An advisory committee was formed to examine the extent of the need for services for adults with learning disabilities in British Columbia, the ways in which these needs might effectively be met, and methods for increasing public awareness of adults with learning disabilities. It was determined that about 15 percent of the adult population of the province have some type of learning disability. A program of action to meet the education and training needs of these individuals was formulated. The plan included recommendations for funding voluntary associations for children and adults with learning disabilities; for organizing and funding a training and development program in adult learning disabilities for policymakers, administrators, counselors, and instructors; for providing comprehensive educational services for all adults with learning disabilities by colleges and universities in the regions in which they reside; for establishing a system for the interinstitutional coordination of services of adults with learning disabilities; for providing specialized assessment, diagnostic, and prescriptive services for learning-disabled adults; and for allocating the necessary funds to ensure the development and delivery of such services. (Appendixes to this report include a list of definitions of disabled and a discussion of learning disabilities among adults.) (MN)
PROVINCE OF BRITISH COLUMBIA
MINISTRY OF EDUCATION
DISCUSSION PAPER 01/84

A DESIGN FOR LEARNING
FOR
ADULTS WITH LEARNING DISABILITIES

Post-Secondary Department
Ministry of Education
Victoria, British Columbia

December, 1984
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 Total 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.

Lorne Thompson,
Executive Director,
Program Services.
SUMMARY AND RECOMMENDATION ACTION

SUMMARY:

About 15 percent of the adult population, despite having average or above average intelligence, are unable to use their full potential to learn new skills and knowledge. They have difficulty with reading, or retention, or visualizing, or organizing, or applying, or with co-ordinating hand and eye. Many have difficulty with several of these tasks. Their learning problems are not caused by lack of motivation, yet the problems are so frustrating as to cause these people even further doubt about their ability to learn. Often they will find ways to hide their mysterious disabilities from others, even from those who might help them.

This report recommends a number of specific ways in which the educational needs of adults with learning disabilities should be met. Although some service to assist these citizens is currently available, it is fragmented and its availability varies widely within the province.

Action is urgently needed in three particular areas.

First, greater public awareness and understanding of learning disabilities is required. More must be made known about the individual and public benefits that result from improved services to adults with learning disabilities.

Secondly, a greater effort must be made to improve the expertise of adult educators, including all those who are in a position to contribute positively to the education of adults with learning disabilities.

Thirdly, greater co-ordination of effort and resources by all who serve adult learners is required.
Progress in these areas could be integrated into a new "design for learning". This new design - a three-level support system - will begin with changes in most places of adult learning in the province. Instructors will improve their ability to identify learning disabilities and adapt instruction to adult learners with such problems. Improved out-of-class support services, available wherever adults learn, will complement the in-class improvements. At a third level of the system, specialized, expert services will be available in every college region at least.

In many parts of the province, institutions and agencies which already provide educational opportunities beyond the elementary and secondary systems will be able to reallocate existing resources in order to provide in-class improvements and some support services. Additional funding by the Ministry of Education, even in times of fiscal restraint, however, will be essential for improving support systems and for instituting specialized services. The necessary training and development activities will also require initiatives and funding at a provincial level.

The price of failing to provide adequate service for this sector of the adult population would be high. Significant numbers of people would not attain their educational potential, would not become the productive citizens they could be, and would not achieve personal or social satisfaction in their lives. The costs of continual re-entry and retraining of adults with learning disabilities without adequate support in the educational system are prohibitive and wasteful. Not only are these adults limited by an inadequate level of service, but also society at large shares in the loss of their human potential.
RECOMMENDED ACTION

Implementation of the following major recommendations will translate the proposed design for learning into positive action:

1. **Awareness**

   It is recommended that voluntary associations for children and adults with learning disabilities be funded by the Ministry of Education to expand collaboration with government ministries and agencies, school districts, employer groups, and post-secondary institutions in the design and implementation of public and professional information programs regarding adults with learning disabilities (page 7).

2. **Training and Development**

   It is recommended that the Ministry of Education fund and organize a training and development program on adult learning disabilities for policy makers, administrators, counsellors, tutors, and instructors (page 15).

3. **Responsibility**

   (a) It is recommended that the colleges be charged with the primary responsibility for providing comprehensive educational services for all adults with learning disabilities within their regions (page 16).

   (b) It is recommended that universities, institutes, and school districts provide services for adults with learning disabilities whom they admit (page 16).
4. **Support Services**

It is recommended that three levels of service for adults with learning disabilities be available throughout the province:

**Level One:** Every educational institution and agency serving adults should assist instructors to recognize and adapt their instruction to adults with learning disabilities.

**Level Two:** Every post-secondary institution should provide for individuals with learning disabilities support services specifically designed for them, as described in the design for learning presented in this report (page 22).

**Level Three:** Each college should immediately plan for the provision of specialized assessment, diagnostic, and prescriptive services to be implemented within the next three years, at least on a college regional basis. (page 22).

5. **Co-Ordination**

(a) It is recommended that policy be established within all institutions serving adults to co-ordinate services for adults with learning disabilities, including the assigning of a staff position responsible for such co-ordination (page 23).

(b) It is recommended that the Assistant Deputy Ministry, Post-secondary, or designate, through the system planning and evaluation processes, ensure the co-ordination of services for adults with learning disabilities among post-secondary institutions (page 23).
(c) It is recommended that an Inter-Ministerial Committee maintain articulation among post-secondary institutions, the schools, other human care systems, and the voluntary sector on matters of public information and referral processes for adults with learning disabilities (page 23).

(d) It is recommended that the Ministry of Education establish a continuing Provincial Resource Team to assist colleges with the implementation and maintenance of the design for learning in their regions (page 23).

6. **Funding**

It is recommended that the provision of educational support services for adults with learning disabilities be given priority in the expenditure of public funds and, to this end:

(a) That colleges allocate the necessary resources for the provision of the service Levels One and Two identified in recommendation 4, above; and

(b) That the Ministry of Education establish a developmental fund to be available to colleges for the purpose of assisting them to develop the specialized services as identified in recommendation 4, above (page 25).
THE CONTEXT OF THIS PAPER

Terms of Reference

In March 1982 the Ministry of Education issued a policy statement on Adult Special Education in the public educational system of British Columbia. Two aspects of that policy are of particular relevance to this report and its recommendation:

1. 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.

2. Public educational institutions have a particularly important role to play in assisting those disabled adults who have the potential for achieving a measure of independence.

Since that time, the Ministry of Education has undertaken studies of ways in which to serve more effectively various groups within the general category of Adult Special Education. Consistent with its role as continuing advocate for all adult learners, the Ministry of Education established, in June 1983, an Advisory Committee on Educational Opportunities for Adults With Learning Disabilities. This Advisory committee was charged with providing advice to the Ministry of Education on:

1. the extent of the need for services for adults with learning disabilities;

2. the ways in which these needs might effectively be met;

3. methods of increasing public awareness of adults with learning disabilities.
Advisory Committee Membership

The following persons were members of the Advisory Committee:

Gwen Armstrong          Selkirk College          ABE Coordinator
Laurel Armstrong        Vancouver Vocational Institute        Counsellor
Malcolm Cant            King Edward Campus              Learning Diagnostician
Donald Chapman          Ministry of Education           Special Education
Larry Davies            School District #42               Principal, C.E.
Paul Gallagher          Capilano College              Principal
Gladys Loewen           Douglas College               Coordinator, A.S.E.
Sheridan Ladbrook       Douglas College               Reading and Study Skills Consultant
Linda Love              Malaspina College           Coordinator, A.S.E.
Betty Mackie            School District #37               ABE Instructor
Elinor Martin           B.C. Assoc. for Children and Adults with Learning Disabilities
Greta Nelson            King Edward Campus              Counsellor
Roman Pointkovsky       Vancr. Assoc. for Children and Adults with Learning Disabilities
Dan Pratt               University of B.C.               Prof. Adult Education
Leone Prock             Simon Fraser University         Faculty of Education
Barbara Reid            B.C. Assoc. for Adults with Learning Disabilities

Frank Cassidy of the Ministry of Education was the Project Coordinator. Michael Claye and Linda Love were the Project Officers.

Special thanks are extended to May Archer (B.C.I.T.), Donna Buchan (Capilano College), Brian Russell (Camosun College), and Dennis Wright (Capilano College) for their important contributions to the deliberations of the committee.

David Harrison edited the discussion paper.
1. WHO ARE THE LEARNING DISABLED?
1. ARE THE LEARNING DISABLED?

Four years ago Charlie accepted a foreman's position at the mill at which he has been working for 19 years. He realized that he could not read or write work orders, authorize time sheets or deal with written directives, even though he had completed 10 years of school. He eventually lost his job. The loss not only created financial strain but increased his feeling of inadequacy. He enrolled in an upgrading program but after a year of classes his progress was minimal.

His search for an educational assessment ended at a Mental Health Centre where a staff member's personal influence resulted in a testing session. The results indicated an above average I.Q. along with a severe learning disability. However, nothing beyond the testing was provided.

In four years, Charlie has acquired some literacy skills, but even this limited success can only be attributed to his own determination and the patience of staff and volunteer tutors. The struggle continues for Charlie, but when will it end?

Approximately 15 percent of the adult population have some level of learning disability: of the 15 percent, 6 to 8 percent have mild disability, 5 to 7 percent have moderate disability, and 2 to 3 percent have a severe learning disability (Figure 1). Charlie is but one example of an adult with learning disabilities.

FIGURE 1
ADULT POPULATION AND LEARNING DISABILITIES

<table>
<thead>
<tr>
<th>Adults with Learning Disabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Population</strong></td>
</tr>
<tr>
<td><strong>15%</strong></td>
</tr>
<tr>
<td><strong>6-8%</strong></td>
</tr>
<tr>
<td><strong>Mild</strong></td>
</tr>
<tr>
<td><strong>5-7%</strong></td>
</tr>
<tr>
<td><strong>Moderate</strong></td>
</tr>
<tr>
<td><strong>2-3%</strong></td>
</tr>
<tr>
<td><strong>Severe</strong></td>
</tr>
</tbody>
</table>
Two formal definitions of learning disability are current in British Columbia; one has been prepared and approved by the Ministry of Education; the other is used by the Canadian and British Columbia Associations for Children and Adults with Learning Disabilities. Both are presented in Appendix A.

In school, Carole could not keep up with her class in reading; in fact, she did poorly in any activity related to reading. She became increasingly withdrawn. At age 15, she left school and later enrolled in a hairdressing course. By memorizing all the course material she passed her exams, but she could not keep a job because of her inability to record names and numbers for appointments. She later opened her own shop where she manages to memorize all the bookings. Carole now goes to college and is determined to learn to read and write. Her fear of people finding out that she is illiterate has created frustration and feelings of inadequacy, but Carole is determined to succeed.

Adults with learning disabilities do not fit a single mould, but they tend to have common characteristics. For example:

1. Many are unaware that they have learning disabilities.

2. Many have had unsatisfactory experiences as students; they may have acted in frustration or retreated into isolation.

3. Many have been referred to inappropriate forms of assistance.

4. Even when they have had adequate support as children and adolescents, most need some continuing support as adults.

5. All are capable of learning, provided that they receive support specific to their disabilities.
6. Most have attempted to hide their learning disabilities and to find ways to compensate.

7. Most suffer from very low perceptions of their own worth, and from unwarranted guilt.

8. They are relieved to know that they are "not stupid", that they have disabilities which can be specifically identified, and probably corrected.

Adam experienced difficulties in Kindergarten and after being promoted a number of times, "because of his age", was labelled a slow learner and placed in an occupational class at the age of 15. At 17 he left school unable to read or write. He taught himself to read enough to hold down low-paying jobs, but never managed to hold a job for more than a year. At 35 he managed to find a program for adults with learning disabilities. He is progressing with the help of volunteer tutors and plans to become an auto mechanic, even though he will be 45 before he is qualified.

Failure to meet the educational needs of adults with learning disabilities deprives our society of effective contributions by a large segment of the total population. Many of these adults will re-enter the educational system several times in the hope of support and assistance, at far greater cost to the public than would be necessary if they were initially well served. They will have great difficulty in obtaining and keeping employment, at a cost to employers as well as to themselves. They will not become the productive citizens they could be without adequate educational support and service. Some will turn to anti-social behaviour, at further cost to society.

The challenge to those who work with adult learners is to unlock talent and energy for productive and constructive ends. To meet this challenge, a new "design for learning" for adults with learning disabilities is required.
Janice is a college student who has been diagnosed as having difficulty remembering what she hears and matching sounds with written symbols and words. With the assistance of a program at her college, Janice is learning techniques that will gradually help her develop basic communication skills.

We need to know more about the incidence of learning disabilities among adults (See appendix B). Furthermore, all those who work with adult learners, and those who shape the policies of post-secondary institutions, need to become more sensitive to the particular needs of adults with learning disabilities - and how to meet these needs. Both public and professional information programs are required if the educational needs of adults with learning disabilities are to be met more effectively in the future. Initiation and facilitation of such programs is a legitimate and appropriate expectation of community-based voluntary associations, which should have access to public funding for this purpose. At the same time, other agencies and institutions should also be encouraged to take similar initiatives where they are deemed necessary.

RECOMMENDATION 1: AWARENESS

It is recommended that the voluntary associations for children and adults with learning disabilities be funded by the Ministry of Education to expand collaboration with government ministries and agencies, school districts, employer groups and post-secondary institutions in the design and implementation of public and professional information programs regarding adults with learning disabilities.
2. CURRENT SERVICES FOR ADULTS WITH LEARNING DISABILITIES

2.1 THE GENERAL SCENE

It is only since the mid-1960's that there has been any significant recognition of the phenomenon of learning disability in British Columbia. With the issue of the Ministry of Education's Policy Statement on Adult Special Education in 1982, there has been a heightened awareness of the large number of adults who are attempting to overcome their disabilities and to pursue further education and training.

Promising initiatives to help these adults have been taken in some parts of the province; several institutions, organizations, and agencies have taken at least first steps, but these efforts have too often been independent of one another. There is no concerted effort province-wide; there is at best an informal level of co-ordination of services in some parts of the province.

The Ministry of Education's appointment of a Special Education Consultant to assist colleges and institutes to develop educational services for adults with special needs has been a vital organizational measure at the provincial level. Similarly, the appointment of Adult Special Education Co-ordinators by some colleges has led directly to improved service and greater accessibility for adults with learning disabilities. In school districts, the provision of Adult Basic Education courses has provided more opportunity for such adults. In at least one university, informal tutoring services have been organized and support groups have been established. As a general pattern on an institutional level, special support services for adults with learning disabilities are in operation where there are expertise, resources and commitment of staff - but only when these are buttressed by leadership at the policy and senior administrative levels of the institution.
In many areas of the province, voluntary associations for children and adults with learning disabilities provide information, support, advocacy and public information. Additionally some testing and tutoring is done by individual professionals and private organizations on a fee-for-service basis. There is also increased interest in learning disabilities by members of the medical profession.

All these initiatives, however, cannot mask another reality - that levels of service vary dramatically within the province, even though the incidence of adult learning disability is not localized. Few institutions provide any substantial professional assistance. In a number of cases, "special project" funding has been used to start up specific programs and services, but these have not survived past an initial phase because of a lack of institutional commitment to specialized services in a time of limited resources. Maintaining an adequate level of service for these adults is simply unrealistic without strong institutional commitment - despite ingenuity and strong interest on the part of individuals or small groups of educators.

2.2 COMMON EXPERIENCES

Most adults with learning disabilities in British Columbia have experiences which are similar to one or more of the situations described in this section.

In the Classroom

An instructor suspects that a student has learning disabilities. Even with a rudimentary knowledge of learning disabilities, the instructor has large classes and demanding preparations and follow-ups which prevent extensive attention to any single student. Neither student nor instructor can diagnose the disabilities nor determine where to turn for help.
The Learning Centre

Institution X has a Learning Centre which some students with learning disabilities discover on their own initiatives. Other students are referred to the Centre by classroom instructors. The Centre, however, is understaffed in relation to demand; the personnel have minimal training in learning disabilities; the Centre's emphasis is on helping students without learning disabilities acquire better study skills. The adult with learning disabilities can see little benefit from going to the Learning Centre and will not return merely in the hope that the Centre will have more time "later".

Assessment

Most colleges and institutes provide only testing services which "place" students in courses or programs. Even when more extensive testing can be provided or arranged, the recommendations may often be educationally irrelevant or impractical. Follow up is unsuccessful. The test results are then disregarded.

Rising Expectations

Students with learning disabilities begin to make real progress in college and soon plan to take more advanced training. Admission to vocational, academic, and technical courses is limited, however, to applicants who do not need compensatory methods or curriculum adaptations to particular disabilities. Some students with learning disabilities are admitted, but cannot keep pace with instruction designed without regard for students with learning disabilities. They fail or drop out and a new cycle of discouragement begins.
Counselling

Counsellors are expected to serve all students. Productivity pressures make it difficult for them to provide the specialized, individual service needed by adults with learning disabilities, who must make realistic career choices or obtain advice on employment alternatives.

2.3 SOME PATTERNS OF SERVICE

The work of some institutions illustrates the effectiveness of some programs as well as obstacles to better services for adults with learning disabilities.

King Edward Campus, Vancouver Community College

Clearly identified, specialized service based on individual diagnostic prescriptive planning and follow up.

This campus, with the largest Adult Basic Education program in the province, has developed the Individualized Education Program for Adults (I.E.P.A.). Students seek out the program or are referred to it by an instructor or counsellor. A screening committee comprised of members of the various departments and support units on campus reviews the circumstance of each student. Where appropriate, students are referred to a specialized learning diagnostician or to other professional help on campus. The learning diagnostician may conduct an extensive series of individual tests and a prescriptive program is prepared. Students may receive individual tutoring for some time while a facilitator ensures liaison with classroom instructors. Students progress is monitored regularly and the tutorial
and support programs are adjusted as required. The goal is to return the student to regular classroom activity as quickly as possible, without continuing support from I.E.P.A.

Capilano College

An emphasis on improving general learning and study skills within the classroom setting.

The Achievement Resource Centre has a number of component programs, one of which is the Assessment and Individual Development program. This program is maintained by a half-time diagnostician whose primary duties include individual and group assessments, extensive liaison with centre program personnel and other college faculty, and development of individualized assistance programs. Referrals are generally made by instructors, but there are also some self or community referrals. The diagnostician performs assessments, although after considerable in-service training, other designated college faculty aid in the performance of general group assessments. Analysis and prescription are then undertaken by the diagnostician. Pre-enrollment group assessments have been used successfully for the early identification and subsequent remediation of students with learning disabilities. Post-assessment programs for all learning disabled students are designed by the diagnostician, and may involve tutorials or workshops, self-paced audio-visual exercises, and/or individualized instruction within the classroom.

The program calls for extensive liaison with faculty, both in terms of the referral system, and specially tailored learning activities within the classroom.
The Learning Centre serves as a generic resource for all students wishing to improve study skills and cope with learning difficulties. A special resource staff provides educational placement tests, referral services, and assistance with learning skills by individualized professional tutoring, peer tutoring, and group tutoring. Two "pre-entry" instructional programs are available to students not ready to enter regular instructional streams. Camosun's philosophy is not to distinguish learning disabilities from handicaps or other learning problems. No diagnostic or prescriptive testing is provided.

The objective is to have the centre serve as a resource to help students and instructors with alternate learning and teaching skills within the framework of the regular curriculum.

Selkirk College

A decentralized program without specialized diagnostic or prescriptive services, making optimal use of limited resources to keep students in a regular classroom environment.
Providing service to students in 12 widespread communities poses special problems. Adults who may have learning disabilities are referred to an Adult Special Education Co-ordinator by counsellors and instructors. After initial screening, the student may be referred to a learning assistance instructor who will make an assessment and contact classroom instructors with suggestions and information on how the student might be helped. When this is insufficient, further testing may be proposed.

Diagnostic and prescriptive services are usually available only by travel to the Lower Mainland.

Arrangements for volunteer tutors, adaptations of instructional requirements in classrooms, aides in classrooms, and special support systems for students with learning disabilities are made where possible by the Adult Special Education Co-ordinator.

East Kootenay Community College

A broad range of services to a whole college community including diagnostic prescriptive services.

In a large non-metropolitan area with several regional centres, the college employs a diagnostician who spends half-time serving students in Vocational Programs and half-time working with other students in other programs. The Learning Centre at Cranbrook assists community members as well as students from any of the regional centres. Diagnostic and prescriptive services are provided; implementation is the responsibility of classroom instructors. A Skill Improvement for Adults Program (S.I.A.P.) is offered. The Learning
Centre provides testing, professional tutoring, volunteer tutoring, group sessions and workshops, information and assistance to classroom instructors and counselling, but for a limited number of students.

Counter balancing these patterns of service are institutions which have no specific services at all for adults who have learning disabilities. Resources, institutional commitments, and availability of specialized expertise determine the degree to which adults with learning disabilities are served.

The existing variety of service levels throughout the province reveals that a basis for building an adequate and equitable province-wide service plan already exists. What is now necessary is movement to a comprehensive design for improved service.

However, a pre-condition for an effective design for learning is the training and development of all people who work with learning adults or who influence the environment in which they will learn.

**RECOMMENDATION 2: TRAINING AND DEVELOPMENT**

It is recommended that the Ministry of Education fund and organize a training and development program on adult learning disabilities for policy-makers, administrators, counsellors, tutors and instructors.
2.4 RESPONSIBILITY

There are adults with learning disabilities in our universities and provincial institutes; these institutions should accept the responsibility to provide special services for these students. As well, there are many school districts and community agencies which offer courses and services for adults, but it is unrealistic to expect them to have the resources and skills to serve adequately the particular needs of adults with learning disabilities. The colleges of the province, however, have a general mandate to serve the educational needs of the adults of their regions. Their system objectives require them to co-operate with other agencies in meeting these needs; consequently, they should be in the forefront of comprehensive service to adults with learning disabilities.

RECOMMENDATION 3: RESPONSIBILITY

(a) It is recommended that the colleges be charged with the primary responsibility for providing comprehensive educational services for all adults with learning disabilities within their regions.

(b) It is recommended that universities, institutes, and school districts provide services for adults with learning disabilities whom they admit.
3. A DESIGN FOR LEARNING

The purpose of the recommendations in parts 1 and 2 of this report - i.e., increasing public and professional awareness, providing training and development, identifying responsibility - was to lay the groundwork for the implementation, on a province-wide basis, of a design for learning which would be specific to the needs of adults with learning disabilities.

FIGURE 2

DESIGN FOR LEARNING - A FLOW CHART

Referral by Instructor, Counsellor or Self-referral by Student

TO

Institutional Contact for Learning Disabilities

Assessment and Interpretive Planning

Mild Learning Disability

Classroom with Teaching Adaptations and Delivery Modifications

Moderate Learning Disability

Learning Support Services

Severe Learning Disability

Specialized Learning Disability Service
3.1 ASSISTING ADULTS TO BECOME SELF-DIRECTED LEARNERS

It is evident from the literature and from experience in British Columbia that a primary need of adult learners is to become independent, self-directed learners. Some adults need more support than others to satisfy this need.

It is equally evident that this support should be provided for as brief a time as required, and should isolate the learner only to the extent required.

The goal, then, of any design for learning for adults with learning disabilities should be to provide the appropriate level and kinds of support, for the required period of time, and as close as possible to regular learning circumstances.

Stated otherwise, all adults with any degree of learning disability should be assisted to become independent rather than dependent, in an environment as close as possible to the mainstream. How quickly that goal can be achieved will depend upon the particular needs of each adult learner.

3.2 CRITERIA FOR A DESIGN FOR LEARNING

An adequate and equitable plan for educational opportunities for adults with learning disabilities will meet the following standards:

1. It will allow for articulation of support among various levels of the educational system, from pre-school through post-secondary and higher education.

2. It will provide for support to students regardless of where in the province they might live and learn.
3. It will help all students to identify their own learning strengths and potential as well as difficulties, problems or disabilities so that each person may develop a positive, realistic self-concept.

4. It will organize support resources to meet the particular learning needs of each individual student.

5. It will foster independent and collaborative/peer learning, as much as possible within the mainstream of education, principally the regular classroom.

3.3 ORGANIZATION OF SERVICES

A three-level design for learning is required. Figure 3, below, illustrates the three levels of support and their relative importance for mild, moderate, and severe types of learning disability, respectively. The support service envisaged at each level of design is then described. Recommendation 4 - Support Services follows.

**FIGURE 3**

**DESIGN FOR LEARNING: THREE LEVELS OF SUPPORT**

<table>
<thead>
<tr>
<th>Type of Disability</th>
<th>Level One</th>
<th>Level Two</th>
<th>Level Three</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Classroom Support</td>
<td>Institutional Support</td>
<td>Regional Services</td>
</tr>
<tr>
<td>Mild</td>
<td></td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Moderate</td>
<td></td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Severe</td>
<td></td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Major Source of Support</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Secondary Source of Support</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Minor Source of Support</td>
<td></td>
</tr>
</tbody>
</table>
All instructors working with adult students first need to learn how to recognize students with potential learning disabilities. In most cases of mild disability, the only other demand on the classroom instructor is the willingness to adapt course requirements to the student - to accept oral rather than written reports, to allow tape recorders, note takers, taped books, and longer periods of time for exams, assignments and course completions. Classroom instructors should receive every encouragement to utilize the Provincial Post-Secondary Resource Centre for assistance. All classroom instructors will encounter students who need additional, more specialized support. In these instances, the classroom instructor should refer the student to appropriate support staff on camps and then continue to work with the student in the regular classroom as part of a larger resource "team".
Each institution and major campus should provide specialized support services for adults with learning disabilities, normally within an identified and well-publicized centre.

Trained staff in each centre should have the resources to provide a broad range of services for adults with mild or moderate learning disabilities: identification of learning disabilities, assessment and diagnosis, prescription of remedial and compensatory programs, monitoring of programs in progress, follow up of students after completion of prescribed programs, co-ordination and articulation within and among institutions, and co-operative planning with classroom instructors. Educational, career, employment, and personal counselling will also be necessary for adults with learning disabilities, but not necessarily within a distinct support services centre.

These support services require fully qualified, trained personnel. Continued involvement of the classroom instructor in co-operation with the specialist is equally critical to a successful support program.

Level Three - Regional Services

<table>
<thead>
<tr>
<th>Diagnosis and Prescription</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extended Individual Attention</td>
</tr>
<tr>
<td>Follow Up</td>
</tr>
</tbody>
</table>

Adults with severe or complex learning disabilities, although few in number, require specialized services, individual attention for extended periods of time and highly trained personnel, including a diagnostician and trained tutors. Diagnostic and prescriptive services are essential components of the design for learning.
While the incidence of severe learning disabilities is not extensive, the quality of service required is of critical importance. At this stage in the evolution of service for adults with learning disabilities, specialized services for adults with learning disabilities should become accessible in every college region of the province within three years.

RECOMMENDATION 4: SUPPORT SERVICES

It is recommended that three levels of service for adults with learning disabilities be available throughout the province:

Level One: Every educational institution and agency serving adults should assist instructors to recognize and adapt their instruction to adults with learning disabilities.

Level Two: Every post-secondary institution should provide for individuals with learning disabilities support services specifically designed for them, as described in the design for learning presented in this report.

Level Three: Each college should immediately plan for the provision of specialized assessment, diagnostic, and prescriptive services to be implemented within the next three years, at least on a college regional basis.

3.4 CO-ORDINATION

The proposed design for educational opportunities for adults with learning disabilities must also be cost effective and efficient. Institutions and agencies serving adults with learning disabilities need to collaborate fully with one another for an equitable provision of service.
RECOMMENDATION 5: CO-ORDINATION

(a) It is recommended that policy be established in all institutions serving adults to co-ordinate services for adults with learning disabilities, including the assigning of a staff position responsible for such co-ordination.

(b) It is recommended that the Assistant Deputy Minister - Post-Secondary, or designate, through the system planning and evaluation processes, ensure the co-ordination of services for adults with learning disabilities among post-secondary institutions.

(c) It is recommended that an inter-ministerial committee maintain articulation among post-secondary institutions, the schools, other human care systems, and the voluntary sector on matters of public information and referral processes for adults with learning disabilities.

(d) It is recommended that the Ministry of Education establish a continuing provincial resource team to assist colleges with the implementation and maintenance of the design for learning in their regions.

3.5 FUNDING - COSTS AND BENEFITS

With few exceptions, the current level of service available to adults with learning disabilities falls far short of dealing adequately with the level of need.

To redress the imbalance between need and current level of service, all institutions and agencies serving adult learning should provide a first level of service in classrooms. This may be achieved by allocating existing institutional funds to instructor training and development, so that all instructors will become more skilled in identification, referral and adaptation of instruction.
In some institutions, basic learning support services already exist. Additional funding will be required if all institutions and major campuses are to deal adequately with the reality of learning disabilities.

The installation of specialized learning disability services in each region of the province will also need additional funding over the next three years.

There is no doubt that better service for adults with learning disabilities will have a major cost impact. In return, however, as much as 15 percent of the population will be better and more fairly served at lower long-term cost. Social costs resulting from inadequate or neglected service will be averted: costs of under-employment, mental health services, incarceration, and related human services constitute a significant pressure on public expenditure.

As well, this design for learning softens the immediate cost impact by requiring or encouraging co-ordination and co-operation rather than individualized, unique responses from each institution, using its own expertise and resources. A co-ordinated plan will be more effective and less costly than twenty or more isolated institutional plans.

Nevertheless, institutions - collectively or individually - will not be able to meet their responsibilities to adults with learning disabilities without a comparable commitment of leadership and resources from the Ministry of Education.

In conclusion, this report emphasizes that the Ministry of Education will need to fulfil several key roles in the improvement of service to adults with learning disabilities.

Firstly, the Ministry must continue its role as province-wide advocate for all forms of Adult Special Education, including adults with learning disabilities.
Secondly, the Ministry must ensure availability of funds to all institutions and agencies involved in educating adults with learning disabilities so that they in turn can participate fully in this design for learning.

Thirdly, the Ministry must exercise leadership to guarantee the implementation of the awareness and training and development programs which are prerequisite to a well-grounded provincial design for learning.

**RECOMMENDATION 6: FUNDING**

It is recommended that the provision of education support services for adults with learning disabilities be given priority in the expenditure of public funds and, to this end:

(a) That colleges allocate the necessary resources for the provision of the service levels one and two, identified in recommendation 4, above.

(b) That the Ministry of Education establish a developmental fund to be available to colleges for the purpose of assisting them to develop the specialized services as identified in recommendation 4, above.
APPENDICES

A. Definitions of Learning Disabilities

B. The Incidence of Learning Disabilities Among Adults
APPENDIX A

DEFINITIONS OF LEARNING DISABILITIES

The B.C. Association for Children and Adults with Learning Disabilities accepts the national definition as presented below:

Learning Disabilities is a generic term that refers to a heterogeneous group of disorders due to identifiable or inferred central nervous system dysfunction. Such disorders may be manifested by delays in early development and/or difficulties in any of the following areas: attention, memory, reasoning, co-ordination, communicating, reading, writing, spelling, calculation, social competence and emotional maturation.

Learning disabilities are intrinsic to the individual, and may affect learning and behaviour in any individual, including those with potentially average, average or above average intelligence.

Learning disabilities are not due primarily to visual, hearing, or motor handicaps; to mental retardation, emotional disturbance, or environmental disadvantage; although they may occur concurrently with any of these.

Learning disabilities may arise from genetic variations, biochemical factors, events in the pre to peri-natal period, or any other subsequent events resulting in neurological impairment.

The Ministry of Education recognizes the severely learning disabled as pertaining to that one to two percent of children in the schools whose hindrances to learning are so severe as to almost totally impede educational instruction by conventional methods.
Learning disabled children have one universal characteristic: in one or more learning areas, performance consistently falls far short of estimated potential.

Given the complex task of defining the learning disabled population and the deficiencies of each of the many definitions currently proposed in the literature, the Ministry of Education defines children with learning disabilities as follows:

Children with learning disabilities are those who show a significant discrepancy between their estimated learning potential and actual performance. This discrepancy is related to basic problems in attention, perception, symbolization and the understanding or use of spoken or written language. These may be manifested in difficulties in thinking, listening, talking, reading, writing, spelling or computing. These problems may or may not be accompanied by demonstrable central nervous system dysfunctions.
There are no conclusive statistics that can pinpoint the exact percentage of people with learning disabilities.

According to the CELDIC Report (Commission on Emotional and Learning Disorders of Children) of 1969, the accepted incidence figures are 10 to 15 percent. The Ministry of Education recognizes that one to two percent of school age children are severely learning disabled.

In specific population groups, this incidence is considered much higher. In the prison setting, the proportion of adults with learning disabilities is known to increase dramatically (Polk, 1976), and it is recognized that more juvenile offenders with learning disabilities are imprisoned than non-learning disabled juveniles (Murray, 1976).

In lower level Adult Basic Education programs (equivalent to grade 0-8), estimates of students with learning disabilities vary from 20 percent (Farrell, 1979) to 75 percent (Pattschull, 1980).

The lack of conclusive research makes it difficult to determine the exact number of adults with learning disabilities who are seeking educational opportunities appropriate to their needs. However, if the calculations of the Vancouver Association for Children and Adults with Learning Disabilities are used, 169,500 adults in British Columbia have specific learning disabilities.