of potential adult students with hearing impairments is essential for adequate program planning. In 1982, the Ministry of Education knew of 1,454 hearing-impaired students in British Columbia elementary and secondary schools. Of those, 159 were enrolled in Jericho Hill School for the Deaf in Vancouver, and 1,295 were enrolled in other public schools throughout the province.

These numbers indicate one future group which might seek further educational opportunities. Another source of need stems from the significant "backlog" of those who have been out of the school system for some time, but have been unable to access appropriate educational
opportunities because of the conditions described throughout this report. The Western Institute for the Deaf, for example, estimates that well over 100 of its present clients in the Lower Mainland area would be referred to training programs in public educational institutions if appropriate support services and programs were available.

It would be useful for the Ministry of Education to more accurately determine the numbers of adults with hearing impairments interested in pursuing further education. Even this cursory review clarifies the fact that there is a constituency which would seek educational opportunities— if they were available.

B. Obstacles to educational opportunity

There are many reasons why hearing-impaired adults have difficulty in accessing educational opportunities. Indeed, most students with hearing impairments face several consistent obstacles in their search for education. Here are some typical obstacles.

* The educational institution at which the student wishes to study is inaccessible, not having any (or enough) support services available.

* The student and/or institution cannot obtaining funding for interpreters and notetakers.

* Individualized and appropriate admission procedures to programs are not available.

* The student does not wish, or perhaps is not able to re-locate to places where specially designed programs and services are available.

* A predominant attitude on the part of educators and others, often including the student, that adults with hearing impairments are not able to participate in or benefit from normal public educational programs.
Adults with hearing impairments require the same access to educational opportunities as their hearing peers. Just as all human beings do, they have the right and the ability to learn. If they are to exercise that right and develop that ability through the use of formal educational provisions, the education system itself must first learn and then change accordingly. A number of consequences should then follow.

First, there should be a co-ordinated response to the challenge. Piecemeal funding and program development, undertaken without decision-making and participation from concerned agencies, consumers and public educational institutions in all regions of the province, is neither productive nor appropriate.

Second, there should be a clearly stated public policy, expressed through guidelines and public statements, regarding educational provisions. It must be made clear that adults with hearing impairments do have a right to public education provisions.

Third, there should be the development of adequate, appropriate, efficient and effective support services and special instructional programs, where appropriate.

Fourth, admission to public educational programs should be based on individualized, appropriate procedures.

Fifth, there must be leadership and commitment from all sectors of the public educational system.

C. Necessary conditions for improved learning opportunities

A number of conditions of learning are needed for optimum use of educational opportunities by adults with hearing impairments. These include the development of appropriate policy; the provision of suitable
support services; the use of individual admission and assessment procedures; and the pursuit of community-based program planning strategies. Taken together, these conditions point to an essential concept: if the situation outlined in the last section is to be altered, the public education system needs to adapt as much as, or more than, adults with hearing impairments.

1. Policy

A critical first step in providing improved learning conditions is the development of clearly articulated policies regarding funding guidelines and the provision of educational opportunities. These policies should be developed by the Ministry of Education, post-secondary education institutions and other ministries, with the active advice of adults with hearing impairments and those agencies which represent their needs. The Ministry of Education should assume a central role in coordinating such a policy development process. If the Ministry does not take this action, there is little chance that there will be appropriate programs and services in British Columbia.

2. Support services

Whatever their choice of educational opportunities, comprehensive and adequate support services are primary requirement for adults with hearing impairments in public educational settings. While support service needs will vary depending on the kinds of communication skills students have previously acquired, trained interpreters, tutors, counsellors and notetakers are commonly needed. Each of these resources must be provided when required.

The importance of these support services cannot be overstated. Most students with hearing impairments have significant difficulties in mastering the communication skills required in educational programs.
As a result, signing and oral-hearing impaired students—as well as many hard of hearing students—often require modifications in the language used in instructional settings and learning materials. Unless such modifications take place, students may have difficulty in mastering otherwise accessible subject matter. They may also have to face barriers which have no relationship to those they might face in employment and other social settings. A flexible approach to such reading and language difficulties is essential, and may be focussed through support services. The following is a brief description of the most important components of such services.

a. Trained Interpreters for the deaf

An interpreter is a person who is trained and qualified to facilitate communication between hearing and non-hearing persons. One who knows finger spelling and some signs, or who simply repeats the spoken word so that it can be lip-read, is not an interpreter. An interpreter must have a high level of special skills which are formally certified. It is important to realize that interpreters do not solely assist persons with hearing impairments. Interpreters enable hearing and non-hearing persons to communicate with one another.

Interpreting is difficult and time-consuming. Students require interpreters for lectures, group activities, seminars and interviews with instructors. An interpreter is often required for as many hours a day as the student is present at an educational institution. Indeed, occasionally a full-time student can require the equivalent of a full-time interpreter. The need for interpreter service will vary for each student.
b. Notetakers

A notetaker, in this context, is someone who is trained to take accurate notes that are useful for adults with hearing impairments. Notetakers are necessary because it is practically impossible for an adult with a hearing impairment to pay attention to what is being said by an instructor and to take notes at the same time. If the notetaker is another student, that student should not be taking the course. Ideally, notetakers should have some training and should be paid for their work. In some instances, volunteers can be used; but they should be used cautiously. Volunteer notetakers should always receive some training and have access to expert advice.

c. Tutorial assistance

The majority of students with hearing impairments benefit from individual tutoring in order to participate in educational programs satisfactorily. Many students require tutors simply to enhance the work undertaken in the classroom. For others, tutoring may involve some language and reading upgrading, or a remedial reading course.

d. Counselling assistance

Students with hearing impairments often have more need of counsellors than do regular students. Extra help is needed in deciding on realistic vocations, in dealing with problems related to housing, transportation, and many other issues. Good counsellors play a critical role in helping students to continue progressing in educational settings.

To work most effectively, counsellors should have specific training in all matters relating to hearing impairments, be skilled in sign language, and be able to communicate with oral students with
hearing impairments. Minimally, counselling staff should be encouraged to participate in training and awareness programs on the education of adults with hearing impairments.

e. Speech and hearing services

The services of an audiologist and speech/language therapist should be available, upon need, to students with hearing impairments. Such services are often available to children, but they have not often been made available to adults. As a consequence, adult students can, and do, suffer much pain and frustration. While public educational institutions cannot expect to have full-time audiologists or speech/language therapists on staff, they should recognize their responsibility to make the availability of the services of these professionals more available.

f. Other support services

Other support services, which should be provided, resources permitting, are sign language training for regular staff; advanced and technical signing classes; orientation workshops for new students; speech reading classes; career and educational exploration programs; and related in-service training for instructional and support staff. The provision of technical aids (hearing aids, FM systems, etc.) should also be ensured. Teachers, other staff, and students should be instructed in the use of technical aids.

3. Individualized admission and assessment procedures

A vital condition of learning for adults with hearing impairments is the use of individual assessment methods to decide if particular students should be admitted to particular programs or courses. The key to this approach is to ensure that the hearing-impaired student's disability does not result in a
situation where normal procedures discriminate in abnormal ways against acceptance into a public education setting.

Since people with hearing impairments have different language capabilities, individual assessment offers a relatively non-discriminatory approach to program admission. Such procedures may be relatively straightforward. The necessary competencies required of a student to enter and succeed in a particular program are clarified. Then, an individual evaluation of the student is made to determine if, with appropriate support services, the student can effectively take part in the program.

Program evaluation and examination procedures for students participating in, or preparing to exit from educational programs present similar challenges. Successful exit from programs should be based on how well adults with hearing impairments meet the competencies set out as learning objectives in the programs in which they are enrolled. Again, because such adults often have different communication skills, decisions about passing or failing such students should be based on individual evaluation, rather than, for example, mass testing. Such procedures result in more accurate and equitable assessments.

Valid procedures for testing functional abilities are particularly important in light of the attitudinal barriers that often lead to uninformed or incorrect prejudgements of capabilities. Tests and evaluations must be structured and used carefully to ensure they do not discriminate unintentionally. Test administrators should be experienced in testing individuals with hearing impairments. If these cautions are observed, the results should reflect more accurately the student’s aptitude or achievement level, or whatever other factor the tests purport to measure.

4. Community-based planning strategies

It should be clear that an extensive range of educational services is necessary to create proper learning conditions for adults with hearing
Impairments. Effective educational planning should involve all groups concerned, and should take into account:

1. the number of hearing-impaired people in the immediate geographical region;
2. the number who wish to access educational opportunities;
3. the special medical, educational and social services for persons with hearing impairments presently existing in the region;
4. the range of programs and services which the local post-secondary institutions.

Satisfactory fulfilment of the foregoing criteria may create the critical mass necessary for the successful and cost-efficient development of a comprehensive range of specialized educational programs and services.

Critical mass is formally defined as the amount of material needed to maintain a nuclear chain reaction. In the context of this report, critical mass means the gathering of enough potential students, support services and community services, as well as a broad enough grouping of educational programs, to create a milieu which would maximize learning. Only where a critical mass is established can comprehensive educational provisions be established. More basic provisions for an individual or small groups may be made elsewhere, but care must then be taken to observe minimal standards of quality are to be observed.

Decisions about the development of special programs and services for adults with hearing impairments have to be made carefully. Whether educational provisions are intended to be comprehensive or basic, such decisions can be made only on the basis of community-based planning strategies which involve a wide range of concerned people and appropriate agencies.
D. Summary

There is a clear need to identify more accurately the actual numbers of adults with hearing impairments who might avail themselves of increased public educational opportunities in the province. A recent report prepared by the College of New Caledonia, covering that college's region as well as the regions of Cariboo and Northwest Colleges provides an example of how this work could be done (Davies, 1983).

The need for trained interpreters, tutors, notetakers, and counsellors is also clear. Other support services that should be developed as part of a comprehensive effort include sign language training for regular education staff, technical and advanced signing classes, speech reading classes, orientation classes, career exploration programs, and special equipment provision.

The need for a policy that encourages admission to and exit from courses and programs based on individualized assessments is crucial; it is also likely to be difficult to put into practice, given current attitudes and normal procedures concerning admission and assessment criteria. More discussion and research on this matter is required.

The problems are difficult and multi-faceted, but the goals are worthy. Two keys to the thoughtful and meaningful solutions which will enable adults with hearing impairments to enjoy a proper and full range of educational opportunities are: (1) clear, provincially applicable policies, and (2) community based planning, as described above. Effective implementation need to take account of current educational provisions for adults with hearing impairments in British Columbia and elsewhere. These current provisions are the subject of the next two sections of this paper.
III. CURRENT PROVISIONS IN BRITISH COLUMBIA: RESOURCES AND GAPS

A. Overview

This section reports on current provisions for the education of adults with hearing impairments in British Columbia. Included are descriptions of the services offered by Vancouver Community College's King Edward Campus and the other colleges in the province. Services available through the Western Institute for the Deaf, the Vocational Rehabilitation Services of the Ministry of Labour, the Ministry of Human Resources and service clubs are also described.

B. Vancouver Community College

1. Services for adults with hearing impairments

Through the Adult Special Education (ASE) Department at King Edward Campus, students with hearing impairments may attend a specially designed program which provides instruction in life skills, research and career orientation skills, as well as those basic educational skills which are required for admission into further academic or vocational training or for directly finding employment. The department also offers part-time courses in mathematics, communication and speech-reading for those students who cannot attend full-time. The department operates a highly individualized program on a continuous intake basis. This is the only cluster of specially designed programs in the province.

The following statement from the King Edward Campus calendar for 1982/83 regarding services for disabled adults also applies to adults with hearing impairments:

A person with exceptional needs arising from a physical, a communication or a learning disability need not restrict his/her choice of courses to those offered by the Adult Special
Education Department. If a candidate can adequately satisfy admission requirements to College Foundations, Communication Arts, or Training and Development Programs, King Edward Campus will endeavour to accommodate his or her special requirements...instructional assistants can serve as readers, brailleists and on-campus guides for the visually-impaired and as interpreters/notetakers for the hearing-impaired.

Although the college goes on to note that such human resources are presently quite limited, it indicates that students with hearing impairments may also take orientation classes, upgrading classes (from the basic literacy to Grade 12 level), vocational classes, and the first two years of university transfer courses. Such students are encouraged to participate, to as great an extent as possible, in regular classes with the provision of support services such as interpreting, tutoring and F-M loopless hearing aid equipment.

In the 1982 winter session 21 hearing-impaired students enrolled half-time (15) at King Edward Campus. Twelve of these students were full-time (30). There were seven part-time students attending regularly. There were also four hearing-impaired students attending the Langara campus of the College and two at the Vancouver Vocational Institute, all receiving assistance in varying degrees, from the ASE Department of the King Edward Campus. One of the Langara students and two of the King Edward students were blind as well as deaf. Two others also had visual impairments.

2. Training for the para-professional worker with the hearing and visually impaired.

The King Edward Campus training program for the para-professional worker with the hearing and visually impaired accepts twenty students for each ten-month program. This program is an expansion of the former training program for the para-professional worker with the hearing-impaired, but training in relation to the special needs of the visually-impaired has been added to enhance the employment opportunities of the graduates.
3. Sign Language Training

King Edward Campus also offers part-time sign language classes. During the 1982 winter session, more than 180 hearing students were enrolled in these courses. The courses are free of charge to faculty and staff.

C. Other Colleges

Adult special education coordinating personnel work at thirteen of the colleges in British Columbia. To date, significant populations of hearing-impaired persons have been identified in the Victoria, Kamloops and Prince George areas by these staff and limited assistance has been offered to some of those who wish to attend local colleges. Lack of interpreter and other special services as well as inadequate funding have been identified as major problems.

Douglas College offers upgrading for those who are working as interpreters, sign language training and a program entitled "Dealing with Your Hearing Loss". Northwest Community College offers an eight-week career exploration program for special needs students. During the spring of 1983, three hearing-impaired students were in attendance. Beginning signing classes are also offered. The College of New Caledonia, Northern Lights College and Cariboo College offer night school signing courses through their continuing education divisions. These signing classes are largely attended by hearing adults. Each of these colleges has a small number of students with hearing impairments in attendance at various times.

Recently, Northwest College and Cariboo College, under the sponsorship of the College of New Caledonia, engaged a researcher to determine the number of hearing-impaired students who would be interested in and able to attend a post-secondary institution. The resulting report outlines present provisions and potential needs in these regions (Davies, 1982).
D. Western Institute for the Deaf

The Western Institute for the Deaf (WID) offers interpreting services, assistance in making arrangements for program funding, vocational and personal counselling, audiological assessment and job placement services. WID will also arrange funding for students who need technical aids. Although the Institute has a provincial mandate, most of its services are provided in the Lower Mainland and, to a more limited extent, Victoria.

1. Interpreting services

WID provides interpreting services primarily for those adult students with hearing impairments in the Lower Mainland who use sign language. Such students attend day or evening classes at community colleges, the Pacific Vocational Institute and the University of British Columbia. The services are partially funded by the Ministries of Education and Labour and the Universities Council.

From September 1981 to April 1982, WID provided interpreting services totalling 1,889 hours for 21 adult students. This work was undertaken by five WID staff interpreters and three freelance interpreters. WID also provides the services of a coordinator/supervisor for its interpreter services. As this person monitors the performance of interpreters, the quality control ensures that students receive services of a high and uniform standard. It is less likely that they will fail due to the performance of an inadequate interpreter.

2. Counselling services

WID offers vocational and personal counselling to students who are WID or Vocational Rehabilitation Services (VRS) clients before and during training. Counsellors play a role in coordinating services for
the hearing-impaired client. They assist the client in making vocational choices and dealing with referrals to other agencies. They also advocate on their behalf and maintain close liaison with other involved agencies.

E. Vocational rehabilitation services

Vocational Rehabilitation Services (VRS), a part of the provincial Ministry of Labour, has a provincial hearing-impaired committee which meets monthly to review and assess clients referred for services. Members of the committee include personnel from the Canada Employment and Immigration Commission, Jericho Hill School for the Deaf, King Edward Campus of Vancouver Community College, and the Western Institute for the Deaf. In June 1983, VRS carried a total caseload of 130 hearing-impaired clients in B.C.

VRS also funds, through the Western Institute for the Deaf, the delivery of primary services to vocational rehabilitation clients with hearing impairments in Vancouver and Victoria. These provisions include counselling, interpreting, audiological services and some administrative costs.

Persons interested in vocational rehabilitation services either apply directly to VRS or, more commonly, are referred by WD, Jericho School, the Ministry of Human Resources or individual teachers. Funding can be provided (within a limited budget) for tuition, books, supplies, transport costs, and a basic maintenance allowance. In 1982/83, several British Columbia students with hearing impairments were attending Gallaudet College in Washington D.C. through full or partial funding from VRS.
F. Ministry of Human Resources

Limited funds are available from this ministry to sponsor students in post-secondary programs and the purchase of special equipment where needed.

G. Service Clubs

Financial assistance has been obtained individually basis by adults with hearing impairments for some specific educational programs and technical aids.

H. Summary

This review of current provisions for the post-secondary education of adults with hearing impairments in British Columbia indicates why the percentage of such students who participate in public education is very low. There are considerable non-educational resources available to adults with hearing impairments. There is little coordination of these resources, however, and there are significant gaps in their educational complements. With the exception of Vancouver Community College's special programs and services, and scattered services at a handful of other colleges in the province, there are no current provisions in the public educational system specially designed for adults with hearing impairments.

There is clearly a need for more provisions for adults with hearing impairments and for a better coordination of all available services. Because of the limited nature of the current provisions in British Columbia, many of those who are concerned about the educational opportunities have looked to well-regarded programs in other parts of North America for models and ideas. The next section of this paper outlines some of the exemplary practices observed in program such as these.
IV. CURRENT PROVISIONS ELSEWHERE: LESSONS TO BE LEARNED

A. Overview

As mentioned earlier, a carefully selected team from British Columbia visited several outstanding Canadian and American centres for the education of adults with hearing impairments in the spring of 1982. Further research was then undertaken on these and other institutions with special programs. Among the institutions visited and/or studied were: Grant MacEwan Community College in Edmonton, Red River Community College in Winnipeg, George Brown College in Toronto, the National Technical Institute for the Deaf in Rochester, New York, St. Paul Technical Vocational Institute in Minnesota, Seattle Community College in the state of Washington, California State University at Northridge, Ohlone College in Fremont, California, and Los Angeles Trade-Technical College in California.

Not all of these centres offer programs and services which are fully developed or entirely adequate. While each has something to offer in the way of useful knowledge, no one of them can provide an exact blueprint for what is required in British Columbia. A few, including the National Technical Institute for the Deaf and the St. Paul Technical Vocational Institute, have much to offer. Out of a comprehensive assessment of these programs, there emerge several clear lessons for British Columbians to learn and build upon, as they seek to augment current educational opportunities for adults with hearing impairments in the province.

B. Exemplary Practices

Ten exemplary practices are to be noted from the review of programs elsewhere in North America. They are as follows:
1. The proper location for educational provisions for adults with hearing impairments is within already established educational institutions which cater to the needs of all sectors of the adult population.

2. With proper support services, adults with hearing impairments can succeed in most instructional programs in which their hearing peers succeed.

3. People with hearing impairments face unique communications problems which are quite different from the needs of students with other kinds of disabling conditions. Therefore, the nature and extent of the special services required involve different kinds of expertise and, often, different personnel.

4. Special services for persons with hearing impairments flourish best when they are staffed, to a significant extent, by qualified persons who themselves have hearing impairments. Such staff may serve as role models for students; add perspective to the work of developing and maintaining valid, realistic program objectives; and facilitate communication process between students, instructors and other staff members.

5. A well qualified and adequate supply of interpreters, notetakers and tutors is absolutely essential to a successful effort. Special technical equipment for the use of students as well as speech and hearing services must be available. Counsellors with appropriate training are also a necessity.

6. There are telling points on either side of the issue of the advisability of self-contained and separate programs for adults with hearing impairments. By and large, experience has shown that an approach which emphasizes integration into regular programs with specially designed and clearly available support services can provide students with a
wider range of choice and more opportunities for quality learning experiences. Each student is provided with unique individual planning and assessment. For some, the most appropriate form of instruction may be participation within a special, separate program. For others, it may be full or partial participation in regular programs, with the provision of adequate support services. In every instance, educational planning is based on the needs of the student and not those of the institution.

7. Artificial barriers to program admission and exit must be removed and individual assessment, as described earlier, must be provided. For example, the majority of students can proceed directly into vocational training rather than upgrading for such training, if the artificial barriers described above are removed. Often it is these barriers, and not the competencies needed to function successfully in a training program and a related job, which are responsible for many of the problems encountered in educational settings.

8. Successful efforts have a sound and guaranteed funding base. They also tend to be developed on the basis of community-based program planning. Most particularly, there has to be a "critical mass" of students, internal support services and resources in the wider community, if programs are to be successful.

9. Knowledgeable, supportive, friendly attitudes on the part of staff and other students have a profound effect on the potential success of students with hearing impairments. Appropriate in-service training for instructors and other staff as well as general awareness education are key ingredients of a successful effort.

10. There is no one model which is suited to the needs of every community or region. Each jurisdiction must learn from experiences elsewhere and
design provisions which are most suitable for its specific characteristics and needs.

C. Summary

British Columbia can learn from experience elsewhere as it develops a model for providing more educational opportunities for adults with hearing impairments. It must do so with a true recognition of its own specific and unique needs. The alternatives for action are clear, and they are outlined in the next and final section of this paper.
A major purpose of this paper is to stimulate discussion of current and potential educational opportunities for adults with hearing impairments in British Columbia. In this section, four alternatives for future development are outlined. Each is then evaluated against selected criteria, as follows:

**Appropriateness**
Is it right to select this alternative? Does it provide for an equitable distribution of educational resources?

**Adequacy**
Given the size of the problem, will the alternative make enough of a difference to make it worthwhile? Does it match the extent of the needs?

**Effectiveness**
How successful will this alternative be in providing solutions to the problems?

**Efficiency**
How costly is the alternative compared to the benefits obtained? Are the benefits obtained worth the money and other resources used?

**Side Effects**
What consequence might result from selecting this alternative?
B. The Four Alternatives

Alternative 1. Maintain the current situation.

- Appropriateness
  
  This approach would not provide suitable educational opportunities. The needs of adults with hearing impairments would still be unmet, and these citizens would continue to receive an inequitable share of educational resources.

- Adequacy
  
  The solution would not be adequate, given the extremely low participation rates of adults with hearing impairments in public education as well as the clear expressions of the need that have been articulated throughout the province for more educational services and programs.

- Effectiveness
  
  The alternative would not provide clear policy guidelines, required support services or special programs, or the necessary community-based planning perspective.

- Efficiency
  
  In the short run, the province would save those further funds that might have been invested in the education of adults with hearing impairments. In the long run, this alternative is the most costly because it would neglect the development of human resources which, with adequate educational opportunities, could contribute in much greater ways to improved economic and social life throughout the province.
Side Effects

Increased frustration would be experienced by many adults with hearing impairments. These adults would have to continue to look outside the province for educational opportunity.

ALTERNATIVE 2. Develop special services and programs throughout the province.

Appropriateness

This policy would maximize equity by providing a level and range of educational opportunities comparable to that of the population generally.

Adequacy

Coverage would be provided throughout the province and at a variety of institutions, only if a large amount of funds were available and all institutions recognized and were willing to provide for relevant educational needs. A massive increase in complementary community services and the availability of trained interpreters would also be required.

Effectiveness

Depending on the amount of funding available, this would offer opportunities for many more students than do current arrangements: Unless the Ministry of Education were willing to increase its capacity to coordinate and monitor Adult Special Education very significantly, effective quality control of support services would not be available.

Efficiency

The result would be duplication and under-utilization of scarce educational resources.
Unless very large amounts of funds were available—an unlikely possibility—the result would be spotty and partial services which would be costly without assuring effectiveness.

Side Effects

Significant pockets of inadequate service would continue to exist because of low priority accorded to these needs by some institutions.

ALTERNATIVE 3. Establish a provincial centre with comprehensive provisions at one existing public education institution in the Lower Mainland, discouraging provisions elsewhere.

Appropriateness

The centre would benefit Lower Mainland students much more than others in the province. Geography and residency outside the Lower Mainland would become major barriers to equitable educational opportunity.

Adequacy

Service would be more adequate than current provisions, but would still be inadequate for those who do not want or are not able to leave their families and communities for education and/or employment.

Effectiveness

The approach would provide clear policy guidelines as well as quality programs and services at one institution, discouraging piecemeal program development.

Efficiency

Significant economies of scale could be achieved by locating all services at one centre. Other institutions might embark on costly efforts as they respond to local pressures.
Side Effects

Despite the lack of encouragement, some institutions might develop localized provisions of questionable quality as they attempt to meet community expressions of need. This alternative would increase the alienation felt by some in other parts of the province because of the centralization of provisions in the Lower Mainland.

ALTERNATIVE 4. Establish a provincial centre with comprehensive provisions at one existing public education institution with a mandate to assist, upon request, other public education institutions as they develop basic provisions.

Appropriateness

Even with the limitations of small populations of persons with hearing impairments and scarce community services in all but a few communities throughout the province, this would be a realistic and most equitable solution.

Adequacy

It would provide a solid base at one central location, encouraging the development of basic programs and services elsewhere. Given potential resources, this would be the most logical way to meet the needs.

Effectiveness

This alternative would provide clear policy guidelines and quality services and programs, emphasizing a central, comprehensive resource, but maximizing the potential success of more basic local responses.
Efficiency

Economics of scale would be achieved by locating many services and programs at one institution while providing for coordination as well as support for other institutions.

Side Effects

Because this is the most complex alternative, it would take longer to fully develop, causing some impatience and frustration, particularly to those outside the Lower Mainland.

C. Conclusion

Each alternative outlined above has strengths as well as weaknesses. When all the alternatives are weighed in light of the educational need, the current provisions in the province and lessons to be learned from experience elsewhere, it is clear that alternative four is the most preferable.

Alternative 1 (the current state) while otherwise unappealing, nevertheless costs the province nothing additionally in the short-term.

Alternative 2 (services throughout the province) would theoretically maximize equity, adequacy and effectiveness, but only if a large amount of resources were made available. If this were not the case—and given the economic times, it is not likely to be the case—this alternative would lead to confusion as well as a lack of equity and effectiveness. In any case, it might be quite inefficient and have negative side effects for the reasons outlined.

Alternative 3 (a provincial centre and no provisions otherwise) would not be appropriate or adequate for those outside the Lower Mainland. It would certainly maximize efficiency and effectiveness at the one centre, resulting in a comprehensive range of provisions.
Alternative 4 (a provincial centre with developmental services, upon request, for other institutions) would be the most difficult to develop in logistical terms because it would involve maintaining a constant balance between resources at and beyond the core. It would probably be more efficient than Alternative Two, and possibly as efficient as Alternative 3.

Given available resources and the dispersed geography of the province, it might be the most realistic way in which to maximize appropriateness, adequacy and effectiveness.

The establishment of a provincial centre with a mandate to assist other institutions requires adequate funding and a clear policy, but it also requires more: a carefully worked out plan of action which will emphasize the development of quality provisions and the maintenance of balance between the centre and other locations. If alternative 4 is adopted, a distinction will have to be made between the comprehensive provisions which can be made at the centre and the basic provisions which can be made elsewhere. Such a distinction would provide for the comprehensive, continuous kinds of services and programs at one location which this report indicates are preferable.

The one region of British Columbia which has all of the prerequisites for the development of a centralized resource is the Lower Mainland. It has the largest population with hearing impairments in the province. It also has an impressive concentration of social, health and other social services. Compared to any other region of the province it is the most accessible. It also has the most comprehensive range of educational opportunities of any region.

One very limiting factor on the development of adequate and appropriate educational provisions for adults with hearing impairments is the scarcity of trained and certified interpreters. If educational
opportunities are to be increased, then more interpreters will have to be available. A necessary complement to any augmentation of educational provisions has to be the development of a provincially available interpreter training program. Such a program should be located at the provincial centre, but it should also be made available in other forms to those who need it throughout the province.

Finally, a central resource located at an existing public educational institution in British Columbia could bring benefits to other parts of western Canada. Recent discussions among the four western provincial and two territorial governments have established the need for more educational opportunities for adults with hearing impairments throughout western Canada. A central resource in British Columbia could draw students from throughout western Canada and benefit from accompanying economies of scale and wider financial support.

The alternatives for the future are clear. So too is the current situation. It now awaits a number of critical decisions by government.
REFERENCES


Davies, Paula. "Report on the needs of hearing impaired persons in the College of New Caledonia region, Cariboo College region and Northwest College region." College of New Caledonia, 1983.
