

OUR EDUCATION SYSTEM IS “FAILING” LEARNING DISABLED CHILDREN

WHY, DESPITE LEGISLATION,  
OUR EDUCATION SYSTEM IS “FAILING”  
CHILDREN WITH LEARNING DISABILITIES

by

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A Thesis

Submitted to the School of Graduate Studies

in Partial Fulfilment of the Requirements

for the Degree

Master of Arts

McMaster University

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McMaster University

Hamilton, Ontario

## Why Despite Legislation, Our Education System is “Failing” Children with Learning Disabilities

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NUMBER OF PAGES: viii, 157

## ACKNOWLEDGEMENTS

I would like to thank Dr. R. Day and Dr. S. Najm for their encouragement, advice, patience and all the ‘pep’ talks that kept me going during the ‘down’ time. Thanks also to Donna Takayesu who was instrumental in bringing this paper to fruition. Finally, thank you to all the LD students I have been fortunate to work with over the years. Your struggle and courage enriched my life and taught me patience and tenacity.

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Abstract

In the Public Education System all children have the right to receive the best possible education that public funds can provide. Outlined in the Ontario Ministry Document, *Formative Years* (1975), is an explanation of an education system that “ensures that each child experiences a measure of success in his or her endeavours, so that each may develop that self-confidence needed for further learning” (p. 5).

However, not all children are born equal, some have varying disabilities that interfere with their ability to achieve “a measure of success”. This paper addresses the child with Learning Disabilities and the problems he or she faces in our current education system.

A Learning Disabled student is one in whom there is a significant discrepancy between academic achievement and assessed intellectual ability which is not due to physical, emotional, cultural or mental handicaps. The etiology is unknown. Before this type of student can receive specialized help, he or she must be correctly diagnosed as Learning Disabled (LD) by specialists in the school board. This process can involve teachers, principals, special education teachers, resource teachers, psychological services, instructional assistants, committees, Doctors and administrators. This is a process that involves an inordinate amount of time. A delay often impinges on the well-being of the LD student taking its toll in loss of self-esteem, failure to keep up with his peers and failure to progress academically. This may result in behaviour problems, lack of interest, emotional withdrawal, or physical symptoms. Continued delay in implementing a supportive programme benefits no one except perhaps the Board of Education which avoids the expense of special instruction for the student in question.

This paper will argue that while there is legislation in place that ensures each child, including those with disabilities, will be educated in an environment that encourages “maximum individual growth and development” (Minister of Education, Hansard, January 8, 1989) our public education system often ‘fails’ these children. Through delays, current philosophical trends or misguided intentions a board can prevent and/or delay, albeit unintentionally, the placement of an LD child in an appropriate setting that “meets the needs of the pupil”. ( as above)

An explanation of how the education system works in relation to the LD child is presented. A historical overview provides the background to the current legislation involving the rights of LD children. The deficits of these children are documented and references are cited to support this. An overview of how children learn to read and how LD children differ from the norm is presented. The prevailing theories of the education system, school boards and administrators are discussed in the light of the ministry guidelines for the education of LD students.

The current theory of mainstreaming, a method of keeping the LD child with his or her regular class, is both economical and appropriate, according to many school boards. It can be argued that this is not always the case. There exists a sub-group of LD students for which mainstreaming is not beneficial, rather the reverse. Case studies are presented to support this view and a programme designed to meet the unique needs of these exceptional students is discussed in detail.

The programme advocates a whole-child approach involving the social, emotional, physical and cognitive aspects of the child. It will be argued that such a programme is necessary for the successful well-being of the LD student. It will also be argued that this programme is best presented in a segregated setting, and could not be appropriately implemented in a mainstream classroom. Support for the theories that are the basis of this belief are cited.

While there is a sound pedagogical foundation for the proposed programme, in the short term it is viewed by the school board as expensive due to the low pupil/teacher ratio required. "Bill 82 gives youngsters an entitlement to special education programs. [School boards] use the mainstreaming argument as an evasion in order not to come into conflict with the province over questions of financing". (S. Lewis, June 1989, p. 5) The expense in the long run, incurred through high school drop out rates, high levels of unemployment, increased use of mental health programmes, etc., are picked up by government departments other than the school board. It is my contention that these funds might be better used for identifying and recognizing early precursors of children at risk for school failure due to LD and implementing an early intervention programme.

Prevention through education of teachers and administrators is advocated. It is by recognizing the potential problem early that many of the damaging results may be prevented. Early identification is the key and immediate intervention is the answer. The ability to ameliorate the low self-esteem, the behavioural, emotional and physical problems that are often the result of an unhappy, unsuccessful and/or unrecognized LD child is within the school system's grasp. Early signs that help identify LD factors are known and some school systems are implementing this knowledge with pre-schoolers. The delay in putting this into effect, prevention rather than remediation, especially in the light of the problems outlined in this paper, risks both monetary and potential loss. This paper advocates that school boards explore their options in order to circumvent a policy that causes the 'failure' of some of its exceptional children.

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# WHY, DESPITE LEGISLATION, OUR EDUCATION SYSTEM IS “FAILING” CHILDREN WITH LEARNING DISABILITIES

## SECTION I

### INTRODUCTION

The education system in Ontario has in place documents, bills, acts, regulations and amendments to ensure “. . . that the diverse needs, abilities and interests of all exceptional pupils can be best addressed in a learning environment which facilitates maximum individual growth and development—physically, intellectually, emotionally, socially, culturally and morally. The Education Act and the regulations require that, once identified, each exceptional pupil be placed in an appropriate setting (see Figure 1, next page) to meet the identified needs of the pupil” (Chris Ward, Minister of Education, 1989). The thrust is to provide each child with the “least restrictive environment” (Diamond, p. 41) in order for the child to flourish and succeed. These good intentions were not the brainchild of some enlightened government officials, but were the result of extensive lobbying from parents and parent organizations who realized their children had little opportunity to succeed in the education system at the time. These were the parents of learning disabled children, children who were not thriving in the schools. Children, who for one reason or another learn differently from their peers.

These same parents who worked so hard to get adequate legislation for their learning disabled children, can still be thwarted by the educational system due to the system’s lack of real understanding of how these special students learn. Thus funding can

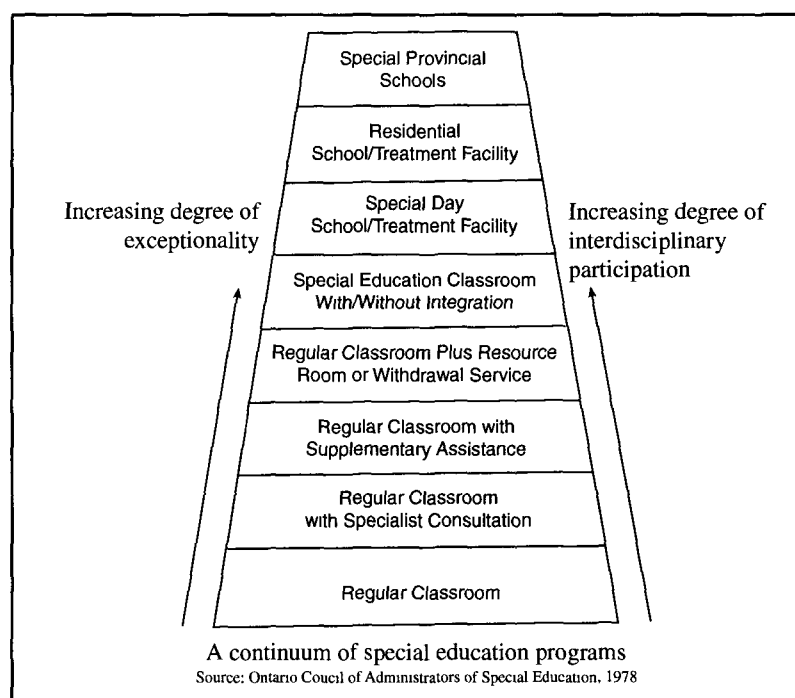


Figure 1

be channeled into inappropriate settings and interventions for these children that fail to meet their unique needs and learning styles. Implicit in the philosophy of the “least restrictive environment” is the concept of “mainstreaming”. That is maintaining a child in the regular classroom setting while providing the necessary services to remediate his special areas of weakness. This is one Board’s answer to “appropriate setting” and intervention for their learning disabled students.<sup>1</sup>

There is an increasing concern by parents and some educators about the often negative impact of “mainstreaming” on the very children this legislation was designed to help.

Though criticizing “mainstreaming” disturbs many educators, it is important to point out the flaws in this system in order that they might be ameliorated.

While “mainstreaming” is an excellent educational objective, “it promises more than our current system can possibly deliver at this time.” B. Diamond (p. 41), in her

<sup>1</sup> The Board, this Board or Board of Education referred to throughout this paper is the Halton Board of Education, in Burlington, Ontario.

article, “Myths of Mainstreaming” discusses “the unfortunate sequelae of current educational practices” of a system intent in maintaining a child in the mainstream setting.

While approving the concept, this paper will attempt to critique its flaws as they apply to some learning disabled children and suggest some alternatives for consideration.

This paper is divided into five main sections. The first section summarizes the historical perspective on the recognition, identification and placement of children with learning disabilities by the Ontario Ministry of Education. The types of placement in a particular school board are explained and the criteria for identification as Learning Disabled (LD) are outlined.

The second section offers examples of how the Ministry directives may be circumvented or misunderstood by a school board and the schools under its jurisdiction thus causing delayed intervention and remediation. It considers the situations and the problems that arise due to late identification of these children.

The third section deals with the Board’s current trend of mainstreaming for the learning disabled student and the view that for a particular sub-group of LD students, this method is inadequate.

The fourth section offers support for the view that some LD children should not be maintained in a mainstream setting but provided with an alternative environment in order to thrive in the present educational system. An alternative method for teaching LD students is outlined and its pedagogical foundation supported with appropriate data.

The final section reiterates the importance of early identification of LD students and some suggestions for recognizing possible soft signs for LD at a kindergarten or pre-kindergarten level in order to provide the necessary and appropriate earlier intervention.

## SECTION II

### HISTORY

#### (A) Ministry Documents

On January 1, 1969, the government of Ontario introduced legislation that established larger school units of administration. One of the objectives was to facilitate the introduction and development of programmes and services in the area of Special Education. While the tendency at the time was towards individualized instruction and open classrooms, it was recognized “that no curriculum and no school design will eliminate the need for special programs and services. Educators must continue to provide alternative programs for the exceptional students in their regions” (Education of Exceptional Children, p. 5). The Ministry of Education suggested five broad areas of exceptionality. One of them was communication, under which “learning disabilities” was listed. Learning disabilities (LD) appeared under many guises in the literature (perceptual handicap, neurological impairment, etc.) and its etiology was either varied (genetic, biological, neurological etc.) or unknown. However, the term “Learning Disabled “ (LD), has been recognized throughout the literature since the early 1930’s (Sigman, 1989). In 1962 Kirk formally defined LD in his text, “Educating Exceptional Children” and was instrumental in establishing it as a major area of special education.

Prior to December 12th, 1980, the Education Act of 1974 contained “only permissive legislation” (p. 1) or students requiring special education, or special programmes, depending on their specific disabilities. A school board was not obligated to provide these services but “could, if it wished” (p. 1). These special programmes and

education services were optional and ‘special’ children were often neglected by their boards. Pressure by parents and parent associations on behalf of these ‘special children’ resulted in the introduction of an Amendment Act in 1978. The first draft was circulated to school boards in February of 1979 and was intended to be phased in over a five-year period. Bill 82, the Act to Amend the Education Act 1974, was introduced in the Ontario Legislature by Dr. Bette Stephenson, the then Minister of Education.

This Act was designed to ensure that all school boards in the province of Ontario provided every exceptional student access to an education suited to that student’s needs and abilities. It provided a procedure for identifying and placing “a hard to serve pupil . . . unable to profit by instruction offered by a board” (p. 4). It guaranteed universal access to its services for all children, regardless of their special needs, and guaranteed provision of programmes and services that met these needs. In addition, Bill 82 ensured the “involvement and participation of the parents or guardians of exceptional pupils in the assessment, identification and placement of such pupils, including the right to withhold permission for a particular placement and the right to require a review of the pupil’s placement at any time” (A Guide to Bill 82, p. 1).

Effective September 1st, 1985, all boards were required to provide for the education of all ‘exceptional’ students. An “exceptional pupil” is defined as “a pupil whose behavioural, communicational, intellectual, physical or multiple exceptionalities are such that he or she is considered by a board committee to need placement in a special education program” (Bill 82, p. 2). The bill defined a “special education program” to mean “an educational program that is based on and modified by the results of continuous assessment and evaluation and that included a plan containing specific objectives and an outline of educational services that meets the needs of the exceptional pupil” (Guide, p. 1).

The Act also outlined the procedures boards and parents were to follow in order to identify and/or appeal exceptional students' placements. It clearly identified the need for "procedures for early and ongoing identification of the learning abilities and needs of pupils" (p. 2) and indicated the board "shall provide a special education program and special education services for the pupil" (p. 7).

In order to ensure that the identification and placement of these 'special pupils' are done in a uniform manner, Regulation 554/81 outlines the legislation governing the "special education identification, placement and review committees (IPRC) and appeals" (p. 1). In part two, the regulations indicate that the principal is to consider the committee that is "most appropriate in respect of the pupil" (p. 3) when he refers the exceptional child for identification. The committee, in turn, shall obtain an educational assessment, and may obtain a health assessment, a psychological assessment (with written permission of the parent), may interview the pupil and the parent before any written recommendation of placement is forwarded to the parent. It further outlines the procedures for appeal if the parent does not agree with the recommendations made by the committee in question.

The Ministry of Education issued a Special Education Information Handbook in 1981 that outlined and highlighted these new initiatives and attempted to reassess "established programs and services in special education . . . and policies pertaining to the education of exceptional pupils in Ontario" (p. 1). It was intended as a handbook of administrative and resource information. This document reiterates the need for early identification and intervention for children with special needs and provides a rationale for the education of exceptional pupils.

In 1984 a new Special Education Information Handbook replaced the 1981 issue. This handbook spelled out more specifically the Ministry's philosophy governing

the education of the “exceptional pupil”. Both the programme and the environment of the school should reflect respect for the worth of the individual and respect for the differences among individuals and groups. “Each student should have access to an educational program that fosters his/her physical, social, emotional, intellectual, and spiritual development” (p. 3). It further states: “Each person has unique needs that must be recognized and planned for in the curriculum so that each person can function effectively as an individual . . . ” (p. 3). The Handbook outlines and stresses the importance of early identification and of recognizing and programming for students with special needs. It emphasizes that special services must be provided for them. It further states: “the needs of an individual exceptional pupil are delineated by an Identification, Placement and Review Committee of the board” (p. 9).

In October of 1985, the Special Education Branch of the Ministry of Education issued a Special Education Monograph outlining the specific steps and process involved in the establishment and operation of the IPRC. It includes suggestions and procedures for identifying and implementing the placement of an ‘exceptional pupil’. It stresses the importance of adequate observation, record-keeping and referral process before the recommendation is made to the appropriate board IPRC. The report advocates a multidisciplinary approach. To be “truly appropriate it must be a team activity, utilizing the expertise of many disciplines” (p. 10).

#### (B) School Board Policy

In response to this, each school board must implement the above procedures. The board establishes the guidelines for identifying the ‘exceptional pupil’ within the individual schools it is responsible for. After appropriate teacher intervention, the school board advocates a School Team (ST) approach which is a “problem solving group using in-school resources to consider the strengths, needs and interests of the students and to



suggest program modifications that will help the student learn” (School Team Guidelines, p. 1). These guidelines outline the procedures for the preparing, problem-solving, decision-making, implementing, monitoring and evaluating of techniques for the group. The process of each step is outlined in the guidelines from the board. Alternatives and interventions are discussed by the team with feedback on the effectiveness of each implementation plan to be discussed with “students, parents, teachers, involved” (p. 6). Continued problem solving and intervention as required are suggested until all resources at the school level have been exhausted. Referral to the School Resource Team (SRT) is then suggested when “a variety of program and instructional strategies, as recommended by the School Team, have not resulted in student growth and the expertise and support of the multidisciplinary team is required or a review is required of a student’s identification and placement” (p. 19).

The School Resource Team “continues the problem solving that originated at the School Team level. It is a multidisciplinary team involving school staff, support services and community resources. This team recommends and coordinates interventions that promote the optimal growth of a student” (School Resource Team Guidelines, p. 1).. The guidelines for this team are the same as those listed for the School Team. At this level, outside resources are available that were not approached at the School Team level. Child care workers, social workers, speech pathologists, psychometricians, ESL teachers (English as a Second Language), health care workers, Primary-Junior consultants, are some of the additions at this level. Their duties parallel those of the original team. They evaluate alternatives and recommend programme modifications, support staff involvement, and they monitor and evaluate the decisions.

Once this committee has tried all its strategies, the recommendation can be made that the student in question may benefit from additional help (resource support) or a different environment (segregated class). If resource support is recommended, the com-

mittee refers the student to an Area or Family of Schools (FOS) committee for either a case conference or an IPRC. This committee consists of an Area Superintendent, and two other committee members (e.g., Primary/Junior consultant and Area school psychologist).

If the referral is to be considered a “case conference” (School Resource Team Guidelines, p. 5), it is not necessary to obtain written consent of the parent. This committee may consider whether the student should be placed in a “cluster class”.<sup>2</sup> Although the progression theoretically is from Segregated to Cluster to Mainstream (with or without resource support) sometimes the reverse happens. A “special” student is thought (by the committee) to benefit from a more restrictive environment than the mainstream. It may be necessary to consider this placement (in a cluster class) as a case conference rather than a more formal IPRC.

If the pupil is to be considered for resource support, a formal IPRC meeting at the area level is convened. However, if a student is considered as more appropriately placed in a self-contained (segregated) setting or is being demitted from this setting to a cluster class, the IPRC meeting is held at the regional level and attended by 3 committee members one of whom is a supervisory officer or his designate, the principal or his designate and a qualified medical practitioner. (Reg. 554 and the 1985 monograph do not mention a doctor as necessary on this committee).

In practice these committees have been composed of a supervisory officer or his designate, a chairman (who is often an administrator such as a vice principal), a

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<sup>2</sup> An explanation of a “cluster class” is necessary as its conception may be in this particular board only. It was conceived in 1989 and put in practise in the 1989/90 school year without any consultation with the teachers directly involved and with no prior knowledge or in-service training for the teachers who would have to implement these procedures. Cluster classes were formed for several reasons: to ease admittance back into the mainstream for pupils in a segregated setting and to circumvent the Ministry’s guidelines on the number of students in a self-contained class (eight). The cluster class may contain up to twelve students. Economically this is more practical for the board. It also assumes that the teacher will rarely have all twelve students at the same time. By cutting back on the number of segregated classes offered, the board is not encouraging this particular placement for students, therefore fewer children will be referred for a self-contained setting.

secretary, the principal, sometimes the board's psychiatrist, and the presenting special education teacher. Sometimes others are present such as parents or a board representative. The board's special education coordinator is also present at all these meetings.

Gradual elimination of segregated classes has been this board's goal. The thrust is for rapid demission for students already in this setting. Mainstreaming is the goal for this board. By making it more difficult to obtain entry into a segregated setting, teachers may be discouraged from making this recommendation. Students often have to be bussed out of their home school to attend a self-contained class because there are fewer of them. This can be extremely disturbing for an already 'at risk' student. The intention of the board was to move these students from the segregated settings and place them in a "resource cluster group" (cluster class) that will consist of students who will work in both an "integrated setting" (in the mainstream) as well as receive "segregated instruction as required" (withdrawn from the mainstream). For example, Mary may receive her instruction for Science in a classroom of her peers which may contain as many as thirty children, but be withdrawn in a small group setting for her English instruction. It was also assumed by the board that cluster classes would eventually be phased out as the incoming students from segregated settings would soon be depleted. These children would then be serviced by resource support in the regular class-rooms thus releasing more special education teachers to help more students, greatly increasing her pupil/teacher ratio and perhaps decreasing her overall effectiveness.

#### (C) In-School Procedures

Within a school setting, a special student may be classified, through an IPRC, as "exceptional" and receive a special rating (e.g., C-1 indicates a learning disability in communication). He or she may then receive individual resource support within her/his own school setting. This can take many forms, from complete withdrawal for forty-nine

percent or less of the school programme, to help within a specific class or classes for a specific period of time. The approach taken depends on the individual school arrangements, timetabling and/or staffing, the needs of the student and school, as well as the preferences of the principal.

If the special student is classified as “cluster resource”, the guidelines are not as clear cut and are defined by the policy within a given school. The school, if governed by the Board guidelines, could provide a combination of integration and segregation depending again on the needs, timetabling, staffing and individual school policy and priorities.

A student thought to be in need of a segregated setting, is placed in a “self-contained” environment for 50 to 100% of the school programme. (Special Education and Special Services Manual, p. 1) The maintenance of these classes and amount of integration are determined by the school policy, the special education teacher, and the level of cooperation from the regular classroom teachers. The school policy is set by the school principal with or without staff input. As each school principal is almost completely autonomous, school policies often reflect the particular bias or preference of its principal.

It should be stressed that the IPRC committee “does not make a decision about a special program for a pupil, but only determines the identification and/or placement of a pupil as an “exceptional pupil”. The specifics of the program are the responsibilities of the educational staff of the board” (Special Education Monograph p. 3).

The Ministry document on Special Education Monographs fully outlines the eight steps a teacher and school-based personnel may take within the school setting when an “examination of the pupil’s learning characteristics and of the pupil’s learning environment is warranted”. (p. 7) From initial observation through to the “multidisciplinary assessment team preparation” (p. 10), the document outlines the procedures taken within the school setting that lead to the IPRC.

According to Bill 82, either a principal or a parent may request an IPRC meeting. The Board of Education, complying with Ministry directives, has outlined the procedures for parents in a booklet called “Finding Your Way”, a “Parent’s Guide to Special Education Procedures “ published in 1983 and revised in June, 1986. This booklet states their policy: “we believe in the individuality of all students and recognize their varying rates and styles of learning . . . when a student is identified as exceptional . . . we make every attempt to provide for the needs of that student” (p. A). The booklet also outlines board procedure governing IPRCs, their makeup, and the appeal process. It defines terms and services and explains the various programmes available to the identified “exceptional pupil”. It differentiates between the various IPRC memberships and jurisdictions and lists the members of a Special Education Advisory Committee established as required under Section 182 of the Education Act.

It certainly appears that the “exceptional pupil” is more than adequately recognized and serviced. From the Ministry of Education of the province of Ontario through to the smallest of schools under the jurisdiction of a Board of Education, the “exceptional pupil” has in place procedures, rules, processes and regulations all designed to see that he/she receives “equality of educational opportunity and a curriculum of a high quality appropriate to their needs, abilities, and interests” (Special Education Handbook, 1984, p. 1).

#### (D) Definition of Learning Disabled

Who is this “exceptional pupil” and why is it so important that his/her needs be met—so important that there is legislation in place to ensure these needs are met? Why was government intervention necessary, and who defines what criteria which must be met for a child to be recognized as “exceptional”?

An “exceptional pupil” is one who deviates significantly from the norm (as accepted by the educational system), who is not able to achieve at the same rate as other children in the classroom (and there is no obvious reason for this deficit). The exceptionality is confirmed by tests administered by a psychometrician and confirmed by a psychologist employed by the board. This paper deals with only one specific type of exceptionality, that of a learning disability that hampers the student in learning to read with fluency. These children’s needs must be met in diverse ways other than those usually employed in the classroom for ‘normal’ children. It is important to meet these special needs, otherwise the student fails to become a fluent reader. Government intervention has been necessary because of the failure of many school boards to adopt the appropriate methodology to meet the unique needs of these exceptional students.

How is an exceptional student identified? “Exceptional” is defined as unusual, uncommon, extraordinary or superior. (Random House College Dictionary Revised, 1980). The Ministry, in Bill 82, states “ . . . an “exceptional pupil” means a pupil whose behavioural, communicational, intellectual, physical or multiple exceptionalities are such that he is considered to need placement in a special education program by a committee . . . ” (p. 1). For the purpose of this paper, the group of children that fall under ‘communicational’ will be my focus. Under this umbrella, the term “Learning Disability” is one of the deficits outlined in the Special Education Information Handbook of 1984. It is defined as:

A learning disorder evident in both academic asocial situations that involves one or more of the processes necessary for the proper use of spoken language or the symbols of communication, and that is characterized by a condition that:

- (a) is not primarily the result of:
  - impairment of vision
  - impairment of hearing
  - physical handicap

- mental retardation
  - primary emotional disturbance
  - cultural difference
- (b) results in a significant discrepancy between academic achievement and assessed intellectual ability, with deficits in one or more of the following:
- receptive language (listening, reading)
  - language processing (thinking, conceptualizing, integrating)
  - expressive language (talking, spelling, writing)
  - mathematical computations
- (c) may be associated with one of more conditions diagnosed as:
- a perceptual handicap
  - a brain injury
  - minimal brain dysfunction
  - developmental aphasia

The literature contains many definitions of the Learning Disabled LD child. Two others will be considered here. The medical definition as it appears in DSM IIIR (Diagnostic and Statistical Manual of Mental Disorders) and an abbreviated form summed up in the Ministry's Statement to School Boards of December 1978.

The essential feature is significant impairment in the development of reading skills not accounted for by chronological age, mental age, or inadequate schooling. In addition, in school, the child's performance on tasks requiring reading skills is significantly below his or her intellectual capacity . . . one-to-two-year discrepancy in reading . . . (DSM IIIR, p. 93).

The Ministry's directive states there must be "a significant discrepancy between academic achievement and assessed intellectual ability" (p. 3). It goes on to list the areas of deficit which have already been cited in the initial definition. The directive also lists a general type of Learning Disability found in literature records as "informational processing disorders [that] result in a preferred way of learning academic skills. The learning disability itself occurs when curriculum approaches do not match a pupil's

developmental pattern of learning” (p. 2). This is an interesting comment and one on which I will expand on in a later chapter.

Although the definitions listed above range from general to specific, the term “learning disabled” and the “discrepancy factor” (outlined above by the Ministry), have been generally accepted and recognized in all educational and medical settings.

Now that the ‘exceptional’ students have been recognized, duly tested and diagnosed as LD what is the next step? Are we providing programmes that address their needs, are we teaching these students to read with fluency and accuracy, to extract meaning from text, to become comfortable with the written word?



### SECTION III

#### IDENTIFICATION AND PLACEMENT OF THE LD STUDENT

##### (A) Problems that Arise at School Level

The policies of both the Ministry and the Boards of Education clearly indicate a desire to recognize and programme both correctly and early for 'special' children. (children who have difficulty reading). If these policies are in place and are working, why then, do we continue to have children with learning problems surfacing in the junior (gr. 4-6) and senior (gr. 7-8) grades? Why do we continue to have such an "alarming extent of illiteracy" when they leave school ("4.5 million in Canada", National, Spring, 1988, p. 17)? Why do we have such a large drop out rate in our high schools, (children who are not meeting with success) such that boards have task forces in place to try to rectify this? Could some of these children and young adults have been learning disabled? Why do 16-18 year old LD youths comprise 85% of the young offenders incarcerated in our penal systems (J. Dougherty, p. 2)? At the general meeting of the Elizabeth Fry Societies in 1986 a resolution was passed that "recognized that a high percentage of persons in the criminal justice system are learning disabled" (National, Spring, 1987, p. 5). It has also been established that "There is a clear relationship between learning disabilities and illiteracy, unemployment and delinquency" (National, Spring, 1988, p. 17). How can this large LD population fall through the cracks? Since legislation guarantees equal access and the right to an education that will assure every child the opportunity to reach and exercise her/his full potential, where does the system break down?

“Researchers across North America estimate that between ten and twenty percent of children in our schools have moderate to severe learning disabilities despite normal intellectual potential” (J. Dougherty, p. 1). In 1988, close to 62 000 children in Ontario were identified as LD, approximately 3% of our school age children (Statistics, Minister’s Report, 1989, p. 2). If we accept the lowest of the above cited percentages (10%), then only a third of LD children are being identified. How can this happen under our present system?

The process of identifying an LD pupil is a lengthy one (and sometimes a discouraging one). There are many reasons for this. The notion of labeling brings with it connotations of ridicule, embarrassment, being singled out, viewed as different. Many feel this stigma causes educators to overlook these students’ other qualities. Parents and educators often do not appreciate that the so-called ‘labeling’ process can open the doors to services and programmes. These programmes, if offered early enough, may significantly reduce future problems that will far outweigh any harm to come from the ‘label’. “This term is certainly not a label, nor is it stigmatizing. For many . . . having their specific learning disability identified and explained is the first firm step toward independence, acceptance and success” (E. Nichols, Communique, April, 1990, p. 2).

In this school board, an LD child may go unrecognized or under-served for many years despite current legislation. A young child enters Senior Kindergarten and the school system at about age five. If the child is LD, she/he may “bring to school a set of behaviours that are maladaptive for classroom learning” (Torgesen, p. 168). Many studies (e.g., K. E. Stanovich, 1988, J. K. Torgesen, 1989, R. H. Felton and F. B. Wood 1989) indicate that there are “significant differences in basic processing abilities important for the development of adequate reading skills [that] are present and quantifiable from the very beginning of children’s academic experience” (Torgesen, p. 168).

Although the Ministry has in place a directive on early identification (1978 Memo to Directors and Principals of Ontario Schools) that states: “each board in the province shall approve a specific procedure to determine the child’s learning needs and abilities when the child is first enrolled” (p. 1), and outlines the procedure and aspects of assessment, there is no universally accepted process. Each board effects its own procedure. In this board, the process is further compromised by the Family of Schools (FOS) or area superintendent who may leave the interpretation of the Ministry directive to the school principals. There is no policy governing early identification. Thus a kindergarten teacher who interviews each incoming pupil in his/her home is instructed to observe and get to know the child rather than complete a set of assigned tasks. It was thought that a preconceived check list would hamper the teacher in her primary task of putting the child at ease. As well, to label such a young child with even a hint of a learning problem, was not considered appropriate. Thus the “Early Identification System” report has been reduced to the amount of note-taking a kindergarten teacher may (or may not) do during her initial interview. This assessment is neither formalized nor necessarily available for others (e.g., special education teacher) to share. It does not have to appear in the child’s Ontario School Records (OSR) and may be destroyed at the teacher’s discretion. Even if the initial report contained sufficient data to alert educators to a possible impairment, it may require some expertise to recognize these early signals, expertise that may not be available to the kindergarten teacher at the time of data gathering. Nor may she have the research background necessary to design an appropriate task that would indicate early soft signs of learning disabilities.

Despite this board’s inability to take advantage of an early identification system, there are many methods available that would otherwise help identify an LD pupil who is in the school system. However, the process of recognition does not always work. There are many areas in the system that may prevent a pupil from being identified as LD

or receive the appropriate setting and/or curriculum. This paper will present examples of case studies to illustrate these problems.

Once pupils are in kindergarten, the teacher is often aware that certain children are not thriving in the academic and/or social environment of her room. Often the child (or children) is the subject of many discussions, both with parents and colleagues. Because the LD child has average or above average intelligence, she/he often compensates for these early deficits and the teacher prefers to err on the side of the child even if she has misgivings about the child's future abilities. That is, when promotion is discussed, it is better to let the child go on to Grade one than to risk making an error in judgment by holding the child back. Often the problems the student encounters can be attributed to slow or late maturation and it is hoped the problems will disappear with time. Also it is often impractical to hold back a kindergarten child. Kindergarten is half-time and if the grade is repeated, he misses the educational and social involvement with his peers during the full-time programme of Grade one. He is then forced to stay at home part of the day during, perhaps, his optimum learning time. Other factors such as parental pressure, teacher and/or principal bias, prevailing philosophy of the school and school board, and amount of classroom intervention available, influence the decision for placement of the 'at risk' child.

Thus the pupil goes on to Grade one. Soon, however, it is evident the student is not making the progress his peers are, and, once again, he becomes the object of many discussions with principal, parents and colleagues.

Among alternatives suggested at this time may be a modified programme, extra help from a volunteer, para-professional, or resource teacher. Consultations with a Primary-Junior consultant (PJ) or informal intervention from the special education teacher or resource teacher may take place depending on who the Grade one teacher has consulted and the resource personnel available. As some or all of these interventions

require discussion, they often take place only when there is available time common to both the teacher and whomever she is consulting. This is often after school hours and/or at lunch time. As this time is also scheduled for staff meetings, inservice of new programmes, etc., committee meetings, or playground duties, it is often some time before the necessary consultations can take place. Then the new strategies must be given adequate time to be put in place and assessed before other techniques are tried. Considerable time may pass before it is decided this type of intervention is not effective and the student is brought before the School Team.

One might wonder why the School Team is not approached initially. There are several reasons for this. Some teachers feel it reflects on their own competence when they have not been successful with a student. Others see asking for help as an admission of failure and find great difficulty with this aspect of referral. It is also very time-consuming because of the required paper work, the waiting list to get on the School Team agenda, and the time to attend the scheduled meeting. During the meeting, the teacher will be asked if different strategies have been tried, so it is to her benefit if she can describe the variety of techniques she has already used.

Because “children with reading disabilities often appear to be deficient on so many different tasks when compared to children who learn normally” (J .K .Torgesen, 1989, p. 167), it is difficult to choose which areas to modify or remediate. Often a behaviour modification programme is suggested to change a maladaptive behaviour that may mask an underlying LD problem. In this case, however, the initial problem remains even if the behaviour has been changed.

Another scenario could result in the student in question being referred to the School Resource Team (SRT) meeting. As this intervention is basically like the first, but with more expertise involved, more suggestions are offered to the teacher to try to implement. Here the PJ consultant may or may not actually enter the classroom and attempt to

role-model the new strategy. Usually, the consultant merely sets up an additional meeting to discuss the suggested strategies further. At this time the SERT (Special Education Resource Teacher) may enter the classroom and attempt some changes but she is often hampered by the large numbers of identified children she is already involved with and has little time to programme for a child not officially identified as LD.

The SERT may suggest testing involving the psychometrician who already has a long waiting list for the schools she services. Time must be found to test the student, usually over several days. Before testing, parental permission is required and paper work must be initiated. After administration, the tests must be interpreted and formalized. A meeting time must be found to discuss the ramifications of the testing. The SERT may also do some informal testing not requiring parental permission, but again, the same limitations are in place: time, availability and re-scheduling of the team for discussion and sharing of information. If health documentation is needed, more time is required to seek parental co-operation and feedback from the medical profession.

#### (B) Examples that Illustrate Problems that Occur

A pupil called Ivan is an example of adequate medical intervention not being put in place quickly. From early kindergarten, it was noted he had many problems. His parents continually requested an assessment as they were concerned he might have a learning disability because of his lack of progress in learning to read and write. He repeated kindergarten and began to exhibit bizarre behaviour which was noted in his file. He received resource support in Grade one and in Grade two. He still was unable to read. He was finally identified as an LD child. He had been in the system four years before being transferred to a segregated setting and another two years before receiving psychiatric help. This was a boy who not only couldn't read or spell but appeared to be losing touch with reality and talked of suicide in grade five. No one wanted to be responsible for

referring him for professional help. The psychiatrist commented he had never met a child with such low self-esteem. He arranged to see him weekly because of the severity of the problem. It is not known how much damage Ivan has sustained because of being so different from his peers and receiving medical intervention so late. As the parents could not afford private help, the recommendation had to come from the school in order to be covered by medical insurance. Whether misplaced concern or a genuine uncertainty about the problem was the cause of the school's inability to deal effectively with his disability, it will never be known if earlier intervention would have helped Ivan. The teacher's observations and recommendations were not weighted heavily in the decision-making process. Board policy, as interpreted by administrators, was.

A great deal of time can pass while the teacher tries different teaching strategies then meets and engages in consultation, application, observation and feedback to the school team committee. If the school policy set by the principal, or the FOS policy set by the area superintendent, is one that makes identification difficult for a variety of reasons, the School Team meetings may continue to suggest and monitor a diversity of techniques that take up the teacher's time and the child's first year. The teacher still has a full class of children with a wide range of strengths and deficits which she must accommodate, and may in fact, have other students that are experiencing problems for whom she must modify the programme. As the first year ends, decisions are made early on the future of the potential LD student. If the principal believes in repeating rather than identifying, or if the parents prefer the former, or if the present teacher feels the child would benefit from another year in Grade one, this student could easily find himself in the same situation for another year.

The decision to promote or repeat lies with the principal who may be influenced by a number of factors including the views of teachers, parents and his own inherent belief system. Principals seldom have special education qualifications, background or

training, and may rely on their specialists' opinions or the opinion of their teachers. Some do not like to fail children in their system, some feel if a child is not successful, he should repeat. Still others are unduly influenced by the expectations of their superintendents. Parental pressure to promote is sometimes a factor. Often the reason for promoting is keeping the youngster with his peer group regardless of the fact that he cannot keep up academically. Paradoxically, some of the above reasons may be used for having the child repeat the year. If he repeats, he will fit in with the incoming class better than his present one. He may, in fact, really be with his peers. Parents may wish their child to repeat, or some principals won't recognize a child as exceptional unless he has repeated. Thus lack of training for administrators, political considerations and philosophical beliefs, (as well as parents' wishes) all influence the decisions governing the proper placement of the LD child. Each school is subject to the current principal's method of making a decision. Each principal may be influenced by all or any of the above. There is no written rule about repeating. Each case should be considered on its own merits. However, the LD child presents added difficulties, as the child is usually average or above average in intelligence and it is difficult justifying repeating thus effectively removing the benefit of peer interaction and stimulation. Even though the child is not yet reading (or writing) at grade level, his remaining skills and abilities are intact and will not benefit by repeating a year with younger children. It is important that the views of an experienced Special Education teacher who has worked extensively with the child be given weight in this decision. She has both the experience and the knowledge to assess the child's abilities and suggest a prognosis based on her assessment of the particular student.

The child who is held back in Grade one is often with the same teacher and receives the same programme. He continues to obtain assistance in the areas of deficiency, usually from the same staff as in the previous year. His failure to thrive is more noticeable as his classmates (who are now younger) start to pass him academically (and



often socially). By now he has a clear message from the school system that there is something wrong with him. This often results in attention-getting behaviours. He builds up his self-esteem in other ways. Class clown earns the laughter and attention of his peers and distracts from academic failures. Class bully gives him a feeling of control and power denied him in the classroom. Passive behaviour is the reaction of the student who feels that nothing he can do will change the outcome. Feelings of frustration often result in frequent crying and complaining. Low self-esteem adds to his sense of failure. These are some of the behaviours exhibited by LD children. They often persevere on a task until it is perfect as if somehow, if they can control what they have printed, if it is finally perfect, it will be concrete evidence that they are okay too.

David is an example of a child who, through constant frustration, was frequently found crying during class and on the playground. He was repeating Grade two. Because of a severe reading disability, he was reading far below his grade level. He could not spell and could barely print anything intelligible. He had spent two years in Kindergarten and was spending his second year in Grade two. This child had been five years in the school system. He had received resource support in Grade one and in Grade two. He had been a frequent subject at school and resource team meetings. He had been referred to a speech teacher and a child care worker. He had received a psychiatric assessment, medical assessment and informal educational testing. Because of the principal's reluctance to support a segregated setting, David was at risk academically and emotionally. The school's inability to recognize his unique learning problems at kindergarten or Grade one level resulted in many wasted and frustrating years in David's life.

On the other hand, the student who, instead of repeating, is promoted on to the next grade even though he/she had not been successful in the previous grade, experiences a similar set of problems. The difference is that he experiences them more quickly: he is with his peers, therefore the differences are more evident and he is soon left behind

in his areas of deficit. He, in turn, may exhibit behaviour (withdrawal or aggression) similar to that of the child who did not go on. He also becomes a frequent topic of conversation in staff rooms, with colleagues, and (because of behaviour), with the principal. More suggestions are made, and more methods are put in place by the teacher. There is greater intervention now because his deficits are more noticeable in the higher grade. He is presented to the School Team Committee. Again various programme modifications are discussed. It may be several more months before the results of the new methods can be assessed. If there has not been sufficient gain, the student is brought back to the School Team meeting. Now the focus may be on some academic testing to see where the student places on a standardized educational test as well as an informal test (if not already previously done). The results are then shared at another meeting and, if interpreted as an evident discrepancy between ability and performance, he is presented at the Resource Team meeting. If the principal's bias is against a segregated setting, or if the area superintendent has a similar belief and has influenced his staff (i.e., consultants, principal etc.), or if the board desires to keep the number of special education students to a minimum because of cost or a sense of aversion to labeling, this meeting can often prove frustrating to his teachers. The classroom teacher still has the student in her class, even though he is obviously in need of more than she can provide. The SERT is seeking placement for the student so that a different programme may be initiated as soon as possible.

Jason was an example of a child caught in this kind of a system. At kindergarten level it was recognized he was experiencing problems. He was placed in Grade one the following year. Very early in the year, in spite of programme modification and small group support, it was evident that the Grade one programme was too challenging for Jason. He was assessed by the SERT. The Primary Junior Consultant (PJ) observed him and the Child Care Worker (CCW) did an assessment as well. An agreement was reached that Jason be placed back in the Kindergarten room for the morning and in Grade one in

the afternoon. This was the decision reached for a child who was already experiencing problems with routines, peers and distractibility. The following year, Jason was placed full time in Grade one. His behaviour deteriorated and he became very aggressive. Academically, he continued to experience difficulties. His teacher frequently presented his case at the team meetings. As a result, he received psychological testing that indicated he had average intelligence. He also received a medical assessment (that indicated he was healthy). His mother hired a tutor at some expense to the family. There was little change in his performance. This was his third year in the school system. At another Resource Team meeting it was suggested that the CCW become more involved. She designed a behaviour modification programme to be monitored by the classroom teacher. Jason continued to experience academic problems. His teacher was hesitant to continue to present his case to the team meetings as this was a frustrating experience for her to continue to admit failure to a group of her peers and outside resource consultants.

The PJ consultant may sometimes appear unsupportive (she is looking at the child from a different perspective) and this may cause the classroom teacher to feel incompetent. This sometimes discourages teachers who tend to persevere with these children. If enough time passes, the problem can eventually be passed on to the next year's teacher. If the PJ consultant feels pressured not to recognize the student as in need of a segregated setting (because of board policy, or misunderstanding of board policy), she may unconsciously give the signal to the teacher or principal that more could or should be done with the student that has not as yet been tried. She may offer to come into the classroom and observe the student in order to offer additional suggestions.

The year moves along in this manner. The waiting list for psychological assessment is often long, as it is for medical assessments. There is considerable paper work involved as well. Then meetings to discuss the ramifications of these results have to be arranged. Often the speed of recognizing and labeling a child as LD is dependent on

the advocacy skills and determination of the teacher or Special Education teacher and/or the effective lobbying of the parent. A vocal parent who knows her rights can have her child assessed early by applying pressure on the principal (through her trustee or superintendent) or using the weight of a parent organization (e.g., Association for Children and Adults with Learning Disabilities). “Access to remedial resources is too often dependent on the family’s or individual’s advocacy skills” (National, Spring, 1988, p. 17).

An example of this kind of pressure occurred when, because of Bill 82, the students that were previously being funded by the Government, but were receiving their education outside of the Public School System or even outside of Ontario, now had to return to the Ontario School System. They would no longer receive funding for their special education outside of the Ontario system. It became incumbent on the school system to provide for these “exceptional pupils”.

The parents of these children were aware of the former difficulty the board had in educating their children successfully and were exceedingly militant and aware of their rights. They were represented by lawyers and the Association of Children and Adults with Learning Disabilities (ACALD) acted as advocates. This school system set up a special section in a high school that cost thousands of dollars to accommodate these “special pupils”. It “serves secondary students identified as severely learning disabled, who require a significant degree of individualized programming” (Special Education, Regional Programs and Services, 1989, p. 7). It did not exist prior to Bill 982. Students who are admitted have to be bussed to this centre as there is only one in existence and because of the high cost, stringent rules for acceptance are in place. Many parents are unaware of this programme.

Once a student is recognized as “exceptional”, and duly labeled, he/she can receive a variety of services depending on the school he/she attends. An official label

guarantees assistance. It may take many forms. The amount of time and aid he receives is dependent on the number of students already receiving help, the number of staff and aides involved and the policy and philosophy of the school and its principal. If the student is withdrawn for extra help, it may be as little as ten to twenty minutes a day, or two times a week or any other arrangement the SERT can work out in order to accommodate everyone involved. If the teacher has a para-professional to assist her, more children may be seen but with less expertise available. In fact, the child may not receive much more help than he was already getting before he was labeled. In some cases this can happen because once the child is labeled, the classroom teacher may see the student as the SERT's problem now and concentrate more on the other children in difficulty that are not yet labeled as "special". Now the SERT has to build time into her day to meet with the classroom teacher (who also has to find the time) to discuss the progress, programme and modifications put in place to accommodate the "special pupil". This is not easy in an already full day for both teachers as, in many cases, more than one child is involved, and, in the case of the SERT, many children and teachers are affected.

However, even with SERT intervention, many children do not thrive. Whether the SERT withdraws students on a regular basis or works in the classroom alongside the teacher giving extra assistance to the "special pupil", some children continue to do poorly. It has been recognized that "Most classes are too large for effective individualized programmes" (Mainstreaming, p. 107).

Once again the student's name appears before a committee and his needs are discussed, his history reviewed, his teachers' frustrations shared. It may be obvious at this time that the current curriculum is not meeting his needs and a different environment may be necessary. This observation would result in the student being referred to a segregated setting. It is noted this decision is never made lightly and may often be delayed further by

a principal or consultant hesitant to go against perceived board policy or the current mode of “mainstreaming” which is presently part of board policy.

This difficulty in getting a child into an alternate environment is often so discouraging that many teachers hesitate to take this route, preferring to try other approaches knowing that next year it will be someone else’s problem. This is not to be taken as a criticism of teachers but a reflection on the board’s policies governing identification and labeling of “special” children or the perceptions of the superintendents or principals of that policy. Often the board is pressured by concerned parents to set up this kind of class for their children, but a segregated class is seldom set up without serious lobbying by parents of LD children who are not benefiting from regular or “mainstream” classes.

The recognition and identification of an LD child vary from school to school, area to area, school board to school board. They also vary with the severity of the disability, how the child is coping, whether behavioural problems develop or not, the influence of the parents and the stamina and courage of the teachers. Some children are identified and provided with a segregated programme much earlier than others, but no child should be permitted to become a victim of a system that forgets its mandate is to help each child “to reach his or her potential” (B. Stephenson, 1978, p. 2).

While this account may seem to suggest that every delay in acknowledging an alternate placement of a child is due to some ‘conspiracy’, that is not the case. Rather, it is the lack of sufficient knowledge on the part of the administrators who influence board decisions. Often these same administrators have never been in contact with an LD student, let alone helped teach, programme for and interact with a child who has learning deficiencies. There is no set formula that will work with all children. Years of successful experience, up to date research, trial and error, appropriate teaching techniques and even intuition, all play a part in successful intervention with these students. Day-to-day interaction with these special pupils is a necessity if one is to be involved in their correct

placement. Unfortunately, the person (SERT) who has this role plays only an insignificant part in the decision-making.

If there is a reason to believe the student would benefit from a more in-depth assessment, or if there is some doubt concerning his problems, the student can be referred to the Diagnostic Centre (which has a long waiting list) (Special Education, Regional Programs and Services, 1989). If the student meets their criteria, the student attends the Centre (which may be a considerable distance away) for a specified period of time (six weeks). Once there, he is assessed by another group of teachers on a much lower pupil/teacher ratio (PTR). When he returns to his home school, a list of recommendations is forwarded which may or may not be followed depending on the circumstances of the school, teacher attitude and commitment, and appropriate help available. Although there is follow up by the Diagnostic Centre, they have no power to implement the suggested changes. Their role is an advisory one. However, if the curriculum the teacher is following is not appropriate to the student, despite this added intervention, the pupil will continue to make little or no progress.

Ryan is an example of a student who failed to benefit from the curriculum offered in the classroom setting. He repeated kindergarten where, it was noted, he had a history of learning problems. He received remedial instruction while still in kindergarten. While in Grade One, his case was presented at team meetings frequently. He had a psychiatric assessment indicating average intelligence. He received a speech and language assessment which was found to be age appropriate. He received remedial support in Grade One from the SERT. He then had a medical workup at a diagnostic hospital. The assessment indicated Ryan had an auditory processing problem and the hospital forwarded a list of strategies to use with Ryan.

As he did not improve academically, he was often the subject of ST and SRT meetings. He had been in the school system for three years. While in Grade Two, the

SERT started working with him on a withdrawal basis in a segregated setting for language only. This fragmented his day as he spent part of his time in his regular class and part of it in another setting. This method of intervention did not work as Ryan frequently forgot to come or wandered the halls between classes as he moved from one room to another.

The administrators at the SRT meetings failed to recognize Ryan as a candidate for full-time segregated setting despite the recommendation of the SERT that this would be the best setting for him. The suggestion from the SRT meeting was that Ryan be medicated with Ritalin to help him with his distractibility. Both the SERT and his parents were against this. In order to influence the consultant and principal to recognize an alternate placement for him, he was referred to the Diagnostic Centre for further assessment. After six weeks, Ryan returned with the recommendation that he be placed in a segregated setting. Only then would the principal consider his placement to a more appropriate environment. Ryan had been in the system for four years. Too much time was required because of the system's concern (reluctance to commit) that it might make an incorrect diagnosis. Band-aid philosophy often governs some decisions or lack of them. The system's overzealousness to protect itself from a wrong placement, or because of financial considerations or a particular board's or principal's beliefs, may result in unnecessary suffering for a student. Failure to consider alternatives for Ryan when he failed to progress, resulted in a delay that cannot be beneficial to the student no matter what the reasons are.

It is evident that if the bias of the principal or his superintendent, or even of the teacher, is one of reluctance to identify or label the pupil, this system can effectively delay the decision to recognize an "exceptional pupil" for many years. Often it is the accompanying, observable behaviours of "acting out" that eventually are sufficient reasons to recognize that the child is now a problem. Schools are quick to record behaviour



that is disruptive to teachers and students and eventually are causes of parental concern. Behaviour problems affect the reputation of the school and its administrators, hence often receive quick attention. Here, however, there are also alternatives. The student can be placed in a behavioural class that is designed to deal with the aggressive or maladaptive behaviours. The option of a residential school or special schools operated by the Province is also a possibility if the student fits the criteria. Private schools are another avenue, if the parent can afford it as, under Bill 82, students are no longer funded by the Government if they leave the public system.

While the above examples may be rare, they do happen. However, I have only addressed the primary and junior level of education. The intermediate and high schools offer a new set of challenges to the LD student which will not be addressed here. The “failure to thrive” syndrome rears its head early and my premise is that it should be dealt with promptly. Intervention in the form of segregation if necessary, ought to take place long before the LD student reaches the level of maturity or the chronological age of a junior grade student. By then, too many inappropriate learned behaviours have been put in place by the child making late intervention very difficult if not impossible.

#### (C) Problems that Arise Due to Late Identification

If the LD pupil is not identified early (kindergarten or grade one level), many problems arise, compounding and often disguising the original learning problem. A student frequently exposed to failure develops many mechanisms that allow him to cope with his environment. Some of these outcomes are regarded as behavioural difficulties. As Joan Dougherty, former director of the Quebec Association for Children with Learning Disabilities notes, “It is true that many children with LD become emotionally upset, but the behaviour is usually the result of and not the cause of the LD” (p. 1).

Children with low self-esteem may become playground bullies masking their failures by physical successes. They are often impulsive and appear immature and careless. Their “difficulties with learning and behaviour are often misunderstood . . . and . . . [they] are often labeled ‘stupid’ and ‘lazy’” (LD—an “invisible handicap” p. 1). Other LD children take the opposite tack, becoming withdrawn and depressed. They are not recognized as children with problems because they are conforming and unobtrusive. They won’t take risks, are sometimes seen as not trying, or as not applying themselves. If their handicap is unrecognized and not dealt with early, it plays havoc with their relationships in school and at home. They are “at risk for rejection and abuse, emotional problems, suicide, delinquency and unemployment” (LD—an “invisible” handicap, p. 1).

In addition to learning deficits and their accompanying problems, the LD child may exhibit a high degree of hyperactivity which is difficult to deal with in a regular classroom setting. This problem can be controlled with medication (e.g., ritalin) which is often recommended by pediatricians, teachers and/or parents. Hyperactivity is often seen as the primary problem for a child who is failing to thrive. Once the LD child is medicated, it is assumed he will be able to learn more effectively. This is fallacious thinking. A student with LD continues to have a handicap even if his hyperactivity is controlled chemically. An LD child who is diagnosed as hyperactive (often accompanied by an attentional deficit disorder ADD) “has difficulty awaiting turn in games or group situations . . . often interrupts or intrudes on others, e.g., butts into other children’s games [and] often does not seem to listen to what is being said to him or her” (DSM IIIR, p. 52). It is not difficult to see why these children are often unpopular with their peers on the playground or in the classroom. As onset is before the age of seven (DSM p. 53), if these symptoms are not recognized, they often escalate to the point of ostracism by his/her peers. What appears as minor annoyances in the classroom may, with time, become major “disruptive behaviour disorders . . . particularly in older children and adolescents” (DSM

p. 53). The longer the child's disability remains unrecognized or unremediated, the more severe these masking behaviours or mechanisms may become. Studies show that exceptional pupils often display behaviour that leads to rejection, ridicule, and failure within the regular group (Bryan, 1978; Weintraub et al, 1976).

Some children exhibit aggressive tendencies which may escalate as they get older. While these outbursts may be decreased in a controlled setting, the unstructured environment of the school halls, lockers and playgrounds removes the constraints that help keep this aggression in check. Other LD children may become victims, their demeanor (or small physical size) suggests, perhaps, their insecurities and vulnerability. Their peers seem to sense this and may deliberately (or accidentally) set off the low frustration levels of some LD children. Frequent teasing or taunting, the physical inability to keep up or the lack of dexterity of some LD children, often cause them distress that results in excessive crying, whining or fighting. While this may not differ from any child experiencing the same frustrations, the LD child often continues this behaviour to excess. He does not realize he plays a role in these confrontations.

Dr. Adele Thomas of Brock University has made an extensive study of these kinds of children and listed among her behavioural checklist are children who give up easily, are last to get started, are easily discouraged with new tasks, ask for help before they get started and appear uncomfortable when praised (Land, 1985). Such children feel they have no impact on their environment. Learned helplessness takes ownership of failure but does not accept ownership of success. Seligman determined that learned helplessness

was a consequence of perception that behaviour would not produce a desired outcome. It is a dysfunction which magnifies all instances of failure which obscures and even obliterates all instances of success (J. Land, p. 5).

In summary, with these children, the process of attribution becomes one of self-depreciation or criticism which the child cannot halt, even when evidence indicates

capability and competence. A few failures quickly become a universalized failure which perpetually reinforces the child's feelings of helplessness. Errors do not act as feedback or cues for change but become evidence of incompetence in their own minds. Therefore, they see no reason to change their strategy or modify their approach to tasks in general.

At the other end of the continuum, there is what appears to be the active risk-taker, the impulsive responder who often reacts with bizarre behaviour both in the class and on the playground. His responses and/or actions are often inappropriate to the situation. He does not appear to learn from his experiences, sometimes making the same mistakes over and over. This type of child is typically impulsive, easily distracted, inconsistent, poor in self-monitoring techniques, often aggressive and disruptive. His inability to interpret social cues and body language often lead others to reject him. This increases his aggressive or inappropriate behaviour.

The above behaviour pattern is easily observed in unstructured situations where the child's efforts often result in rebuffs, aggression and chaos. He faces constant rejection by both his peers and his teachers but does not attempt to modify his behaviour or his approach in order to reduce these conflicts. It appears that he takes risks constantly. Rejection does not deter him from risking further. His maladaptive social behaviour often results in inappropriate responses, short attention span, little task commitment and unsuitable affect. Ritalin is often dispensed to these children unnecessarily. Learning is at a minimum, risk-taking is at a peak. As an impulsive responder, he frequently risks incorrect answers and, as a socially maladjusted child, he constantly risks rejection. This type of youngster does not take ownership of his behaviour. He sees his problems as always caused by others. He is forever blameless in risk or conflict situations. (In fact, he risks nothing as he struggles with an inconsistent environment, one which only aggression can master). Such a child is often a problem in class and on the playground. What appears

as constant risk-taking by these children is perceived by them as attempts to 'belong', to be 'right', to be 'accepted'. Since the child never sees that he is the cause of his unhappy circumstances, he does not take ownership of the consequences. In essence, he has risked nothing.

Both these two types of children, the passive and the impulsive child, divert their energies into protecting themselves from real risk, and this results in further damage to their already low self-esteem. Without risk, there is little learning, little gain, little change.

It is easy to see why identification and appropriate intervention at an early age, are so important. When LD is concurrent with maladaptive behaviours, it becomes increasingly difficult to diagnose the primary problem. If we are to avoid "the problems of insult, failure-mentality, and loss of esteem now often associated with achievement problems in the curriculum", (R. Steffy, p. 7) it is of prime importance that we understand the best way these children learn and what factors prevent or impede their progress.

#### (D) The Importance of Early Identification

"The Ministry of Education is requiring that every school board identify the learning characteristics of all children when they enter school for the first time. Identification and appropriate intervention at this early stage will ensure that LD students are provided with meaningful early school experiences related to their individual strengths and weaknesses" (Special Education Information Handbook, 1981, p. 6).

No one can argue with this directive. In theory, all LD children would be recognized at an early age and appropriate intervention would be instituted to circumvent early school decline and the future social-emotional problems that result from low self-esteem brought on by repeated failure. Not to intervene at an early age in order to ensure

proper placement of the LD child will surely have lifelong consequences. No intervention “during the first five years of life [in order] to press development to its limits and to minimize any secondary problems is likely to place a child at a disadvantage with regard to future opportunities to develop” (M. Guralnick and F. Bennett, p. 18).

Much research has been done on the need for early detection for high risk children (Critchley, 1968, Satz, 1973, Siegel, 1985, Haber and Norris, 1987, Felton and Wood, 1989, Koppitz, 1971 to name a few). Since “reading disorders which persist into late childhood often lead to secondary emotional and behavioural disturbances” (Satz, Taylor, Friel and Fletcher, 1978, p. 316), it is of prime importance that children with LD be detected early, preferably before they begin formal schooling. “A valid early detection system that could be administered before the child began formal reading, at a time . . . when the child is less subject to the shattering effects of repeated academic failure” (Satz et al, p. 316) would be a boon to both the education system as well as the ‘at risk’ student. Felton & Wood (1989) agree on the importance of early identification and “appropriate instruction prior to the development of reading problems severe enough to meet standard LD criteria” (p. 12). Olson, Wise, Conners, Rack and Fulker (1989) state that evidence indicates that for pre-readers “language training may reduce the likelihood of reading difficulties for children at risk” (p. 347) and they cite a study by Bradley and Bryant (1983) that indicated a “trend toward better reading in the early grades for pre-readers” (p. 746) who performed a series of language tasks prior to formal schooling.

Throughout the Celdic report (One Million Children: A National Study of Canadian Children with Emotional and Learning Disorders, 1970), importance is placed on “prevention, upon early identification of problems and on mobilizing help immediately before the problems become complex” (p. 91) “Unless some form of intervention is provided, much too large a proportion of children are likely to be trapped in a cycle of events during their early years that appear counterproductive to their development”

(Guralnick et al, p. 19). Unfortunately, in our system, children are often not referred for evaluation until the ages of 9-11 when they “may be maturationally less ready” [for intervention] (Satz p. 317) and have developed concurrent problems of failure rather than at an earlier age when “variations in the environment have their greatest quantitative effect on a characteristic at its most rapid period of change” (Satz p. 317). Early prediction of learning problems would not only be more effective, but also less costly if the long range health and social ramifications are taken into consideration. “Even if the effects of these early events are reversible, they appear to be affecting processes that may require extraordinary and costly efforts in order to restore development to its optimal course at a later time” (Guralnick p. 19).

The costs of dealing with problems of illiteracy (4.5 million Canadians functionally illiterate, National, Spring, 1988, p. 17), unemployment (there appears to be a clear relationship between LD and unemployment, National p. 17) and delinquency (75-80 % of delinquent boys can't read, J. Dougherty) far outweigh the cost of developing an early identification programme for ‘at risk’ children. “There is some evidence to suggest that learning disabilities are associated with juvenile delinquency (Berman et al., 1976; Jacobson, 1974) and adult mental health problems (Rutter, 1970)”. (P. Salvatori, 1984). The cost in human waste cannot be measured. In our educational system, there is no systematic monitoring, no longitudinal studies, no organized method of early identification, no specialized ongoing early intervention, no consistent policy being implemented in all schools. Policy is interpreted by administrators of individual schools (often with little or no special education background).

There is insufficient in-service training for kindergarten and Grade one teachers and little or no training for new teachers at this level. The importance of early identification or a systematized check list is not stressed. The Special Education teacher is not alerted at kindergarten age for early monitoring of an ‘at risk’ child. Often the kindergar-

ten teacher is aware of deficiencies but since the children are not necessarily required to read at this level, she is unable to articulate or predict to others the nature of the problems or their possible long term effect.

Despite the obvious advantages of an early intervention system, it must be based on a valid and efficient detection programme. Prediction errors, however, may still arise. False positive identification may be included among the children screened. High risk children may be missed. However, this should not prevent an early identification system being put in place. With proper monitoring and longitudinal studies, the programme of recognition can be adjusted, adapted and revised in order to eliminate these errors. Children identified through a check list will not ultimately be labeled for life. This recognition would only act as an early warning system to alert educators to watch for possible problems. Activities could be initiated to deal with evidence of weaknesses related to LD and the child's progress would be monitored as he progressed through kindergarten and grade one. A slow maturing child will produce different results over time from those of a LD child. By the end of Kindergarten that differentiation should become evident.

A risk index developed by L. Siegel (1985), was successful at detecting developmental problems with relatively low rates of false identification . It was composed of a variety of demographic, reproductive and perinatal variables. The children were tested before they were one year and up to six years. The Satz battery (1978) was designed to predict LD. The Texas Preschool Screening Inventory (TPSI) resulted in a "simple preschool screening device for identified children who need further assessment for language and LD" (Guralnick p. 221). Koppitz (1971) makes 12 recommendations for early identification and intervention for LD children. "Most children with LD tend to have difficulties in school beginning with the primary grades. The emphasis in Special Education should be shifted from rehabilitation and the correction of language and emo-



tional disabilities to the prevention of such problems” (p. 198). “. . . vulnerable children should be identified at the time of school entry and should be given special consideration before they develop serious learning and emotional problems” (p. 198). Koppitz advocates additional after school recreational activities, as well as working closely with the parents. Her recognition and concern for the whole child is important. A too narrow focus on the child’s disabilities is not the answer. A programme that deals with his strengths, social and emotional, as well as physical aspects, is necessary for his well-being and his successful involvement with the school system.

One superintendent of a local school board said “the Early Identification program introduced by the province eleven years ago was a major combat weapon in the battle against illiteracy. The program requires schools to identify children in need of special attention at the earliest possible stage and then do their best to meet those students’ needs to the fullest”. (P. Beveridge) However, he does not elaborate on what modifications are put in place once these children are recognized. It is not sufficient just to alert the system that a child is at risk. If it were that simple, we would not have so many children with problems identified in later grades. It is also not just a matter of good teaching because many of our excellent and well-trained teachers are found in kindergarten and grade one.

Once LD’s are identified, it is important to provide an ambience that enhances their style of learning. In this school board it has been the general policy to have the SERT go into the classroom and work with the child and the teacher on the programme and in the style the classroom teacher is currently using. An LD child often benefits little from this approach as his learning style is often unique and differs greatly from that currently being used in his class. Thus there is seldom any long term effects of the SERT’s intervention when used in this manner. (as evidenced in the cases cited many of whom had long term SERT help).

In 1988-89 the LDAC launched a project called “Early Identification of LD in Day Care Centers”. Phase one involved investigating the programmes to train early childhood educators and the second phase involved data collection from existing day care centers (p. 1). There is no parallel data collecting at the school board level, no formal follow up on high risk children entering Grade one. Rourke (1983) states that “a large proportion of LD children identified during the early school years do not have a very favourable prognosis for either academic success or social adjustment” (p. 570), not under the current system, in any case. All the more reason school boards should be investigating options for these children in order to more adequately meet their needs and provide for equal opportunities for success at all levels of their development.

Some of the more successful longitudinal research illustrates that there are possible indicators for early detection of LD children (L. Siegel, 1985, p. 231). While there may be some risk of false positive identifications, a carefully trained teacher would be able to make the distinction early during the school term. Even if the child were slow in maturing or of low ability or had a medical problem related to learning (e.g., hearing problem, needs glasses, etc.). It is possible and likely that no lasting harm would occur to the falsely identified child who was put into the programme in error (perhaps, rather the reverse, he would benefit from it). As any child suffering a delay could benefit from additional attention, it is probable that less harm would come from erring in the direction of over-identification rather than the overlooking of children at risk who require the assistance in order to thrive. A child falsely identified, working in an individual programme designed to meet his unique needs, would soon surface. Either he would progress more quickly than is normal for a LD child, or if health and/or emotional problems were impeding progress, because of the very nature of the programme, these needs would be addressed. It is then hoped the child will progress normally. (and thus be demitted from the special programme). These kinds of children might fall into a false

positive category, but can hardly be classified as harmed for life by the individual attention accorded to them while within the programme. Since children with varying disabilities as well as varying degrees of disability are placed in a special education programme, they are demitted at different times throughout and during the years that follow the placement. A false positive child would, because of his early progress, in all probability, be mainstreamed more quickly than a learning disabled child.

Hollinshead (1975) evaluated a programme designed to detect LD in preschool children and provided interventions so these problems might be ameliorated before the children entered formal schooling. The programme involved speech and language and perceptual motor activities. "Evaluation objectives focussed on assessment of improvement of 50% of the participants. Pre- and post-test data revealed that statistically significant differences in the direction of gains and improvement were obtained" (Windsor Early Identification Project Revisited, Ministry of Education, p. 8). A. Biemiller (1983) suggests that "very early identification of potential learning difficulties is possible" (p. 9). Bechtel's (1975) study which identified and remediated potential LD pre-school and elementary grade children showed marked gains by the children involved. "The experimental group made forty-four positive gains (out of 50 possible test scores) over the control group, twenty-seven of which were significant" (p. 9) It was their conclusion that experimental students gained significantly over the control students in the areas of reading accuracy and visual tracking among others. "Bechtel's study was one of the few well-designed attempts to provide remediation based on identification" (p. 9).

The Windsor Early Identification Project (1975) has achieved considerable success as a viable early means of "inexpensively identifying high risk/high potential children in the kindergarten year." (O'Bryan, p. IV).

"Identification programs may best serve their purpose by concentrating on providing immediate, direct, and easy-to-use information drawn from a wide variety of

sources, to focus on the child's current abilities and needs. The teacher, given this type of information, is then in a position to adopt and adapt programs and strategies which may well prevent subsequent learning difficulties". (O'Bryan, p. 2)

However, it must be remembered that the kindergarten teacher has in her class a wide variety of learning styles and maturation levels as well as the possible LD child. Piaget's work suggests that marked transitions can occur in children's cognitive processes around the beginning of school and "many curriculum specialists have suggested the need for care in the testing of and programming for children in the transitional stages." (O'Bryan p. IV). It is here that the funds and concentration of resources should play the greatest role. The SERT should concentrate on directing the programming and on tracking the progress of these early identified 'at risk' students. Her area of expertise is recognizing and adapting material for LD children. It should not be left to the classroom teacher to do (as is the case in most classrooms in the board). The kindergarten teachers' should concentrate their efforts on identifying rather than programming which is time-consuming and may sometimes be beyond their area of expertise. While O'Bryan (p. 2) suggests early identification not be used to predict future success, Rourke (1983), suggests that "prediction is very important for intervention" (p. 570). He explains that the reason for this is the necessity for school boards to allocate special services. "School officials need to know which children will need a multifaceted- and probably expensive program in order to make gains in academic performance" (p. 571).

Satz, Taylor, Friel and Fletcher (1978) studied developmental precursors in kindergarten children that would predict reading failure. They found that reading problems identified during childhood persist during adolescence. Satz et al were unsure about the implications of their results. They state "it is unclear as to whether the persistence of the reading disorder in these children is due to secondary emotional problems or merely to a failure of our education system to help them sooner" (p. 347). Their longitudinal

studies (from grade one to five) indicated that the reading disabled group became increasingly vulnerable over time, “particularly to external changes in the teaching curriculum” (p. 346). They found that by grade five, 78% of the severe group of LD readers had been classed as only mild in grade four: over time, the disability increased. In the study 95% of the children who were classed as severely disabled at the end of grade four remained problem readers in grade five (Satz et al, p. 346). With adequate early identification procedures and immediate and correct intervention, we could decrease these numbers significantly. We have nothing to lose by trying.

It is frequently a matter of economics that may prevent boards from putting into place these procedures. If more money were available for early identification and intervention, we would require less funds later for government services, social services, mental health, penal systems, rehabilitation centres, adult education, residential schools, etc. The impetus for recognition and change is not coming from the Ministry of Education, nor from the Education Administrators of our schools, but from the parents (of these children) who are acutely aware of the poor prognosis of their LD children in the public school system for academic success and job related skills. “An adult with a learning disability typically holds a job for three months . . .” (LDAO fact sheet, p. 2).

There are programmes set up by government social services for early stimulation of children from deprived (inner city) neighbourhoods. Children born with visible handicaps are provided with therapy and enhanced educational advantages by the Ministry of Health. Children exhibiting emotional difficulties are serviced by Children’s Mental Health Centres. It is only Education services that balk at funding their responsibilities to children with the hidden handicap of LD. Perhaps because the former difficulties are so evident, usually recognizable at birth, the physically handicapped, mentally and emotionally handicapped receive support services early, but the LD children don’t. As all children with handicaps benefit from early

recognition, I advocate early intervention with children who are learning disabled in order to teach them how to succeed in the present school system. The Education field should take into consideration the benefits that will accrue to the population as a whole when considering the costs of such a programme. “The early years are not only precarious ones but may well carry a crucial and disproportionate burden for a handicapped child’s later development and overall well-being” (Guralnick, p. 19).

If a school board does not implement an early identification system one that would operate at the pre-school or kindergarten level, it would be helpful for the kindergarten or Grade one teacher to be able to recognize some early precursors of LD in children who fail to thrive in their classrooms.

#### (E) Some Early Precursors for Identifying Possible LD

A soft sign system that helps identify mild perceptual factors that significantly correlate with reading prediction would be extremely beneficial. Koppitz (1971) suggests one indication that there may be a learning problem is a child who exhibits very immature social and emotional affect. Ehri (1989) suggests sensitivity to rhyme correlates significantly with the “speed of acquiring deep phonological awareness” (p. 368) a skill LD children do not seem to learn easily. Maclean, Bradley, and Bryant (1987) found that “early word learning was linked to the ability to detect rhyme when the children were as young as three” (p. 268). I have noted in my many experiences with LD children, that all seem to have difficulty identifying rhyming words. For instance, when asked to locate the two words that sound the same in a two line poem, they consistently are unable to do so without aid (either aurally or in writing).

Rourke and his colleagues (1989), “in a series of studies spanning the last seventeen years” (p. 169) developed a list of neuropsychological characteristics of children with LD and one of the signs was “outstanding deficiencies in visual-spatial organi-

zational abilities” (p. 169), which can be detected early in a child’s development. The

CACLD lists some “common early signs . . . of varying degrees of severity . . . ”

delayed or immature speech  
 the inability to comprehend and/or remember  
 difficulty in controlling level of attention  
 or activity as required  
 problems with left and right coordination  
 and/or fine motor control  
 inappropriate behaviour  
 low tolerance for frustration or change

Some early school signs consist of:

- (1) has fallen behind peers in learning alphabet and sound/symbol relationship
- (2) has poor spatial relationship
- (3) has difficulty with reversals
- (4) has poor printing (often as a result of above)
- (5) has disruptive behaviour and/or poor peer relations
- (6) has not been completing tasks
- (7) is socially and/or emotionally immature
- (8) does not appear to pay attention to instructions
- (9) has short attention span
- (10) has poor coordination, or difficulty in eye-hand coordination

DSM IIIR cites signs of gross motor overactivity, impulsive, inattentive, excessive fidgeting and restlessness as indicators of problems (p. 50). However, not all LD children can be categorized by aggressive behaviour as many of these children are also quiet, classed as ‘dreamers’ by their parents and teachers, are sometimes withdrawn and frustrating to work with. Often these children are noticed early because they appear ‘out of step’ with their peers.

On interviewing teachers who work with identified and yet to be identified LD children (or children who are too young to have been identified yet) in the regular classroom, the comments made most often are about the inability of LD children to focus, their differentness (out of step), and, of course, their slowness and/or inability to learn the

intricacies of the written word. Often the wide discrepancy between their good verbal skills and poor performance on school skills leads teachers to blame other factors, such as laziness, (doesn't apply himself, doesn't try hard enough), lax parental expectations, ethnic differences, etc. Oddly enough, the LD's peers often pick up on these children. Because LD children are often socially immature, or socially inept, other children sense these children are victims and treat them differently, thus exacerbating their problems.

Thus LD students fight many battles both covertly and overtly. They arrive at school as fairly successful children having mastered all that was necessary to get them this far. Soon they may be confronted by failure, inability to keep up with their peers, inability to perform as requested, inability to master skills often leaving little to redeem themselves in their own eyes as successful students. They are starting to feel different, are confused by their inability to master what appears easy for others. Still expectations are high—on the teacher's part, their parents' part, often on their part as well. Their innate intelligence allows them to sense all is not right with their world, but they feel powerless to make change or influence their environment. Thus the stage is set for the behaviours that will begin to deflect or protect them from repeated feelings of failure in their daily school life.

As an anguished parent writes,

RE: 'Parents have an instinctive ability to know something is not quite right' (June 21) . . . The experiences encountered by the . . . family are not unlike my own. After three years of continuous meetings and testings, my child was officially deemed "exceptional" by the . . . school board.

The process endured by the parents and children, in order to establish if in fact a learning disability exists, is long and tedious. Not only are you dealing with the teacher, principal, learning resource department, psychological consultants and various other committees representing the school but the medical profession as well.



Several testings are performed by the medical community and all consume precious time, i.e.: appointments, meetings, waiting lists, reporting, diagnoses, etc. I would urge every parent who might have the slightest inkling that a problem exists to pursue their instincts immediately.

I am fortunate that my child has [been] recognized (grade four level) and will be receiving the assistance required to ensure a successful future. However, . . . the struggle will continue. We must never let down our guard, in order to secure the academic achievement of our children—the innocent victims. (Hamilton Spectator, 1993)

## SECTION IV

### PREVAILING THEORIES

#### (A) Mainstreaming

The current trend in the Ontario education system is 'mainstreaming': integrating all "exceptional" students into full-time placement in regular classrooms. This board, in initiating this practice, states that its policy is to "maximize learning experiences for special education students, and to make optimum use of special education personnel". (Vekemans, April, 1989) It is their aim to integrate the LD student into full-time participation in a regular classroom. The teacher will be responsible (with the support of the SERT or Special Education teacher) for accommodating these students, adapting curriculum, modifying programme and individualizing instruction.

A modification of this policy allows the team (Special Education teacher, paraprofessional and SERT) to "work with the students and their teachers in an integrated setting, as well as providing segregated instruction as required". (Vekemans, 1989) This means a "special pupil" could work within the regular classroom with support help when necessary (and when timetabling permits). The child could work part-time within the classroom setting and be withdrawn for remediation in his area of weakness and receive resource support outside of class by either a SERT, Special Education teacher or paraprofessional or a combination of this team. The amount of time or the scheduling of the above intervention would be adjusted depending on the child's needs, the availability of help, the amount of intervention that would be appropriate, timetabling, the number of children who are already being serviced, as well as the teacher's cooperation and her

timetable. He could receive extra help individually or with a group on a regular schedule or one that depended on need based on subject remediation (e.g., difficulty in long division in math). Or he could continue to receive most of his subjects in a segregated setting if necessary, provided there were sufficient help to permit this. As the Special Education teacher has as many as twelve students from various grades, some integrated, and some with partial integration and, perhaps, some not integrated, she must schedule many personal timetables in order to adequately accommodate all her students. Although she has an aide, programmes may still be hampered or constrained by timetabling.

In the integrated setting, the LD student would be in the same environment with 25-30 non LD peers. The setting would not be adjusted for his particular deficiency. The geography of the class might provide for a special area (a private desk away from peers or carrel set aside from others) but the general environment would not be adapted to accommodate the LD child's unique needs and learning style. Whether the teaching method is one of exploration, openness, freedom, individuality, learning centres, or the other extreme, that of rigid adherence to completing tasks, desk sitting, mimeographed seat work and quiet efficiency, the LD student is expected to fit into these diverse mainstream teaching styles. "One grave problem with mainstreaming is that most regular teachers use the majority of class time in the lecture method or in large group instruction; both methods are often inappropriate for the mainstreamed learner" (Mainstreaming, p. 110).

Once identified, a "special pupil" has at present, an array of modified programmes at his disposal. This was not always the case. Due to this board's reluctance to label a student as LD, often these modifications to programmes were not offered or were not even available. Prior to 1980 the possibility of special programmes was only an option; Boards did not have to provide for their Special Needs children. Parents soon recognized that if they were to prevail on the current system to adequately educate their

LD children, they would have to channel their energies and organize into cohesive groups that would be effective in bringing about change in the education system.

(B) Organizations Formed by Parents of LD Children

The Learning Disabilities Association of Ontario (formerly The Ontario Association for Children and Adults with Learning Disabilities) was conceived in late 1963 and incorporated in 1964. The founder, Doreen Kronick, recognized that the formation of such an organization “would shatter complacency, and create some problems” (Kronick, 1988, p. 3) for the medical and educational systems. Kronick, along with two other parents of LD children, formed this organization in order to enable parents of other LD children “to have easier access to knowledgeable assessments and services” (p. 3) than they had previously experienced. There is now a Canadian Association with fifty-one affiliates that have precipitated social change in their communities and have been instrumental in legislation that has given LD children “an opportunity to learn in understanding environments, and be allowed to actualize their abilities, without being penalized for what they do poorly” (p. 3).

Parents for Action is a group of parents for special needs children who are reviewing the lack of assessment services in their Halton community. The Children’s Assessment and Treatment Centre (CATC) has just opened another branch in this same community to help service the growing number of children in need. Hyperaid is group formed in Halton to help parents deal with their hyperactive and/or LD children both at home and at school. The Council for Exceptional Children (CEC) provides workshops locally for teachers to increase their knowledge of exceptional children and how they learn. The Special Education Advisory Committee (SEAC) is a committee that reports and makes recommendations to the Board of Education regarding special education programmes and services as they apply to exceptional children.

Two other organizations have recognized the rights of the LD to equal access to educational opportunities and “the necessity to meet the needs of the LD” (Wong, 1987, p. 5). The Canadian Association of Elizabeth Fry Societies (CAEFS) in June 1986, passed a resolution concerning LD, recognizing the “necessity to meet the need of LD persons in the criminal justice system” (p. 5). The Canadian Home and School and Parent-Teacher Federation “endorse the right of the LD to the services, including assessments, programs and placements, necessary to ensure equal access to educational opportunities” (p. 5). There has been an increase in the number of Child and Youth Care Workers (CYCW) and Social Workers involved in the school system in order to work with the increasing numbers of children with emotional and behavioural problems, problems that frequently mask a learning disability. In addition to these various organizations there is a call for “comprehensive training for service providers to ensure effective educational services for people with LD” (Council for Exceptional Children, Dec. 1982) as well as more effective training of professionals and paraprofessionals in the remediation and accommodation for children with LD.

With appropriate legislation in place to ensure LD pupils receive programmes and services to meet their needs, with board policies outlining the identification of these special pupils, with staff, support staff and administrators aware of their problems, with school guidelines governing the education and classroom modification for exceptional pupils, with agencies organized to ensure all the above policies are being utilized and that parents are educated with regard to their rights and those of their LD children, why do so many LD students continue to fail to thrive in the school system?

## SECTION V

### SUB-GROUP OF LD CHILDREN

#### (A) Case Studies

It is my contention that there is a sub-group of LD children who will not and cannot thrive under the present approach of mainstreaming or partial withdrawal as outlined in the previous chapter. This group of LD students are characterized by their inability to read. They can be identified early and have a set of recognizable characteristics that set them apart from their classmates. They may have deficiencies in other areas (e.g., math) but their early problems with phonics distinguish them from children with other learning disabilities (e.g., speech).

Educators and researchers have known for some time that not all children develop into good readers. Many theories have been advanced to explain this problem. Educators have long attempted to remediate this deficiency. Even the medical profession recognizes this problem as a “Developmental Reading Disorder” (DSM IIIR) and states:

The essential feature of this disorder is marked impairment in the development of word recognition skills and reading comprehension . . . oral reading is characterized by omissions, distortions, and substitution of words and by slow, halting reading . . . (p. 44).

In addition, a writing disorder is often present, characterized by spelling, grammatical or punctuation errors. Disruptive behaviour may also be present “particularly in older children and adolescents” (p. 43). What is a poor reader and what distinguishes him from a good reader? Educators (and the medical profession) define a poor

reader as one whose disorder results in a significant discrepancy between academic achievement and assessed intellectual ability; that is, one who is not reading as well as his peers and thus is falling behind, usually two or more years (DSM, p. 44).

The prevailing practice of teachers is not to pay undue attention to probable cause of LD since there are no scientifically proven treatments that address this. Rather, the preferred approach is to remediate the behaviour, attacking the primary problem of an inability to read proficiently. This deficit is usually confounded by a wide diversity of problems that include motivation, individual differences in experience, home environment and genetic background, level of maturation, deficits in other academic areas, as well as the emotional, social and physical elements of each child.

This sub-group of poor readers often exhibit an “attentional deficit disorder” characterized by “inattention and impulsiveness . . . difficulty organizing and completing work correctly” (DSM IIIR, p. 50). These students often do not appear to hear directions or instructions, their work is messy and they appear careless and impulsive. They have poor social skills, appear immature, and have low self-esteem. Often they have poor coordination and appear clumsy and inattentive and insensitive to others.

The following ten students, who range in age from seven to fifteen, are presented to illustrate the commonalities noted in their varying deficits. This syndrome or collection of deficits identify them as examples of the sub-group of LD students that do not thrive in the mainstream. All ten students had been unsuccessful in school. All had repeated a grade, and all were identified as “exceptional”. All had received extra help both within the mainstream setting and on a withdrawal basis. The ten students, all poor readers, are from grades two to eight with average or above average intelligence (Otis Lennon School Ability Test, Wechsler Intelligence Scale for Children Revised). There are two girls and eight boys reflecting the population average of approximately 1:4 females to males. All read two or more years below their chronological ages (Peabody Individual

Achievement Test). They come from varying backgrounds but all live within a radius of fifty miles of each other and are from a suburban milieu. Five were removed from their home schools as “hard to serve” students (Bill 82, 1980, Amendment to Education Act p. 4) and were bussed to a central location.

Figure 2 (next page) gives an overview of their weaknesses, academically and behaviourally, as well as difficulties in the affective domain. It should be noted that all ten were classified as poor readers. Of these ten, eight either did not know all of the phonics (sound-symbol relationship or speech sounds) or didn’t use phonics for decoding. All ten would read a passage to the end whether it made sense or not. Meaning did not appear to be relevant to their reading.

All ten were poor spellers and did not appear to be guided by punctuation marks when they read or wrote. Their writing skills reflected their reading problems. All of the ten used immature sentence structure (e.g., “I see the dog. The dog was running. It was running down the street. It was black.”) and all omitted words both when reading and when writing. They would add these missing words verbally when asked to read what they had written. Only two of the ten students exhibited poor or immature verbal skills (e.g., “My mom was gonned before I got home”). Seven students were average or above-average in their use of verbal language and expressed their opinions and thoughts very well. In reading as well as writing, eight of the ten used reversals (e.g., “saw” instead of “was”, “b” instead of “d”).

When reading, nine substituted words that made the passage meaningless and seven of the ten did not use contextual clues to assist in word decoding or to obtain meaning (e.g., pictures, key words, balance of the sentence). Seven of the ten were also poor in math. None used any recognizable strategies in reading and all were disorganized in their approach to problems, assignments, their working areas and personal effects. Only two were motivated and continued to try to learn to read despite their difficulties. Behaviour-



Figure 2

Name	Demographics				Reading						Writing						Verbal		Math	Affect										
	Sex Characteristics	Age	Grad	Siblings	Parents 1 or 2	Poor Reader	Poor Phonics	Does not use Context	Does not use Meaning	Reversals	Subs Words-no meaning	Too Large—Too Small	Poor Speller	Poor Legibility	Poor Spatial Awareness	Immature Sentences	Poor Punctuation	Omits Words	Low Vocabulary	High Verbal	Poor Math	Poor Social Skills	Low Self-Esteem	Unorganized	Unmotivated	Passive	Aggressive	Hyperactive	Immaturity	
Dinah	F	15	8	2	1	✓			✓	✓	✓	L	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓			✓	✓	
Joel	M	15	8	1	2	✓	✓	✓	✓		✓	Varies	✓			✓	✓	✓	✓		✓	✓	✓	✓	✓	✓			✓	✓
Georgia	M	15	8	2	2	✓	✓	✓	✓		✓	S	✓			✓	✓	✓		✓			✓	✓					✓	✓
Donald	M	12	6	1	2	✓	✓	✓	✓	✓	✓	S	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓				✓	✓
Kail	M	14	7	1	2	✓	✓	✓	✓	✓	✓	S	✓		✓	✓	✓	✓	✓		✓			✓						
Barry	M	8	2	0	1	✓	✓	✓	✓	✓	✓	L	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓			✓		
Cheryl	F	9	3	1	1	✓	✓	✓	✓	✓	✓	L	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓
Jimmy	M	8	2	0	1	✓		✓	✓	✓		L	✓	✓	✓	✓	✓	✓		✓		✓	✓	✓	✓	✓			✓	✓
Mickey	M	13	7	1	2	✓	✓		✓	✓	✓	S	✓			✓	✓	✓	✓	✓			✓	✓						
Ron	M	12	7	1	2	✓	✓		✓	✓	✓	S	✓	✓	✓	✓	✓	✓		✓			✓					✓	✓	
Total						10	8	7	10	8	9		10	6	7	10	10	10	5	7	7	7	7	9	10	8	2	2	2	7

ally, two were extremely passive, two were very aggressive and two were classed as hyperactive. Seven exhibited various levels of immaturity when compared to their peers. All but one had low self-esteem. Seven had very poor social skills.

The common feature in all ten is their poor reading ability, poor phonics, no strategies, and, with one exception, low self-esteem. These children have been classified as “deep dyslexics” (Siegel, 1983). It appears that they will never master phonics efficiently and will not be fluent readers no matter what strategies are employed. (Parents of these students often confess they used to be like their children in school and are still regarded as somewhat disorganized). This group of students appear to have difficulty with all vowel sounds, unable to recognize which vowel is being used. While they can tell the sound most consonants make, they cannot put the sounds together quickly or fluently. They are not efficient readers. They can sound out the word in some cases but cannot connect the sounds efficiently in order to recognize the word. Their reading of a sentence is “word calling” with no attempt at fluency, phrasing, chunking, use of expression or punctuation. It appears as though they feel print has nothing to do with communication, meaning or understanding and they appear to draw no parallels between written words and spoken or vocal discourse.

Although many potentially poor readers come to light early when they cannot master phonics, this is not always the case. A poor reader may not surface in the early grades, because he develops compensatory skills that mask the real problem, the inability to decode efficiently. These coping strategies tend to break down as reading material becomes more complex and more difficult vocabulary is introduced. It is important that teachers be alert to this phenomenon. As early as kindergarten, it can be noted by the observant teacher which child has not yet mastered the sound-symbol relationship.

In summary, some common deficits were noticed in these ten students. All were poor readers and although they varied in their degree of knowledge or use of phon-

ics, the majority had difficulties in this area. Most did not use any compensatory skills, (context, meaningful word substitution). The three that did avail themselves of these strategies were older and these skills may have been taught or they had learned to cope by developing these strategies themselves. However, this cannot be depended on to develop on its own. Most read with reversals, and all read without any attempt to obtain meaning from the material. All were “word callers”, reading word by word with no chunking or fluency, and none used punctuation, stopping when coming to the end of a line rather than at the end of a sentence. Almost all were poorly organized in their work habits, had poor social skills, and low self-esteem.

Of the ten students cited, six were in a segregated programme (an explanation of the programme will appear later) for two years, two were in it for one year, and two were in it for less than six months. With the exception of the last two, all progressed successfully. The progress of these eight students was measured on a standardized test (Peabody Individual Achievement Test) , when they entered the programme and when they left. All made gains in reading ability at greater rates than had been indicated by previous testing and their lack of progress up to the time they entered the segregated setting. (It should be noted here that most of the students cited had varying degrees of behavioural problems by the time they entered the program). The remaining two students were not in the programme a sufficient time to be assessed (less than six months). To achieve this progress, it is suggested the programme should be in place for at least two years due to the pervasive nature of their disabilities. However, this may not be the case if the students were identified as early as grade one.

It is my belief that this sub-group of LD students fail to thrive in a mainstream setting (as already noted above) or in one that involves withdrawal for a limited period of time. If there is an aide or special education teacher working with the student in the mainstream setting (as is now the practice), the student will be successful only if the

extra assistance is always there. Once the assistance is removed, the student lacks the compensatory skills, to work without a crutch. As he cannot read, without the aide, he continues to be handicapped. Although his handicap is invisible, it is nevertheless, as severe as a missing limb. We would not ask a child who was missing a leg to run in the cross-country races and do well. Nor should we expect a child with LD, who cannot read, to keep up with his peers in a mainstream setting while maintaining a healthy self-esteem—this despite an awareness at all times that he is falling behind his classmates.

From the anecdotal reports and summaries given, it is obvious this group of LD children have not met with success either in the mainstream, on a one-to-one basis in class, or on a partial withdrawal basis. It was only when they were placed in a small (eight) segregated setting (Bill 82) and provided with both the environment and the teaching style conducive to their learning styles, was sufficient progress made (most of the examples cited had been in the school system for four or more years with little progress, being two or more years below their peers). It is my contention that this subgroup of LD children learn differently from their peers. They cannot effectively learn to master the reading process in the regular classroom no matter how innovative the teacher is nor how much extra help the student receives while he remains in the mainstream. These non-readers failed to master the process of reading, they had difficulty with phonics, with making sense of their environment, with obtaining meaning from the written word, with social interaction, and with retaining a positive image of themselves. Many developed behavioural and/or emotional problems. However, the answer is not just to offer them a segregated environment. It must be combined with the correct method of teaching or the whole exercise will have been in vain.

These children were chosen as examples of unsuccessful attempts at mainstreaming because:

1. they fit the profile
2. they were in the mainstream for three to four years
3. their problems were recognized at an early age
4. all attempts at intervention (varied as the examples indicated) were unsuccessful
5. ultimately they were placed in a segregated class
6. all started to experience success

While this is not conclusive evidence and contains no definitive data to support the claim that this sub-group of LD children need a special environment in order to become successful students, it certainly merits further study. The toll of young children, even one child, is worth the consideration of alternative programmes that appear to have been successful in dealing with their diverse needs, emotionally and cognitively.

Many LD children can successfully be integrated into the mainstream if they are exposed to the correct methods of teaching that accommodate their learning style. Such children do not meet the criteria for the sub-group previously discussed. Consider several examples:

Courtney was diagnosed as LD in Grade four. She also had a history of academic problems in school. Her parents said they were glad they had only one child, as she had caused them so much concern. However, she was very popular in school, although continually puzzled about her low academic performance. She had an auditory processing problem that was finally diagnosed both medically and by the school psychological services. Her needs could be met in the regular classroom by being cognizant of the fact she was unable to process directions the same way her classmates did. She was a good reader, did not have difficulty with spelling, was not a highly verbal child, rather quiet and withdrawn. Her phonics ability was intact and she was highly motivated to do well.

David was diagnosed as LD in Grade five. He also had a history of problems in school. They could be summed up by three years of report card comments, "David does not pay attention in class". In Grade one, David's report card comments were glowing indicating a bright, inquisitive youngster with a possibly great academic future. After that, the comments and achievements are downhill. David was ultimately diagnosed privately at the parent's expense as having a disability in the verbal component of the tests. His performance scores on the tests were very high, almost in the superior range, but there was a wide discrepancy between this and his test scores on verbal performance. This disability could be accommodated in the regular classroom by being aware that David should be evaluated in ways different from his peers. He was a moderately good reader and speller and, while rebellious at home, was a model student at school.

Laura was diagnosed as LD in Grade five. Test indicated she was math disabled and her needs were met by withdrawal from class for her math instruction while remaining in the mainstream for her other subjects. Her reading skills were excellent.

Adam was diagnosed in Grade two as LD. He had difficulty with taking in information and processing it. His needs were met in the regular classroom by a teacher who made certain Adam received individual instructions both in writing and verbally. Expectations were clear and concise and material was structured and brief. Adam's reading and spelling skills were excellent. While he had little self-confidence, his phonics and writing skills were not a problem.

There are numerous examples of LD children who do not fit the profile of the sub-group. Many of these same children who are or were successful in the mainstream had their unique needs addressed by a knowledgeable and caring teacher who was willing to make adjustments to their programmes. This list contains only a few examples of learning disabilities that vary significantly from those listed in the sub-group. While there may be examples of children from the sub-group attaining success at the elementary

level, they have not been documented. Often behavioural problems cause them to be sent outside of the mainstream to classes or schools that deal with their emotional and behavioural problems.

As we get better at diagnosing children with learning problems at an earlier age, there should be fewer students in the sub-group that are being maintained in the mainstream. Graeme is an example of a child diagnosed early because of a speech problem in Kindergarten. He was placed in a segregated speech class for Grades one and two and returned to the mainstream in Grade three. He was diagnosed as severely LD and fit the profile of the sub-group. While highly verbal, he continued to have extreme difficulty with reading, phonics, spelling and writing. In the mainstream, he progressed very slowly because, despite modification and a caring and understanding teacher, there was not sufficient time to give Graeme the programme he needed to progress more quickly. The two years of withdrawal in the speech class concentrated on that area of the programme (speech) with much success. But his speech teachers were not equipped to deal with a very bright (diagnosed as 'superior') student with severe learning disabilities in the reading process. While Graeme made some gains, with his high IQ, progress was slow and frustrating for him. He had begun to develop some behavioural problems that seemed to be outcomes of his extreme impatience and frustration. Graeme was becoming more and more socially alienated from his peers. He perceived himself as without friends but his inability to socialize and his impatience with others set him apart from his peers. He has now moved to another school with little expectation his progress in reading and spelling will ever be at par with his high abilities. This is a child who might have benefitted from a small class that had an environment that was geared to meet his unique needs.

The suggestion to segregate and teach LD children that fit the profile of the poor reader is a sound one. There is little evidence that they succeed in the mainstream.

There is evidence that they succeed in a highly specialized programme designed to meet their needs. Data taken from eight students who entered a segregated setting at various grade levels, ages and from a variety of schools, indicate a significant improvement in the rate of learning and acquisition of skills as measured on standardized tests. (PIAT) All eight children entered a segregated setting two or more years behind their peers academically. In other words, a student entering grade three was functioning in the language area at a grade one or lower as measured on a standardized test (PIAT, WISK-R, PPVT, Otis Lennon, etc.) This after being in the school system for approximately four years—kindergarten, grade one and two and repeating at least one of these grades. In that time (four years) the child in question was still functioning at the grade one level, an approximate yearly gain of one quarter of a year or three months. Testing after two years in a segregated setting involving the programme outlined in this paper, indicated a growth of 1.27 years in the second year, a vast improvement over past performances. I have cited only a few cases to support this view. Many more could have been listed. (Further evidence to support this theory is the fact that the board has been forced by parental pressure and “failure to serve”, to maintain its segregated classes in the system despite the prevailing belief that they are not necessary). Sample data indicating this progress is provided in table I in the Appendices.

What is wrong here is the fact that an LD child like Clare, who is a fairly typical example of board decision-making, has just been sent miles away to a segregated class for her Grade five year because of lack of progress! This occurred after being in the school system since kindergarten, and at a time when peer relationships and changing physical and emotional needs require a stable, familiar environment for a child with LD.. As cited earlier, Clare, at this age, is less open to change and her removal to a segregated setting so late in her academic years, will have some negative repercussions both socially and emotionally. If the board had recognized Clare’s deficiencies at an earlier age much



of this child's current problems as well as her future ones may have been avoided. Clare's mother had been pressuring the school since Clare had been in Grade two to have her daughter assessed for LD. As Satz et al have pointed out:

“ . . . when the diagnosis of [LD] was made in the first two grades of school nearly 82 percent of the students could be brought up to their normal classroom work, while only 46 percent of the problems identified in the third grade were remediated and only 10 to 15 percent of those observed in grades 5-7 could be helped when the diagnosis of learning problems was made at those grade levels. This report is compatible with the more recent study by Muehl and Forell (1973). Results indicated that early diagnosis, regardless of amount of subsequent remediation, was associated with better reading performance at follow-up five years later. The tragedy, however, is that most of the children with reading and learning problems are not referred for diagnostic evaluation until the ages of 9-11—at which time the child may be maturationally less ready and already exposed to years of reading failure” (Satz et al P. 317).

It is my purpose in this paper to suggest a future direction for the school board. Of the few examples cited, I believe there are many more children that fall within the criteria of the sub-group that remain struggling within the system. Identify these children earlier and get them the highly specialized help in a segregated environment designed to integrate them into the mainstream with the reading skills that will allow them to be successful in the school system. If we concentrate our resources on children at an earlier age, our education system will benefit in the long run and allow our LD children to become earlier beneficiaries of “a learning environment which facilitates maximum individual growth and development”. (Ministry of Education, Sessional Paper No. 37, p. 2)

#### (B) How Children Learn to Read

In order to try teach the LD child to read, it is important to understand how all children learn to read. The process of reading is still not very well understood however.

Researchers do not yet know enough about the developed skills of the fluent reader, the process of acquiring these skills or the role of the instructional techniques. We don't know how good readers learn to read fluently, but much study has been done in order to learn why poor readers are not fluent with print. In studying how the written word is mastered, it is thought we can apply this knowledge to assist poor readers to become more fluent. The more knowledge we have about reading models, the greater the chances are that we will be able to assist the poor reader.

Some reading models are operationalized as bottom-up processing models that represent a linear series of analyzing stages from "sensory representation through to meaning" (Levy 1977, p. 625). The information flow is in one direction only (Gough 1972, LaBerge and Samuels 1974). In other words, a reader must be proficient in the sound-symbol stage before he can read well.

Other models are classed as top-down processes (Smith 1971, Goodman 1970) that are controlled by higher-level cognitive processors and "seen as a problem-solving task, with the visual signals simply being sampled, not fully analyzed, to confirm semantic hypotheses" (Levy 1977, p. 625). It is not necessary to master the phonics coding as one uses context clues to get meaning from print.

There are also interactive models (Rumelhart 1976) that include both top-down and bottom-up forms of processing "that occur simultaneously at several levels of analysis" (Levy 1977, p. 624).

McConkie and Zola (1981) discuss the relationships between the role of visual information used in reading and the contextual information contained in print. Carr (1981) introduces a hierarchical model that identifies factors relevant to reading success and takes into consideration developmental level and reading experience.

A promising integrated approach (from a standpoint of teaching LD children) is the interactive-compensatory model (Stanovich, 1980, Perfetti & Roth 1981). It is

designed to explain developmental and individual differences in the use of context to facilitate word recognition during reading.

“Word recognition is both the most fundamental aspect of reading and one of the most highly controversial” (Reid and Hrisko, 1984). Proponents of bottom-up processes of reading maintain that word recognition is basically data driven while top-down theorists argue that word recognition processes are largely dependent on predictions generated from semantic (meaning) and systematic knowledge.

Gough (1972), a bottom-up theorist, describes the reading process as beginning with an eye fixation that “sets in motion an intricate sequence of activity in the visual system, culminating in the formation of an icon” (p. 332). He describes the “icon” as a visual image with a capacity of approximately twenty letter spaces which can be “erased or masked by a following patterned stimulus” (p. 332). He explains that letter recognition is very rapid and “spelling pattern, pronounceability, and meaningfulness” (p. 334) are a higher order of processing and come later.

In teaching a child to read, Gough states it is preferable to teach through the use of phonics (p. 34). The pairing of letters with spoken syllables is a necessary requisite for reading. Sounding out a word using phonics allows the child to search for something he can hear as a word. Phonics, then, provides him with a valuable tool for data collection. However, what of the LD child who has an auditory processing deficit? If he can’t process the sounds accurately, how can he master phonics? LD children have a “marked problem in auditory-perceptual tasks that tax their capacities for the exact hearing of speech-sounds” (Rourke, 1988, p. 806). Gough admits that solving the decoding problem does not automatically make the child a reader. Speed is also essential in order for comprehension to take place since pauses or disruptions will result in memory loss. The poor reader who must frequently pause as he attempts to match sound to symbol, is at a double risk.

Gough's model does not allow the phonetic stage to be bypassed, so does not explain pre-readers who use visual clues rather than phonetic cues (Ehri, 1985), nor does the model take into account the past experiences of the reader. What the reader brings to the task does not play a role in Gough's model.

LaBerge and Samuels (1974) offer an alternative to Gough's model by introducing a dual access model. Their information processing model is used as a framework to explain the "many possible ways a visually presented word may be processed into meaning" (p. 312). The four major stages of processing are (a) visual memory, (b) phonological memory, (c) episodic memory, and (d) semantic memory. According to the model, a major factor in reading difficulty is lack of automaticity in decoding. With practice, a reader develops strategies which allow him to proceed through these initial stages at a very rapid rate. A beginning reader must be able to recognize letters automatically before he can become skilled at combinations of letters. If the initial stages are not automatic, too much attention is diverted to this area and subsequent stages cannot be processed. The LD reader who has not attained automaticity at the initial stage cannot proceed further according to this model (Ross 1976). He is also unable to develop strategies on his own like chunking (reading several words at a time). Since all his time is taken up with decoding, he loses all sense of meaning. Memory plays a large role in this model. Unfortunately, this is a common deficit in learning disabled children. Both short-term and long-term memory often present problems for these children (Ross, 1976).

Goodman's model is an example of top down processing. According to Goodman (1967) "reading, like listening, is a receptive psycholinguistic process. The reader brings to the text his knowledge of the language. ". . . what the reader thinks he sees . . . is only partly what he sees and partly what he expects to see" (p. 77). This conceptually-driven model explains that the reader's expectations enable him to bypass a step by step analysis and through use of syntactic and semantic cues, predict or guess at

the content, in order to abstract meaning directly from print. Goodman refutes the idea that reading is a precise process involving detached, sequential letter identification, words and spelling patterns. He explains that reading is a selective process and that the reader uses minimal language cues selected on the basis of his expectations. The reader brings knowledge and experience to the task of reading, allowing the reader to make good predictions or guesses about print. But learning disabled students have learned they can't trust print (how explain to a child a word like 'cough'?). They do not make good guesses. They do not use strategies like context to make predictions about print. They guess wildly often not expecting it to make sense anyway. They seldom extract meaning from print. It is unreliable, the vowels change sounds, sometimes the words do also (e.g., throw, through, though, thought). They can't depend on the little phonics they have in order to make good guesses.

It is too simplistic to view reading as entirely a bottom-up or top-down process. Rumelhart (1976) presents a model that suggests reading is a continuous interaction among many levels of analysis. "Reading is best characterized as a process of applying simultaneous constraints at all levels and thereby coming up with the most probable interpretation" (p. 38.). Rumelhart believes that reading is both a perceptual and a cognitive process. Grammatical knowledge helps the reader determine the word he is decoding and semantics modify his processing at the word level (sounding out a word like 'could' is helped by knowing the meaning of the word). Meaning also affects our understanding of syntax (e.g., eating apples, 'eating' could be a verb or adjective). Rumelhart explains that reading "is the product of the simultaneous joint application of all knowledge sources" (p. 20). That is, top-down and bottom-up processes converging and operating at the same time. This model is more robust than the top-down model. The reader can hypothesize using context, which is strengthened or weakened by information from bottom-up processes. Unfortunately, the LD reader has neither the proficiency for

bottom-up decoding nor the strategies for top-down predicting. Guessing is a slow process if the initial prediction is incorrect.

Stanovich (1984) examined the theory that readers with poor decoding skills might rely more on context if it were meaningful. He found that “when the materials are well within the capabilities of the less-skilled readers, these children do show large context effects” (p. 16). Stanovich postulated that the slow and inaccurate word decoding of poor readers may hinder or mask the contextual information that they receive, thus rendering it unusable. This model, besides incorporating the advantages of the interaction between conceptually-driven and data-driven processes, includes an important variable that has been lacking in other models—the skills of the reader. The strategies employed by skilled readers are apt to be quite different from those being used by less skilled readers. These differences must be taken into account for a full understanding of the reading process.

Stanovich’s model provides a framework for studying these individual differences. A teaching programme for reading should be closely allied to the features outlined in this model. Stanovich sees the disabled reader in the classroom and his insights provide educators with a curriculum model that provides for the deficits of the poor reader.

An example of the use of this model in the classroom could be illustrated by an LD child being taught both phonetically (sound-symbol relationship) and contextually (overall meaning, pictures, etc.) as well as developing (by rote) a growing list of words learned by sight. As he is learning the sound-symbol relationships, his reading would consist of stories and experiences he has dictated. While much of his reading of his dictated stories will be by memory, the flow and meaning come naturally to him. Guessing at missing words becomes simple and natural when he knows what he intended to say in his story. Many classroom teachers do this as a matter of course, but LD children need to do it for much longer than other students (perhaps well into the primary grades). Often

this method is used for only part of the year (or not at all by some teachers, or only in part), as children learn and move on to be challenged in other ways. (For example, the use of story-books, readers, charts, etc., is common in most classrooms. Poor readers should have books that use patterns that will encourage risk-taking and prediction, allow them to develop some confidence in the written word, and then bring these patterns into their writing. Most of their reading would then be based on what they wrote.)

Whether reading is a matter of mapping sound to print or a unique process of deriving meaning from print, most authors tend to agree that language competence is essential for a good reader. Experience with LD children has led me to the conclusion that if we could unlock the box that provides the key to the phonological code, we could teach them to be efficient readers. Without automatic access to phonics, the poor reader cannot become a good reader. Learning to decode helps develop awareness of orthographic (spelling) regularity that is necessary for skilled reading. Inability to attend to patterns of letter groups and order would result in the spelling deficits seen in many poor readers (Ehri and Roberts, 1979).

It was noted in the case studies that eight of the ten students cited had a phonics deficiency. The remaining two did not use their phonics skills often when decoding. In addition, all ten had spelling deficits indicating problems at the orthographic level. None was able to extract meaning from unfamiliar material and most seldom attempted to impose meaning through their word substitution. (e.g., 'The man was waiting for the bus' may be translated as 'the man was wanting for the but'.) Unfamiliarity with language was a problem with all ten, as evidenced by their inability to use punctuation, immature sentence structure, reversals and improper word substitutions. Seven made no attempt to get meaning from print by use of context. This collection of deficits constitutes the subgroup of LD children who are the most difficult to teach to read. It is evident from the diverse models presented, that there is no agreement on how good readers learn to read. If

readers with poor decoding skills could be remediated by teaching them more phonics, it would be a simple matter to change poor readers into good readers with appropriate drills and instruction. These many deficits indicate there are many factors involved that cause the reading problems of LD children.

Educators of LD children are faced with the problem of whether to emphasize the relationships between sounds and symbols or to stress the ability to get meaning from print. Although an emphasis on one does not necessarily exclude the other, the balance between the two is in question. All students in this group had been taught using a bottom-up approach—an emphasis on phonics. These ten students did not learn to read very well. Bottom-up proponents advocate more experience with the coding system. But at what stage does an educator accept defeat and attempt a different approach? The environment must be designed to accommodate both methods. Like Stanovich's interactive- compensatory model, a programme should be based on recognition of individual differences, acknowledging the students' deficits, and teaching compensatory skills that address the weaknesses and strengths of these children. Their varied patterns of learning, strengths and weaknesses, coupled with poor self-concept (nine of the ten in the study) make it difficult for both researchers and educators to programme effectively for these children. Their teacher would have to be skilled in the best way for teaching them to read without reaching their frustration level. In addition, poor memory and lack of effective transfer of skills and knowledge from a training task further complicate appropriate instruction. (Godfrey et al., 1981, Liberman and Shankweiler, 1979, Siegel and Linder 1984).

A unique feature of Stanovich's interactive- compensatory model is that information of one type at one level may be used to compensate for lack of information of another type at another level. "Thus one may rely heavily upon thematic material to compensate for poor decoding skills" (Vellutino, 1984, p. 43). This approach is necessary for the unskilled reader because of his deficits. It is also important to put a great deal of



emphasis on efficient, automatic word recognition. Carr (1981) recognized that this was an important element in a good reader. Since LD children are not good readers, an over-emphasis should be directed towards developing a large sight vocabulary (words known by sight without having to guess or sound out). Because of phonics deficits, other methods must be found to increase sight vocabulary.

One of the major problems facing educators of LD children is motivation. In the studies presented earlier, eight of the ten poor readers lacked motivation. In the examples of late identification already cited, all lacked motivation. Many had been exposed to years of failure. It is necessary then, to give meaning, to give relevancy to the material, to demonstrate the usefulness of print. They must begin to see print as a means of communication and thus a valuable tool they could use for their own ends. Motivation is the first key to unlocking the reading process. It doesn't change poor readers into good readers but it is the first step in that direction.

My success with poor readers has been a result of a curriculum that takes a global approach to learning, one that addresses the whole child. It encompasses a variety of strengths and deficits, teaching compensatory skills with the main view being to allow poor readers to be able to extract meaning from print more efficiently.

#### (C) Suggestions for Teaching Sub-Group to Read

In order to do this, material should be presented in a manner that is meaningful, it should have relevance for the LD reader. "The role of the learner in constructing meaning is viewed as the single most critical and relevant variable [in learning] (Poplin, 1990, p. 13). Information should be presented wholistically<sup>3</sup>—not broken into bits and pieces (splinter skills) as it would be if presented to a regular class or in a remedial set-

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<sup>3</sup> Wholistic, synonymous with holistic, is used throughout this paper to remind us that the whole child, the whole programme, and the whole environment must be considered when working with an LD child.

ting. An example of a splinter skill would be a worksheet asking the student to change all the nouns into pronouns expecting that if the student did this correctly, he has learned this concept and it will transfer automatically to all other situations. LD children seem unable to transfer learnings effectively. Efficient use of context has to be taught in order for LD children to extract meaning from print (e.g., use of pictures, title, theme, informative discussion prior to reading etc.) Weaver and Resnick (1979) state, “children should be taught reading in the context of the various functional modes that are relevant to them. In this way written language can become a form of communication that is as useful as oral language” (p. 16).

By teaching reading skills via a thematic approach as described below, LD students are introduced to a wide variety of reading material as opposed to basal readers (basic vocabulary) or high-interest, low-vocabulary readers. With a diversity of choices, LD pupils are provided with a range of literary experience. These literary forms or genre expose the reader to a semantically rich context rather than the impoverished form that a basal reader takes by limiting the vocabulary and sentence structure. Exposing the reader to different styles and varied syntax helps to bridge the gap in language paucity that results from a limited exposure to print. (e.g., if the theme is ‘Sports’, the reading material will be about sports reflecting the different reading levels of each child. He will research his information, and the answers to his questions, using all forms of communication. Charts, pictures, encyclopedias, dictionaries, letters, phone books, etc., all are at the level he is comfortable with. Since the vocabulary will be repeated over and over, he becomes familiar with it more quickly and is able to use context to pick out even more complex information).

Siegel and Ryan (1984) suggest that deficits in syntactic (grammatical structure) and morphological (patterns of word formation) skills in poor readers could be remediated by modeling as well as direct teaching. This would enable the LD student to

make better use of context, or better predictions if he were more familiar with the rules of syntax. Use of theme optimizes top-down processing. Unless thematic context is available, the semantic levels will be hindered in formulating useful hypotheses forcing the reader to use only bottom-up analysis. In other words, the student fails to get sufficient meaning from the material to use it effectively. Thematicity should lead to greater cognitive control, thus decreasing dependence on lower levels of processing which are already faulty. The reader may make mistakes in areas of his deficiency but makes better hypotheses when the material is theme-related.

Perfitti (1984) observes that “children who do not read well tend not to know very much” (p. 35). Thus they are doubly handicapped; they are not only unskilled at decoding, but also they do not have the kind of knowledge about language that in the long run will help them compensate for decoding problems. They fail to master the fluency of the language. They are less likely, then, to extract meaning from print, therefore reading becomes less relevant, not useful to them.

A good programme demonstrates how reading can add a necessary and vital component to their environment. Every effort should be made to increase word recognition in order not to rely as heavily on bottom-up or code breaking processes that slow them down and detract from comprehension.

Ehri and Roberts (1979) found that the reader learns more about the meaning of words if he sees them in context but learns more about their orthographic identities if he sees them on isolated flash cards. Words should be presented to the learner continuously in both forms as a way of allowing the student to compensate for weaknesses in either area.

Accuracy in the classroom should be relaxed in order to encourage the LD reader to take risks. This will be necessary in order for him to move from word-calling when reading to chunking. “If he begins to organize some of the words into short groups

or phrases as he reads, then further repetitions can strengthen these units as well as word units. In this way he can break through the upper limit of word-by-word reading and apply the benefits of further repetitions to automatization of larger units” (LaBerge and Samuel, 1974, p. 315). Many strategies are employed to encourage the poor reader to “chunk”. These include drills with phrases or groups of words, taping of his oral reading, role playing and modelling. The last three are most effective as the poor reader seems unaware he is word calling unless you draw it to his attention frequently. Use of drama forces him to attempt to emulate conversation while he is decoding the script. (This playing with language parallels Piaget’s (1977) claim that children must be able to manipulate the environment in order to construct accurate interpretive strategies).

An advantage of a thematic approach is that it offers the LD child many opportunities to increase his sight vocabulary. Words that reflect the concepts are repeated, displayed, discussed and written. They are spelled, read, diagrammed and listened to all during a unit which may last several months. Familiarity with these words results in increased fluency in the reading of them. Oral discussion of the facts, concepts and principles promotes the use of new vocabulary and the games played with these words allow the student to become overly familiar with their use and meaning. This over-use of the vocabulary is necessary in order to help the poor readers retain the material. Once these words are part of their speaking vocabulary, they become easily recognized in print (a student who has difficulty sounding out ‘Hibernation’ has little difficulty recognizing and decoding the word when he has been discussing and studying bears and their habits). Because of the LD’s limited decoding skills, it is necessary to try to overcompensate with top-down processes. Predicting and guessing become easier and more accurate when the material is theme oriented and students are able to recognize some of the key words in a sentence. This success gives them confidence. Getting the LD child to feel comfortable with print, to make it less threatening, is very important.

Deshler, Schumaker, Lenz and Ellis (1984) claim that training readers to use more efficient strategies significantly affects the quality of performance in school tasks. LD students unfortunately appear to lack good strategies and techniques for solving their problems. This is true for school skills as well. Many compensatory skills must be taught and utilized. For example, in reading, learning to skim for key words by scanning topics and sub-topics and opening sentences of paragraphs are a few of these skills that should be taught the LD child. Use of indexes, tables of contents, library card system, graphs, illustrations, simple reference books, library vertical files, all can be taught and utilized in the course of studying within a theme. Repeated use of these materials and techniques is necessary in order for the poor reader to become proficient in their use. These strategies will not change an LD child into a good reader but will allow him to become a better reader, more comfortable with print, more able to manipulate his environment.

I believe the classroom environment can be manipulated to enhance learning.

The Ministry of Education (1980) in *Issues and Directions*, views the learner as:

an active participant in education who gains satisfaction from the dynamics of learning. The concept of the learner as a mere processor of information has been replaced by the image of a self-motivated, self-directed problem solver, aware of both the processes and uses of learning and deriving a sense of self-worth and confidence from a variety of accomplishments (p. 2).

As the ultimate goal of education is to prepare the individual to deal effectively with this environment, understanding the environment requires exposure to a broad knowledge base. Dealing effectively with this knowledge requires the skills of problem-solving and independent decision-making. Efficient communication is an integral part of this process. A thematic programming approach that integrates many subjects creates an ideal learning environment for the LD student. This global approach provides a context or gestalt from which he is able to derive meaning. It is an attempt to more closely approximate his own environment.

Themes provide the opportunity to learn new concepts in a meaningful setting (as in the case of sports, all material is related to sports). When content is relevant to student (he relates to a particular sport, for instance), more learning occurs. Because thematic programming deals with topics over a longer time frame, the learner has the opportunity to understand the relationships between and among concepts leading to more complex knowledge levels; the formation of generalizations and principles.

During the process of dealing with thematic content related to the environment, the LD child is also allowed the time to learn the skills of research, posing good questions, collecting and evaluating data, predicting, drawing conclusions, and learning how to communicate this information appropriately; all skills the LD child is significantly lacking. It is during the research method that the student begins to use and understand the process of problem-solving and decision-making which is a life-long survival requirement.

This philosophy or wholistic approach is in keeping with the traditions of Dewey (1975) who advocated the learner's interaction with the environment, "Give people something to do, not something to learn . . . and learning naturally results". (p. 207) Dewey stresses process, the use of problem-solving strategies to teach skills and knowledge, the acquisition of skills and techniques as a means of attaining ends which have direct vital appeal. He advocates interaction and continuity with the focus on the learner and his environment. Behaviour is altered through experience and learning is facilitated through manipulation of the environment.

The learning environment of the classroom can be manipulated to reflect the theme that is being researched. Print, graphics and illustrations are utilized to enhance knowledge of the vocabulary, concepts and new learnings of the students. Books (from the library) that relate to the theme and encompass all levels of the readers are displayed in the room. Reading, writing and presenting become a means to an end, a search for

knowledge and the ability to communicate that knowledge to each other in many forms. LD students become more efficient at locating information. Exposure to the technical language of the unit fosters familiarity with the vocabulary. The more they are required to read for information, the more exposure they have to the nuances and idiosyncrasies of the language.

Facts and concepts are taught when the need arises, when they fit into the schema of the unit. New vocabulary, figurative speech, more complex phrasing, all relate to the theme. The student becomes more and more confident with the material. Within this framework, he begins to take risks. Spelling contains theme words and is geared to individual needs. Reading comprehension is introduced through a series of predictions based on titles of stories and influenced by personal experience. This guessing is used as an initiating device for reading and risk-taking. The ultimate goal is to increase sight vocabulary through frequent repetition. Because of memory deficits, overlearning must take place in these children.

The goals for each unit are short-term, attainable and rewarding. The students' surroundings reinforce what they are learning and serve as reference points when they forget. The stress is taken from memory reliance. The student, instead, learns to find the required information. Since he is surrounded by data in print form, he soon learns what and where information is available to him when he needs it. Under the encompassing umbrella of a theme, the student obtains knowledge through print that is both meaningful and satisfying as well as providing an atmosphere that enhances confidence and self-esteem through a variety of accomplishments.

A child "wins recognition by producing things" (Erikson, 1950, p. 259), a stage in the life of a child that is necessary as he makes the transition from play to productivity. If this outcome ("stage") is not met, it hampers growth in the next stage. LD students don't always complete assignments. Their work is often messy and difficult to

read. It may be filled with errors. They seldom produce an end product that they can be proud of. Their work often ends up shredded, lost or thrown away. They have little reason to feel good about their accomplishment.

In order to change this attitude, LD children must be given the means to produce a product that they can be proud of despite their deficits. Poor eye-hand coordination, poor spatial awareness, poor spelling ability, poor organizational skills: all contribute to their frustration and poor product outcomes. These weaknesses may be addressed through the use of a computer when available. While the computer does not 'fix' their deficits, it goes a long way towards elimination of the visual effects of these weaknesses. It is an invaluable tool as it helps overcome some of the cosmetic problems that face the LD student. It allows the student to present a neat, orderly, printed product that the LD child produced through his own efforts. He starts to develop pride in his accomplishments and this acts as a stimulus for the next assignment.



## SECTION VI

### WHY SUB-GROUP FAIL IN THE MAINSTREAM

#### (A) Cognitive Aspect

One of the problems with LD children is their failure or inability to acquire learning strategies or adequate coping skills that would enable them to learn more efficiently. In order to try to bypass their weaknesses, it is necessary to teach them how to learn despite their deficits. "LD children have inefficient strategies in the reception, storage and production of information" (Deshler, Alley, Warner and Schumaker 1981, p. 415). They have poor analytical skills, are disorganized and often disoriented. Their work is incomplete, untidy and illegible. They are not natural problem-solvers and lack the skills that would help them become good decision-makers.

The blend of psychological and educational insights or cognitive-behavioural approach has been identified by Deshler (1986) as metacognitive skills or the metacognitive approach. He explains that LD children are lacking the techniques of how to learn. The logic of metacognitive strategies is compelling for it gives students assistance in how to analyze problems, to figure out the steps of solutions, to monitor progress and to reward their own gain so that they will be able to develop good learning strategies that they can apply any time and at any place to other diverse tasks (Steffy, 1988).

How does the regular classroom teacher address the teaching of these skills to the LD students in her class? This is not a 'once a week' lesson or an occasional emphasis. This is a necessary, ongoing, daily task, more important to the LD child's future than

any other curriculum area. The mastery of these skills will allow the LD student to function successfully in future classrooms, future academic settings, future professional or trade environments. These are the “life-long skills” the Ministry promises in its address to the school boards of Ontario. They can neither be neglected nor left to the whims of teachers who are not skilled in the use of this approach. Since these are difficult skills to teach, they must be addressed at every opportunity. If the LD student is working closely with an aide within the classroom, the aide requires the training and expertise necessary in teaching and helping the student implement these skills. She must know when to assist and when to back off. She must know how to train the LD to become proficient in these skills, hence independent, and no longer in need of her assistance.

This becomes a two-fold problem. First, the aide seldom has the necessary expertise to teach metacognitive skills and second, if she were skilled in teaching them and were successful, she would no longer be needed by the student. As aides are determined by the number of LD students to service in the school, if there were insufficient LD students to warrant her presence, she would not be employed. (rather like a catch-22). “Most teachers in mainstreamed classrooms find they do not have the time or the teacher’s aide necessary to ensure that the exceptional children can participate fully with the class” (Mainstreaming, p. 107).

These skills are difficult to teach on a withdrawal basis (the student is taken out of the regular classroom for brief periods of time) because of the problem of transfer that the LD experiences. It is beneficial for the student to approach his daily tasks and problems while he is being introduced to these skills so he may see the purpose and usefulness of what he is learning. The difficulty which the classroom teacher faces in working with an LD child in the mainstream can be described as follows.

It is customary for the teacher to assign projects to her students in order to reinforce their research skills, independent work habits, collecting and organizing mate-

rial, synthesizing their facts, making observations and drawing conclusions for presenting to an audience. Since the LD student lacks all of the above skills and since he does not pick up incidental learnings, each aspect of the project must be taught individually. It must be taught often and reinforced frequently. Usually the project has been completed and presented before the LD student has even mastered the ability to locate the information efficiently. If he works in a group, it is difficult to ascertain whether he has mastered the requisite skills. If he works independently, how much help did he receive from parents, aide or sibling? If his input is not analyzed individually and each aspect of the task viewed in order to ascertain understanding, it may be assumed he has these skills and the teacher moves on, building on this process.

He is soon left behind, so lacking in the basic skills, that the classroom teacher no longer has the time to expend on their acquisition. As she covers a varied number of topics and subjects with her class, she must move on. She cannot be expected to extend her theme or topic for another month in order for the LD student to reach a comfort level with one or two of the required skills. As he is easily confused and disoriented, the introduction of a new theme before he has mastered the previous one, is distracting and confusing for him. "The psychological barriers to mainstreaming are often overlooked. In fact, the mainstreamed child is often paralyzed by the fear of negative reactions from peers and is terrified that the particular academic or physical need might show and be scorned by the others" (Mainstreaming, p. 110).

While the teacher's agenda is knowledge, the LD's is the acquisition of coping skills, of how to acquire knowledge, a process that will be a life long benefit. What some children will pick up naturally in the regular teaching of material, the LD student will not. That is what makes him different from his peers, that is why he is labeled LD, and that is why material must be presented to him in a way different from that of the regular classroom in order that he may master it. This mastery, this acquisition of strategies, is an

ongoing, year-long process, and should be the main emphasis in an LD's education. This is not the main focus in a regular mainstream classroom.

Instruction in learning strategies is necessary in order to teach LD students how to learn, solve problems and complete their tasks independently. Metacognition allows these students to accept responsibility for their learning and progress, to acknowledge their strengths and weaknesses, to take risks, to take ownership of their environment. Cliches perhaps, but necessary steps in the LD student's growth to independence and success.

"The challenge inherent in designing interventions to overcome or lessen the effects of a learning disability is a significant one" (Deshler and Schumaker, 1986, p. 583). Deshler points out that the challenge is greatly magnified as the LD child grows older and is faced with the demands of a high school. Thus it is important to introduce these skills at an earlier age, well before bad habits or inadequate coping skills have become ingrained, confounding the initial deficit and causing more difficulties and resistance to change.

In a segregated setting, the development of metacognitive skills can be addressed in an ongoing process. As these children are poor readers, obtaining information from written material is doubly difficult. They lack decoding skills and strategies for obtaining information. They have no strategies for sounding out an unknown word or obtaining meaning from written material. They cannot organize information or seek data efficiently. This has to be taught. For example, initially, using reference books with pictures, charts or diagrams, teach the child to use the illustrations and diagrams to obtain much of the relevant information. Show him how to scan for key words (e.g., origin, weight, size, colour, etc.). Explain how to use the index and table of contents for quick access to information. Practise to increase his speed at using these short-cuts. Set up interesting activities daily so that he becomes proficient and acquires the skill involved,

that of being efficient at locating information. Expand this skill to maps, newspapers, phone books, encyclopedias and catalogues. Be sure each theme has a large source of reference material, so as this skill improves, he can move to more challenging material and more difficult levels.

Show him short-cuts in obtaining information, the use of a highlighter, a chart or diagram to organize his facts, an organizer (system) that provides alternatives or is useful for collecting information, a check list to analyze his progress, etc. Ask to see how he organized his facts, get him to explain the process he used. Have him articulate, demonstrate, illustrate, verbalize and explain all his strategies. This is the only way to see if he used these skills, understood the reason for using them, whether he found them efficient or if he had difficulties with them. Ask him what changes he would make next time, tell him that you want to see all his rough work. LD children do not take to change easily. He will fall back into old habits constantly. Time must be taken to ensure he acquires these new skills. He will attempt to skip some of the steps, or do them incorrectly. It is not laziness; he does not see the need for so much extra work or care. He must be monitored closely until these strategies are part of his daily routine. In a mainstream setting, the classroom teacher cannot afford the intensity and time consuming task of ensuring just one of these skills is being used and mastered effectively.

It is also important to demonstrate to LD students the difference “between inefficient or ineffective approaches and the instructional strategy to be taught” (Deshler et al, 1981, p. 416). Involving students “actively in the use of strategies has been found to increase the strategy’s durability” (p. 416). Showing an LD student the use of a book’s index instead of flipping through the pages allows him to check for information more efficiently. This does not ensure he will use this method, however. Additional modelling will be necessary. The teacher, or another student, continues to model this skill whenever new information is required. Increasing efficiency with this skill supplies the student with

information quickly thus effectively decreasing his previous frustration with obtaining written material.

Learning a strategy for locating information is important for a student who has a reading disability. It cuts down the amount of time devoted to extraneous material. Once the student is provided with a rationale for the strategy, it is more likely to increase the motivation for learning it. In a mainstream setting, the teacher does not have the time to model frequently nor can she target the LD child who needs to overlearn the skill before it becomes part of his repertoire. "No one should make the mistake of assuming that the regular classroom will be synonymous with the 'least restrictive environment'. If the child is unable to have a fair portion of the teachers' time, it is highly restrictive". (Mainstreaming, p. 108)

Other techniques the LD must acquire are those of visual imagery. Obtaining mental pictures of the material helps the student organize his thoughts. Much individual time is invested in the discussion and use of this strategy. The child can illustrate the relationships between characters in a story as evidence of his understanding of them. To explain, Tanya was answering questions related to a simple event in a story. As she replied to some questions correctly, it was tempting to assume she understood the whole story.

However, these assumptions cannot be made about an LD child's understanding of the material she is dealing with in the classroom. These erroneous assumptions lead the teacher to assume Tanya has mastered the ability to extract meaning from written material, so the teacher moves on to more complex information (thus Tanya continues to miss crucial steps in acquiring information or concepts.) I asked her to draw the relationships in the story. There were three key figures, a mother who was a veterinarian and her two children. Since the story referred to a Doctor, a mother, the pronouns 'she', 'he', 'her', 'him', 'his' and the names of the boy and girl who were the Doctor's children,

Tanya drew many figures indicating that she did not know that two of the characters were brother and sister and children of the veterinarian. Unless the teacher takes the time to interact individually with each LD student, obtaining feedback on all material, it is difficult to analyze each child's ongoing problem with printed or verbal instructions.

Asking the LD child to draw what she understands in the story, gives her the first technique for coping with print. In order to draw what she knows, she must first analyze what she knows and provide the rationale for her illustration. It is the beginning of another helpful technique called self-questioning. Other strategies include paraphrasing, visual aids, memory aids, writing and summarizing material and organization techniques. Teaching these skills is a lengthy process and a difficult one, but necessary for her development.

In order for students to master some of these skills each year, it is important for the teacher to apply her expertise in an optimum period of time. A systematic sequence of instruction should be planned spanning the school year so LD students are assured of receiving sufficient instructional coverage. Deshler calls this strategy "critical teaching behaviours" (p. 586) and he explains:

The following teacher behaviours appear to be critical to optimizing instructional gains through learning strategy instruction: providing appropriate positive and corrective feedback, using organizers throughout the instructional session, ensuring high levels of active academic responding, programming youth involvement in discussions, providing regular reviews of key instructional points and checks of comprehension, monitoring student performance requiring mastery learning, communicating high expectations to students, communicating rationales for instructional activities, and facilitating independence (pp. 586-7).

This is an enormous task for any classroom teacher to undertake. It is highly unlikely she will have the necessary time to devote to it. It would fall to the resource

teacher (SERT) either in the classroom or on a withdrawal basis (remove temporarily) to attempt these strategies while teaching the LD student. Deshler also points out that his recent study indicates “many . . . resource teachers fail to regularly use many of these behaviors” (p. 587). It is a complicated process and should not be a hit or miss procedure for these children. It should not be left up to resource teachers (SERTS) nor to the busy classroom teachers to implement these processes which are so necessary to the attainment of future success for the LD student. The student can receive these skill instructions and feedback on an ongoing basis related to his daily activities in a segregated environment. These strategies can be taught when needed. The emphasis on relevance will present these coping strategies in a meaningful way for the LD student thus enhancing their acquisition and retention.

#### (B) Behaviour Aspect

One of the main reasons an LD child is referred for identification is that he has become a behavioural problem. An extraordinary amount of time and attention is spent by the teacher on solving the problems of working with a disruptive child. There is pressure on her to try to resolve the problem of having the child in her classroom continually disrupting and causing stress to her and the other children. She refers the child to the team for relief or help in managing his behaviour. It may even be that her unconscious desire is to refer the child to the team (ST or SRT) meetings in the hope that if he can't be changed, he can be removed. This is not uncommon, given the pressures of curriculum that a teacher faces daily. His problems are claiming an unfair amount of her day, to the detriment of the rest of the class.

Often children with behavioural problems are LD with attention-deficit disorders with or without hyperactivity (ADHD). As previously noted, they are often treated chemically by stimulant medication (ritalin). While this may decrease the hyperactivity



syndrome, it has not been conclusively shown to improve the child's ability to learn. Most studies have not shown reading skills to improve with stimulant medication. " [Medical] interventions to improve a child's attention do not have a significant positive effect on a concomitant LD" (Mahoney & Resnick, 1990, p. 4).

An LD child with ADHD exhibits inappropriate degrees of inattention, impulsiveness and hyperactivity. These symptoms "worsen in situations requiring sustained attention, such as listening to a teacher in a classroom . . . or doing class assignments . . . signs of this disorder may be minimal or absent when the child is receiving frequent reinforcement . . . or a one-to-one setting" (DSM IIIR, p. 50).

In the classroom, inattention and impulsiveness are evidenced "by not sticking to tasks sufficiently to finish them and by having difficulty organizing and completing work correctly. The child often gives the impression that he or she is not listening or has not heard what has been said. Work is often messy and performed carelessly and impulsively" (DSM IIIR, p. 50).

It often appears as if the child deliberately does not listen to instructions. When given a task, he has difficulty focussing attention and is restless and distracted. He is the type of child who doesn't attend to what the teacher just said, but hears and responds to the sound of a fire engine many blocks away. He is hyper-sensitive to sensory input, almost as if he can't sort through everything his senses are telling him. He can't focus on which one is the most important. For example, Jean-Paul missed his class outing claiming the teacher never told him about it. Her response was, "It serves him right, maybe he will listen next time." Unfortunately for Jean-Paul, nothing will change. Unfortunately for his teacher, nothing was learned (by her). Jean-Paul listens to everything. Too many stimuli take up his attention. A different approach by the teacher is necessary in order for Jean-Paul to learn a strategy for attending to what is important to the teacher.

Another annoying feature of the ADHD child is his disruptive behaviour which causes a frequent problem in the classroom.

Impulsiveness is often demonstrated by blurting out answers to questions before they are completed, making comments out of turn, failing to await one's turn in group tasks, failing to heed directions fully before beginning to respond to assignments, interrupting the teacher during a lesson, and interrupting or talking to other children during quiet work periods. (DSM IIIR, p. 50).

A child with these symptoms is doubly handicapped by working in the mainstream. His LD causes him to lag behind his peers academically and his ADHD is often interpreted as a behaviour problem. Frequent admonishing from the teacher to "sit down", "stop wiggling", "finish your work", etc. makes little impact on this type of child. Often you will find his desk far removed from the others. In order to complete his work, he is frequently deprived of his recess (an activity which he sorely needs). He is the despair of both his teacher and his parents who struggle to get him to attend to instructions, get to school on time, take some responsibility. "If only he would work a little harder" is frequently heard, as if it were a solution to all his problems. His low self-esteem, mood lability, temper outbursts and low frustration tolerance cause problems not only with the adults in his life but also with his peers.

With peers, inattention is evident in failure to follow the rules of structured games or to listen to other children. Impulsiveness is frequently demonstrated by failure to await one's turn in games, interrupting, grabbing objects (not with malevolent intent), and engaging in potentially dangerous activities without considering the possible consequences (e.g., riding a skateboard over extremely rough terrain). Hyperactivity may be shown by excessive talking and by an inability to play quietly and to regulate one's activity to conform to the demands of the game (e.g., in playing "Simon Says," the child keeps moving about and talking to peers when he or she is expected to be quiet (DSM IIIR, p. 50).

It is evident that this type of LD child causes problems for himself and his teachers in a mainstream setting. Unless he can receive frequent reinforcement for staying on task, (in a class of 20-25), a variety of short, attainable and interesting activities, freedom to move around and lots of real successes, his needs will not be met in this setting. Both he and his teacher will become sources of frustration for each other. "Hyper-activity may be evidenced by difficulty remaining seated, excessive jumping about, running in the classroom, fidgeting, manipulating objects, and twisting and wiggling on one's seat. "(DSM IIIR, p. 50). Frequent shifts from one incompleting activity to another and a tendency to be accident-prone are a constant distraction for peers and teacher alike. It is very difficult for the classroom teacher to adequately meet his needs when her attention is commandeered by the needs of the majority of her other students as well. "The worst failing of mainstreaming is that administrators insist on placing children in classes which are too large. Every researcher repeatedly warns that classes must be small. Under twenty pupils has been mentioned by many" (Mainstreaming, p. 109). This board's classes average over twenty-five.

One solution is to have an aide to assist the ADHD child and keep him on task. Since he is also LD, the aide would require considerable expertise in order to give him the strategies necessary to cope with his environment. She must be able to balance assistance with teaching him to respond independently. Acting as a buffer between him and society will not help him to adapt to his environment successfully. In order to keep his tasks short and varied, he may be on a programme that differs from that of the other students. This defeats the purpose of maintaining good self-esteem by keeping him with his peers when both he and his classmates see how his programme is not the same as theirs and how his unique mannerisms cause a continuous problem in the classroom. He may become the classroom clown or the butt of cruel jokes. "Non-exceptional pupils rate exceptional pupils harshly if they require too much of the teacher's time and attention" (Mainstreaming, p. 110).

Since his social skills are often poor because of his particular deficits, his self-esteem suffers another blow if he is rebuffed by his peers during playtime. “The popularity of the mainstreamed child is considerably below that of the other children” (Mainstreaming, p. 110). Sessions would have to be taken to help him cope with the social/emotional aspect of his personality. This is time-consuming and ongoing but a necessary component for his progress. This time-consuming but all-important task cannot be accomplished in the hit-or-miss method of the mainstream setting. “Careful attention should be paid to the child’s social adjustment. Almost all researchers who touch on the subject, are concerned about the fact that most mainstreamed children are lonely and isolated. They are mainstreamed in body only” (Mainstreaming, p. 108).

In a segregated setting, a one-to-one activity can be maintained. A variety of short and meaningful tasks can be put in place and choices given so the child perceives some control over his programme. For example, Ryan could neither read nor write with any degree of success. He was throwing temper tantrums at home and becoming a problem in the school yard. Although small for his age, he was often an instigator in playground disruptions. His school work was unsatisfactory and although expectations had been lowered considerably in the classroom, he was not completing his work. In a segregated setting, a list of tasks was compiled, involving different activities, different locations and of varying lengths. Unlike the regular classroom, these children did not have to follow a set curriculum. Considerable computer work, illustrating (instead of printing) and sharing (verbal skills are often a strength) were involved with immediate feedback given on completion of any activity. Since he chose the activity, he took ownership of that task.

The list of tasks was reviewed frequently as well as discussed at the end of the day for praise and evaluation. He was allowed to earn his free time for socializing over and above his recess. The expectations were kept high, but the brevity of the initial tasks

was important in order to show Ryan that they could be done, and that the rewards were immediate. He was not rushed to complete material, it could be finished any time during the day, again unlike a regular class when each subject is allotted a given amount of time. He shared his completed assignments with the teacher or his peers who, in turn, gave him recognition for his accomplishments. This engendered pride in his finished product and encouraged him to complete further assignments.

Soon his tasks became longer and more challenging as he began to internalize the intrinsic rewards for accomplishments he took pride in. As he recognized that his skills were improving, he wanted to take on more complicated assignments. ("I want to do what the other kids are doing"). His motivation and time on task were improving, so more attention could be paid to his academic deficiencies. This is not possible in the mainstream when the emphasis is on academics and the scope and sequence of skills progress at a rate beyond Ryan's capabilities.

The secret of Ryan's success and that of other similar children is starting them from what they know. Considerable time must be spent working with them in order to have a good understanding of their strengths. If success can be guaranteed with little risk on the part of the student, he will want to experience that good feeling again. Being constantly alert for problems that may develop, yet not be encouraging dependency, is very important. Knowing just when to intervene and when not to is crucial. Ryan must not be allowed to become frustrated, but he must also learn to make independent decisions, to try things on his own, not to be afraid to be wrong or to take a risk. In order to do this, his comfort level must be high before he is willing to try anything new (or Ryan's term "anything hard"). Therefore, he must achieve many successes on his own before he may be ready to attempt this risk-taking procedure so necessary for his growth. The classroom teacher cannot give him this crucial and exclusive attention in a large setting with many other children who also demand equal time and attention.

Another feature of some LD children is their lack of physical co-ordination. While this does not apply to all LD students, poor motor skills and lack of appropriate interaction in play (which often prevent them from being included in playground activities), further alienate these children from their peers. It is important to address these problems in an appropriate setting.

### (C) Physical Aspect

In a mainstream setting, as in regular programming for academic subjects, the whole class is involved in physical education (PE). The actual area may be a large gym or outside in the school yard when weather permits. The programme may be loosely structured or rigid in its expectations. In kindergarten, this may be once a day, through to the junior grades, where it may be only once a week. The teacher involved may be the regular classroom teacher (with or without any special expertise in this subject) or the class may be taken by another teacher who has more training in this area. The classes may consist of physical games (working with hoops), sports (playing volley ball), fitness (cross country running), or movement (pretend you are a snake). Some programmes emphasize competition, others may emphasize skill development or improvement. Regardless of the emphasis or the amount of expertise, it is difficult to provide the LD child, (given his particular strengths and weaknesses) with a programme that will meet his unique needs. He should have daily physical activities in a structured setting using a well-designed programme that will enhance his strengths and meet his needs.

Physically, the LD student is often uncoordinated and clumsy, weak in gross and/or fine motor skills (G. Reid, p. 6). He may have difficulty catching or throwing a ball. He is accident prone and has difficulty with spatial relationships and body awareness (Reid, p. 7). In games, he bumps, pushes or interferes with others causing problems with his peers. He may be overly active or the reverse, slow and

lethargic. The latter child is often reluctant to participate, appears to tire quickly, is last to emerge from the change room. He is often without proper gym dress and may be sidelined for the period (which is all right with him as he doesn't like gym anyway!). He gets lost in the crowd, is able to melt into the background. He becomes unobtrusive in a room of many active children and may not participate fully. Unfortunately, he would benefit most from the physical workout.

The LD child often lacks the qualities of good sportsmanship, hogs the ball, is often rough and uncooperative. A crowded room is an open invitation to an impulsive, inattentive LD student, allowing him to engage in unacceptable activities unnoticed for a longer period of time because of the many other children in the room. He is frequently side-lined for fighting and may spend his gym periods on the bench or in front of the principal's office. Unstructured activity removes the parameters or reins controlling his behaviour. Physical activity may give him an opportunity to vent his built up frustrations, causing him to react inappropriately in a game situation.

His inability to read his peers accurately (Salvatori, p. 6) causes him to take offense easily if he is accidentally bumped or pushed. The release from the stress and confines of a classroom may result in bursts of energy and mischief that cause a problem when cooperation is necessary. His inability to attend to and/or follow the instructions often make him 'odd man out' in game situations. His lack of coordination may cause his peers to see him as a poor prospect for team competitions. Comparisons between the LD child and his peers are inevitable, further lowering his self-esteem.

If he is a strong child, he may attempt to dominate others, seeking success through strength when he lacks it in other areas. This could result in frequent confrontations between himself and both his peers and his teachers. He distracts others and may involve his peers in problem situations if he acts out his frustrations or by his inability to follow directions. Often he may be involved in a game situation with others where his

weaknesses may be obvious and his confidence shattered. It is difficult, in a mainstream setting to adequately meet the needs of this type of child. Gresham's review (1982) of research on the social effects of mainstreaming clearly states that those students who are mainstreamed, rather than experiencing increased social interaction and acceptance, find instead an environment which is unforgiving and critical. Social isolation, not interaction, is the common outcome (Ballard et al., 1977; Bryan, 1978; Gottlieb, 1977).

In a segregated setting, the LD student should have an opportunity to engage in physical activities daily. This need not take place in the gym. He could be provided with activities using gross and/or fine motor skills that allow him to build (woodworking), manipulate (blocks or lego), move (music and mime), or exercise (fitness video). "Strength, flexibility and endurance activities are great boosters of morale as improvement is usually rapid and can be noted easily and quantitatively so that knowledge of results is immediate and effective" (Widdop, p. 4). Simple bean bag activities involving juggling can promote self-competition as well as eye-hand coordination. Activities can be planned in carefully graded progressions to allow for individual differences and developmental patterns of growth. The programme should be designed to avoid comparisons with others and the student is "encouraged to dwell upon his own abilities and capabilities and the improvements possible without relating to others" (Widdop, p. 4).

Developing the ability to work well with his peers should also be an integral part of the programme. This is a slow process starting with the chance proximity of another child and progressing through stages so that group size is gradually increased over a period of time. "The social benefits of this type of arrangement cannot be stressed too strongly . . . in many cases, this is the only time that the child actually participates as a fully accepted member of a group" (Widdop, p. 4).

Every opportunity should be taken to encourage and inculcate the non-physical skills that the LD child requires. Decision-making is strengthened during physical



activities when he is involved in choices. “Do you want to finish the box you were making or would you rather work with the building blocks?” or “I’d like you to practice ball-catching today, what do you think we should work on to improve it?” “What do you think we should include in our fitness programme next week?” and “Why do you think so?” etc. This individual questioning, individual growth monitoring, is difficult in a mainstream setting when many children, at many different levels of growth, are involved in the programme.

Individual problem-solving techniques should also be built into his PE programme. As a conflict situation arises, all participants involved can be engaged in discussion and problem-solving immediately. “What do you think we should do?”, “How can this be avoided in the future?” and “Let’s list alternatives to this problem”, “What would you like to try next time this problem surfaces?”, “How did it work?” and “How could it be changed?”, etc. are all openings for problem-solving. In all cases, the LD child (instead of defending himself or making excuses) is involved and encouraged to speak out and verbalize his ideas and potential solutions. Verbalizing each child’s perceptions of what happened offers insight to both student and teacher. It assists the LD child in becoming aware of his own reactions and feelings as well as interpreting his peers’ actions and reactions to his verbal and physical language. This is difficult to stop to discuss immediately in the mainstream setting because of the numbers of children in the class.

Responsibility should be encouraged by requiring the child to be as self-sufficient as possible. Instead of requiring him to sit and thus miss all physical activities which are a necessary component of his programme, as a consequence of not having proper gym attire, work out an alternative strategy with him. Two sets of gym clothes, frequent locker inspection, parental involvement, going home for the missing clothes, sorting through the ‘lost and found’ box for suitable clothing, borrowing, or providing an alternative activity that is less fun but can be performed without a suitable gym outfit, are

all alternatives that can be explored. He doesn't miss his activity time and he is provided with opportunities to solve his problem himself.

It is difficult for a regular classroom teacher to stop and take the time to design an appropriate strategy with the child in order to help him overcome his lack of self-sufficiency. It is not enough to tell him to remember, and punishment is not a solution to his problems. It will not teach him how to become responsible and self-sufficient. Techniques must be part of his daily programme until he is able to internalize them and make them part of his coping strategies.

The teacher involved in a segregated setting is the same teacher who deals with the child all day; she knows the child well and the child is aware of her expectations. The expectations are consistent and manageable. The child is required to work within the guidelines negotiated with the teacher, and is not tempted to 'test' these requirements as he might do with a teacher who does not interact with him often. It is difficult for the LD child to relate to many different teachers with different expectations. In a segregated setting, this problem is effectively reduced.

#### (D) Social and Emotional Aspect

In the mainstream setting, the socially awkward (Salvatori, 1984; National, Spring, 1992; Rourke, 1988; Chase, 1988; Paul-Brown, 1989; Wilchesky, 1981) LD student is often at a disadvantage because of his "inability to build or maintain interpersonal relationships" (Ministry of Education, 1981). It may be some time before the classroom teacher has sorted out the interactions of her students and has become aware of the social deficits of the LD student. What might be interpreted as misbehaviour may, in reality, be the LD's difficulty in relating to his peers and interpreting social cues. When the teacher calls the children to the front of the room for sharing or story-time, she has expectations of attentiveness and interest. When the LD child

misinterprets a bump or shove because he has intruded into another's space, and reacts by causing a disturbance, he is often sent to his seat away from the socializing of the group. In each case, the LD child often feels he has been unjustly singled out or is confused over the results of his actions. However, he is effectively removed from any further social interaction and has no strategies for dealing with the situation when it reoccurs. "Exceptional children need to be taught important social skills before they are mainstreamed. Research show that they will not automatically model regular children in appropriate social and academic behaviour. Contrary to popular belief, modelling does not occur through exposure" (Bandura 1977).

In a regular classroom, it is not uncommon to have a desk set apart from the others. This is usually where the LD child sits in order that he may not distract others or be distracted by them. As one of the reasons for mainstreaming is the social interaction among peers, this setting apart sends a clear message to the other students that the LD student is different and must be removed from the group. The LD child must now react with even more bizarre behaviour in class and on the playground to get the attention and approval he seeks. Or he might withdraw, becoming a victim that invites teasing, suffering depression and psychosomatic illnesses. Rourke, Young, Leenaars (1989) suggest that there is a subtype of individuals with LD who are at particular risk for depression and suicide. Mainstreaming proponents claim it is socially beneficial for an LD child to be with his peers. Yet this interaction is effectively lost in group situations involving reading or research as the LD child can't read. He is excluded from participating socially when children are engaged in activities for which he does not have the required skills to become involved. At these times, he may work with an aide or be withdrawn from the room for remedial activities by the SERT. His social interaction, already weak, is now limited to less academic tasks like art, music and physical education which, by their very nature,

are less structured and allow more freedom of movement, creating another problem for the LD child who may have difficulty handling this unstructured situation.

Rourke states that “distinct types of socioemotional disturbance and behavioral disorder are displayed by LD children” (Rourke, 1988, p. 807). He notes that these manifestations appear more frequently among LD children than among their normally achieving peers. Often you can note the progress of an LD student as he moves through the classroom. He pushes child ‘A’ who was in his way, takes the pencil from child ‘B’, explaining it was his. He accidentally knocks the books off child ‘C’'s desk and gets involved in an altercation. When asked by his teacher to return to his seat, he retorts, “I wasn’t doing anything”. As he returns to his desk, another child may distract him. The teacher, now weary from his constant disturbances, confronts him again, perhaps blaming him for an action he didn’t initiate. While he protests about this injustice, the class observes the interaction between him and the teacher. They know he is having difficulties and that he can be “set-up” or blamed for their misdemeanors. He, in turn, knows he has no control over the situation just described and doesn’t understand it. Now he starts to whine again that it wasn’t his fault.

Although not all LD children are socially inept, those who are “exhibit higher rates of inappropriate behavior, they are more likely to behave negatively or competitively” (Chase, 1988, p. 5). They appear unaware that there is a relationship between their behaviour and the consequences that follow.

Social situations in a mainstream class may occur in small group situations such as sharing or presenting of material. The LD child often has trouble listening or attending. If he is not the centre of attention, he may become restless, interrupting. His comments are often blunt; he has not mastered the nuances of the language. While his strengths lie in his verbal ability, they are often at the concrete level rather than the abstract. Because of his difficulty in reading others, he may misinterpret statements or

take their comments as encouragement to continue his interrupting. “It is apparently typical for learning disabled pupils to overestimate their social status within the group; a social misperception that can lead to inappropriate responses and subsequent rejection” (Bruininks, 1978). His egocentric behaviour often alienates his peers. LD children “seem to have less ability to understand the feelings of others” (Chase, p. 5). They appear at risk for social problems either “because they don’t perceive the situation accurately, or understand why it is important to be co-operative” (Chase, p. 5). Their immature behaviour is also a disruptive force in the classroom. “When given criticism, for instance, they can’t listen to it and the situation escalates. They refuse to give up, continue to argue, and may throw a tantrum” (Chase, p. 5). They may react with frustration, not having the ability or vocabulary to explain the situation. They become very defensive. Alternatively, there are some who don’t act out. “They may pretend they understand directions, and fail to ask for the clarification they need . . . they may begin an interaction appropriately, get lost, and not know where to go with it. Over time, some just give up and don’t try to enter into situations where they know they can’t cope” (Chase, p. 5). These children, because they do not draw undue attention to themselves, are often not recognized as having social or emotional problems in a large classroom.

Interpersonal skills are not just personality traits, but can be defined and broken down into individual steps that can be taught. “Teaching a social skill involves structuring the knowledge of that skill: the skill itself must be explained to the student, as well as the reasons for using the skill, and where it can be used” (Chase, p. 5). The classroom teacher does not have the time (and perhaps not the expertise) to teach these skills to the LD student. She is burdened with the demands of a full curriculum and a wide range of student needs. “The researchers found no attempt to teach social skills in the mainstreamed classrooms they examined (Cartledge and Milburn, 1978, p. 36). If the child is withdrawn from the regular classroom to receive instruction in social skills, there

arises the difficulty of having the skill generalize to real life circumstances, something that doesn't happen routinely for these children. When a skill is learned in isolation, that is, it is taught in class without the actual application to a meaningful situation, it loses its relevance for them. The use of the skill or instruction in the use of the skill, must be applied or discussed at the moment of occurrence, when it is needed and while it still holds meaning for the student.

As inculcating social skills to two or three LD children in her class is not the main teaching priority of the classroom teacher, these children are further differentiated from their peers. Thus the reason they were placed in the mainstream originally, namely, enhancing their self-esteem, is effectively defeated.

These particular needs, lack of interpersonal skills, can be adequately met in a segregated setting where the emphasis is on raising the low self esteem of the children. "The earlier the better for intervention" asserts J. S. Hazel of the Institute for Research in Learning Disabilities at the University of Kansas. He believes LD students need to learn how to interact with others. "Social skills training ought to be integrated throughout a student's curriculum. For the LD student it shouldn't happen just in the Resource room". [It is important to] "target skills that matter, such as friendship and problem skills . . . leading students from awareness, to practice and application of skills" (Chase, p. 6). Then the skill can be modelled by another person and the student can rehearse it through role-playing, then generalize it to a real life setting.

In a segregated setting, when the inappropriate response occurs or frustration sets in, because of the small number of children (8) and because all can profit from social skills instruction, the teacher can respond immediately and intervene in the situation. For example, when Matt gets confused because he can't do a particular exercise, he doesn't come for help. He starts to perseverate, going over the same material again and again. He has no techniques either to deal with his frustration, or to pursue an alternative. When the

papers start to fly and the desk banging begins, it is often too late to stop the tears or the momentum of his fury. In a small setting, it is easier to monitor his mounting frustration and intervene before it reaches this stage. The teacher and Matt can discuss the problem and put some strategies in place for Matt to help him deal with his anger before it gets out of control. It may be as simple as getting up and changing activities, but Matt must be taught that he has alternatives in order to retain control of the situation. It sounds relatively simple to help Matt redirect his energy. However, it is exceedingly difficult and very time consuming as Matt has been dealing with frustration in this manner all his life and he is extremely resistant to change. At home, his frustrations often result in violence and changes attempted in school to help curb this behaviour are only a minor part of his life. The point of changing Matt's behaviour is so that he will use it all the time, in order to live a more productive life. It is worth the large amount of effort and vigilance on the part of both Matt and the teacher to persevere.

As Matt's loss of control will happen many times during the school year, he will have many opportunities to try alternative behaviours or reactions, to practice their effectiveness, to modify them and to try to generalize them to social situations such as arguing with his brother at home. Without the opportunity to practice, discuss, role-play and practice yet again, Matt will not internalize this option and his anger and frustration will take on new forms as he grows bigger and stronger.

Role playing and discussion play a large part in the learning environment of a segregated classroom. The child-care worker (CCW) can be enlisted to help interact with the students but the main role is played by the teacher who not only must model the necessary behaviours but must be prepared to discuss and intervene whenever the need arises. The CCW may come in once a week to initiate an activity, but the day to day dealing with the frustration is up to the teacher's expertise and alertness.

LD children who have difficulty in comprehending the non-verbal communication of others, are at a disadvantage in social situations. Chris engages in physical fighting daily in the schoolyard because he takes offence everytime he is accidentally pushed or shoved. There are many verbal altercations in the classroom where the atmosphere is more structured. Chris has not learned to accept apologies or to shrug off petty annoyances. With his low frustration level and large size, he will soon be a danger to himself and others. In a segregated setting, Chris can receive the counseling and strategies that will help him all through life. To assist him in shaping his behaviour into more productive outlets, he needs to understand that he has alternatives and the choices are his. With his low self-esteem and his inability to understand cause and effect relationships, he has no insight into his problems. His few friends are often at odds with him because of his fighting. Chris needs to hear every day that he has alternatives and he needs to see he has a choice. He needs to understand the implications of the alternatives he chooses. He must play a role in outlining practical alternatives, and discussing them in detail, being aware of (even articulating) the ramifications of each choice. This constant, quiet, unobtrusive monitoring is not possible in a large class where Chris could lose control before the teacher is aware of what is happening. He, like other LD children, is slow to adapt to change and is considered uncooperative by others. He is easily misinterpreted. He needs to know that he is a worthwhile person and is accepted despite his behaviours. There is a different attitude of acceptance in the mainstream where there are many children that see Chris's behaviour as unacceptable, further ostracizing him and lowering his self-esteem yet again.

Attributes such as independence, responsibility, and decision-making, must be fostered, starting with small steps and teacher expectations. A simple procedure such as providing the child with a chart that lists his daily activities, is one solution. Allow him to



choose which activity he will do first, second, etc. Decide on the consequences if the activities are not completed and the rewards if they are. Review the list frequently so it does not become a problem at the end of the day. LD children have a poor concept of time. This will help him learn to plan his day and set his own goals. Provide encouragement and praise each time an item is reviewed and checked off. In a mainstream setting, it is difficult for the teacher to give so much time to a few students when she has so many. Although she can set up a similar situation, unless it's monitored closely, it will not work. Learning to make good decisions, taking responsibility, and working independently are achieved only through small, attainable steps and careful and frequent reminders. If the child has not chosen wisely, consequences should be immediate so he learns to relate his decisions to the results he receives. This immediate feedback is difficult in the mainstream situation. Treating him differently from the regular students reinforces, to both his peers and himself, that he is not the same as they are. This again negates the purpose of mainstreaming which was to keep him with his peers so he wouldn't feel different.

#### (E) Programming for Sub-Group in Segregated Setting

In a mainstream setting, lessons are often introduced to the class as a whole. The teacher either verbalizes her instruction or uses the blackboard to present the material visually, depending on her teaching style. She may not engage the class in dialogue relating to the lesson. These lessons are often followed up by exercises designed to reinforce the instruction given. They are usually in the form of ditto sheets or written exercise sheets that the students complete, or they may be exercises in a text book that apply to the concept in question. Thus the teacher, by checking the worksheets or workbook is able to ascertain who has mastered the lesson and whether or not a follow-up lesson or exercise is necessary. While there are variations on the above style of instruction, the method is

fairly basic and applies at one time or another to all grades and all subjects when the teacher wishes to introduce a new concept.

An LD child, in this situation, has a difficult time. If the lesson is presented verbally (e.g., an explanation of the use of a pronoun, identifying the character the pronoun refers to, etc.), the LD child has three problems. First, his memory will not hold the entire lesson. For example, when the teacher asks a question, or if the child wishes to ask a question, by the time the teacher acknowledges his waving arm, he has often forgotten his answer and/or her question. Second, since he is unable to identify the important point the teacher is making, his question is often irrelevant, or may refer to an earlier comment that has little bearing on the present discussion. If he senses ridicule by either the teacher or his peers, he may soon stop asking questions. If he cannot read his audience and does not realize the impact he makes in the classroom, he continues in this manner and is soon labeled a clown by the class and a nuisance by his teacher. He is often at a loss to understand the negative reactions he is receiving. Or he may begin to capitalize on the new attention he is receiving from his peers and go out of his way to be the 'class clown' in future. Third, if he requires concrete materials or many examples and illustrations in order to comprehend the lesson, the teacher's verbalization will not be sufficient and he will soon be left behind. "In the 'regular' classroom, many LD students don't receive the intensity of instruction, the repetition, number of examples, opportunities to generalize or 'hands on' practice that they require" (D. Kronick, 1989, p. 6).

When this happens, the child has several defences. He may withdraw and start to daydream, thus missing the balance of the explanation, and soon becomes the recipient of comments such as, "if you listened to the instructions, you would know what to do". Or he may become bored and restless and act out in class thus disturbing both his peers and the teacher. This often results in some form of punishment such as being sent into the hall (he misses the lesson anyway), or kept after school, or the extra work is sent home. In

the case of the work being sent home, he often requests parental help and thus is able to complete it, reinforcing the teacher's idea that she did the right thing in punishing him. (Even with help at home, he may not have mastered the concept). Another scenario is that the work does not get done at home and thus piles up until neither he nor the teacher can see a way out. If he is kept in to do the work, he misses out on a crucial time (for him) of free activity and peer socializing (and venting his frustrations) and thus regresses further in the area of socialization and becomes more withdrawn (or hyperactive) in the classroom. He is then labeled "stubborn", "lazy" or "not trying" by his teachers and often by his parents as well. This may soon become a self-fulfilling prophecy as he becomes less and less motivated to participate.

If he has reached the point of working and/or completing the seatwork, other problems arise. He may copy from another student (LD students often are very clever about hiding their disability), thus giving the impression that he understands the lesson. He may, through a variety of ruses, not complete the paper, thus taking it home and getting help from parents or a sibling—again indicating by the results that he has mastered the lesson. He may lose, misplace, tear, etc., the paper and, after a period of time, gets out of completing it through sheer teacher frustration. Or he may, in fact, complete it but the result of the lesson does not transfer to his day to day work and thus the concept, though apparently mastered, had no relevance for him in his own writing.

If the teacher's mode of instruction is to present the material visually on the blackboard, again the LD student is at a disadvantage. Usually one to two years behind his peers in his reading level, he often cannot read or understand the blackboard instructions. For him to question what was on the board would disclose to everyone his inadequacies and thus damage his self-esteem, something mainstreaming is supposed to be enhancing. "Students feel positive and confident" is the rationale from this school board for integrating these students in the mainstream (Special Education handout 1989, p. 4 ).

If he remains silent, he is unable to comprehend the lesson and the problems cited above come into play. If the seatwork and/or instructions are handed out for him to decipher, he is no further ahead if he is unable to read the material. In the case of some LD children, they can read the instructions but often fail to comprehend their intent or they miss a key concept and misinterpret the instructions. Another problem is that LD children often get their seatwork back with instructions to “redo”, or “incomplete” or “too messy, do over” or “can’t read”. The LD child who thought he had done a good job is often surprised and/or puzzled with these comments. Eventually he comes to expect them, never sure where he went wrong or why.

Because of their many problems with the written word, LD children cannot complete the same amount of work that their peers are able to complete. A classroom teacher must be sensitive to this requirement. However, it often backfires as the child soon becomes aware he is not keeping up with his classmates. “Research at Teachers’ College, Columbia University, found that LD students were typically able to learn and generalize only five or six spelling words a week, as opposed to the twenty words their fellow students might be learning” (D. Kronick, p. 6). This realization does little to add to the self-esteem of the LD child in the mainstream, contrary to what this school board believes.

The teacher who uses group situations to teach or reinforce instructions may group her students in one of two ways. The group may be heterogeneous, in which case, the LD child, finding he didn’t fully grasp the lesson, merely copies or agrees with a child in the group whom he knows is probably correct. The LD student often has excellent cover up skills and neither the teacher nor the peer may be aware of what he is doing. If this method is not available to him, he may resort to negative behaviour in order to camouflage his inabilities. He is then often removed from the group and thus loses the advantages of the interactions with his peers. If the group is homogeneous, the teacher is aware

that this group takes longer to finish an assignment, that they often will not complete the work and that they may or may not understand the lesson. Thus, for the sake of time, she may water down the activities, thus expecting less of the child, who soon learns to take advantage of this situation and/or may come to expect less of himself as well. He then sees himself as less able and this also damages his self-esteem. If the teacher groups him in a homogeneous group, in order to spend more time with him, it soon becomes apparent that the group is taking a disproportionate amount of her time in comparison to the other groups. This eventually may cause some resentment either on the part of the teacher or on the part of peers and their parents. This homogeneous group no longer receives the benefit of interaction with children who have academic strengths and the LD group are further alienated from the very mainstream they are being maintained in. This type of grouping strengthens the fact that they are at a different and lower level from their peers which is not destined to enhance their self-esteem.

Writing and spelling activities for these children are very different from those of the regular children. The quality and quantity of their work are well below those of their classmates' work. Their spelling lists and writing assignments may differ radically from the rest of the class. Their stories may have to be read to them by an instructional aide or a volunteer who may also do their writing for them as they verbalize their stories to her. It is thus difficult for these children to develop pride in accomplishment, (the stage Erikson (1950) says is necessary to attain before the next stage may develop.). Because of this delayed development, this may be one of the reasons LD children often exhibit immature attitudes in school.

Even if lessons are given both verbally and visually in order to address the LD pupil's best learning style, some of these students require tangible materials in order to use a tactile strength to understand the lesson. Unfortunately not all lessons lend themselves to manipulable materials. When the teacher is giving a lesson in long division and

illustrates her example on the board, it is difficult to provide appropriate tactile material to demonstrate this complex procedure. The LD child requires an inordinate amount of repetition, not only when a concept is being taught, but after it has been taught throughout the year if he is expected to remember and use it when the occasion arises. This may mean the LD child who is trying to master long division is eventually left behind as the class moves on to a new concept. If the child moves on before mastery, the unknown concepts eventually cloud the understanding of new concepts and it becomes impossible for him to make sense out of this subject. If he sometimes gets the correct answer, but the method is incorrect, it is difficult to diagnose the problem and equally difficult in getting him to change an incorrect method. "The unlearning process will be long and arduous, due to their being rigid in their deficit areas" (p. 6).

Even if the LD child masters a concept, there is no guarantee it will be applied in a real life situation when needed. The student who memorizes his times table is seen adding up his pennies, not by grouping them in lots of five or ten but laboriously counting them one by one; or the child who is asked to add a column of five single digit fours, counting on his fingers or his ruler each digit instead of mentally multiplying five by four something which he had previously memorized. He knows he can depend on a tried and true method that has worked for him rather than a concept he memorized in class but has no bearing or use (to him) in real life. The difficulty arises when the columns get too long and the numbers get too big. He now takes too long to complete these mathematical problems and is left behind once again. It is sometimes easier for the LD student to hand in wrong answers than to face the consequences of an incompleting work sheet. He has long since given up trying to understand why some of his answers are wrong and some are correct. This loss of control over his environment is the beginning of many of his future problems and behaviours.

In a segregated setting all of these problems can be addressed in an environment conducive to success rather than failure. The small, intimate arrangement allows the teacher to zero in on individual problems. She can insist on eye contact (difficult in a large class) when giving instructions, because the instructions and lessons are now given in a one to one or small group situation. She can stress this important feature without holding up a whole class in an heterogeneous group. It is often necessary to stress eye contact with an LD child to ensure his attention as well as to model good social interaction.

When the teacher gives instructions, such as “Go to your desk and bring back your science books” in a segregated setting, she can have the child (or children) repeat the instructions or paraphrase them or ask the child what he is now going to do. Children with a learning disability often do not take in the entire set of instructions nor do they have any strategies in place to carry them out. Giving them strategies for following a set of instructions is an important part of their education process. Giving them mnemonic techniques or encouraging repeating directions quietly to themselves are some of the daily strategies the teacher is able to follow in a segregated setting. For example, Matt, when sent off with the above instructions, may never get to his desk, stopping on the way to talk to Chris or accidentally bumping into Tanya’s desk and causing a disturbance, or just forgetting what he had to do by the time he sorts through his desk. The teacher, aware of these problems can address each child with the appropriate questions designed to help him or her plan a strategy for following through on simple instructions:

What did I just ask you to do?

What did I mean?

What do you think I meant?

What are you going to do now? next?

What are you going to do after that?

How are you going to do it?

What will you need to bring with you?

Where is it?

Where can you put it so you won't lose it?

What will you bring back from your desk?

How will you remember next time?

How long will it take you? etc.

The teacher requires this kind of feedback as well. It helps her determine if the child, in fact, understood the directions as well as remembered them. In this way, she can monitor if she has given too many directions at one time, if she has used clear and concise language rather than being ambiguous and finally, how the child has perceived the instructions. Often the LD child does not attend to the attitude of the teacher and may not feel he has to perform her instructions now, but rather at a later time. This causes conflict between teacher and child, with the child never fully comprehending the problem. In an integrated setting, teachers have neither the time nor, perhaps, the intuition to continually cue the child with the aforementioned questions after each set of instructions. Thus, she may perceive the child as having problems other than LD such as behaviour, hearing, stubbornness, low IQ, etc.

Another problem with this type of student that is difficult to deal with in the mainstream, is that he is often late: late to class, late in assignments, late coming to the group, late in attempting his seatwork, late in joining in an activity, etc. This can prove very frustrating for a mainstream teacher as her class may get restless while waiting and now she has two problems, both caused by one or two children. In a segregated setting, when this occurs, the teacher can stop and talk about the problem and the consequences. A discussion involving the whole group may ensue since all could benefit from the inter-



action and the strategies being discussed. These strategies can be repeated and the child (with the help of others in the group if necessary) can choose a strategy that best helps him. This is the beginning of problem-solving for these children. For instance, if during the math drill, the child can't find his pencil and thus is late getting to the table, various techniques could be put in place. One would be to start without him, thus causing his scores to be lower than they would be normally. Or, the pencil problem could be solved by having a pencil tied to his desk beforehand, or he could be in charge of seeing there is a supply of pencils on the table in advance of the drill, etc. Each child's level must be considered before one of the above solutions is put in place. This kind of problem-solving takes time, time which the regular classroom teacher would have to take from her curriculum already overloaded with skills and concepts that must be taught to a broad range of children. These kinds of strategies must be repeated daily for some time before they become part of the LD child's routine.

The classroom routines should also remain predictable in order to ensure some stability in the child's otherwise chaotic world. This may not appeal to the regular teacher who has a group of children that may enjoy or profit from spontaneity and unpredictability. This does not mean the LD child is not spontaneous or is not equipped with a sense of fun, but it is difficult to establish techniques and compensatory skills for this child if his environment is constantly changing and unpredictable. It is the very predictability of the classroom routines that allows him to channel his energies elsewhere (learning) rather than into trying to make sense of what is happening from day to day. It also contributes to a sense of comfort, from within which the child can venture and return when learning becomes too stressful or risky.

The segregated teacher is constantly on the lookout for problems that may develop. She must be able to sense when the child is experiencing frustration, anxiety or overexcitement and be prepared to intervene, discuss, suggest alternatives, or change the

activity. She must use the opportunity to get the child to identify the problem, to understand his feelings, to perceive the consequences, to comprehend cause and effect. The regular classroom teacher seldom has the time to devote to these affective and problem-solving skills and thus the child remains in ignorance of this continuous cycle of frustration, anger and consequences. He has learned nothing from the incident which tends to strengthen his feelings of little control over his environment.

While being vigilant about the child's attention to his task, the teacher must also be prepared to offer the child continual challenges. It is, perhaps, easier to offer the student less difficult assignments or less work. Unfortunately, if the child is not encouraged to reach higher standards, he begins to feel he cannot and will no longer try. Expectations should be reasonable and strategies introduced in order for the task to be attainable, yet the element of challenge should not be denied. The teacher should be sensitive to each child's abilities and each child's emotional state. It is the challenging of these children that enables them to derive the confidence and satisfaction that regular students experience daily as a matter of course.

In a segregated setting, the teacher is able to present frequent repetition of skills and concepts. This would not appear to be out of the ordinary, but it would become boring and unmotivating in a regular classroom if all children were subjected to the constant repetition and reinforcement necessary for the LD child. If, in fact, only a small group of children received this, not only would they soon fall behind their peers, but it would be evident to all that they required extra instruction on familiar concepts (not exactly a confidence building revelation).

Short and varied tasks are necessary for the hyperactive LD child, whereas this may not be conducive to the teaching of regular students who may need and wish to approach a subject with more depth. Correcting a class's seatwork or paper work may necessitate exchanging of papers with their peers. The corrections would only indicate

errors, not the reasons for them. Even if the teacher conscientiously corrects all her children's work sheets, she is not likely to have the time to analyze each error on the LD children's papers. It is often, however, only in analyzing the type of errors these children make, that the teacher has any insight into the problem. If the child is adding left to right instead of right to left, he will continue to make errors until someone discovers exactly why he is making them.

When the teacher is giving a lesson, her students are able to make minute leaps sensing the direction she is going in. Conversely, the teacher may leave out small steps in her presentation. LD children cannot make these transitions. Each minute, sequential step must be laboriously outlined and taught. For example, when teaching two digit by two digit multiplication, the teacher demonstrates that when multiplying the digit in the ten's place, you start your answer in the ten's column, immediately under the product of the one's column. The little leaps most children must take here are that they know the ten's place, that they have arrived at the first product correctly, that they are multiplying from right to left and that they know how to regroup (carry to the next column). LD children may forget any or all of the above and continue to make errors long past the point of mastery for the other students.

These are small, isolated examples of the problems encountered in instructing the LD child, but multiply this by the introductions of each new concept, each subject and at each level and you have a monumental task for the teacher as well as the student. There is often a "prolonged resistance of a LD student to amelioration as well and instruction should not be left up to the expertise and time (or lack of it) of the regular classroom teacher (Handbook for Teachers, Ministry of Education, 1985, p. 2). Nor can it be expected to be "ameliorated" by the intervention of a 'sometimes there' SERT who can neither change the environment nor the expectation (or lack of it) of the LD's progress as compared to that of his peers, nor can she

disguise the fact he requires constant help in order to achieve. If he didn't realize that he was different before, the interventions and allowances and programme adjustments put in place daily for him in the regular system will soon point out too graphically to both him and his peers, that he is, in fact, very different.

A segregated setting provides him with a successful atmosphere (with no comparison or competition), such that he is able to face his peers with confidence in himself as a growing, learning, capable individual. Once he no longer feels defensive or victimized, his classmates take their cue from his newfound confidence and skills and regard him as an equal. He leaves little room for ridicule or scapegoating when his demeanor suggests a healthy self-esteem.

Thus he is given an equal opportunity for learning and his "severe learning difficulty, which, though resistive, is not unresponsive to change, provided appropriate teaching methods are used" (Handbook, 1985, p. 2).

#### (F) Motivation

It is often very difficult to motivate children with LD who have experienced much failure. They know they can't compete with their peers, are seldom successful and their end products are unfinished, messy or incorrect. The secret of motivation often lies in starting them on a task you know they can do, which leads to another successful task. For example, have them identify some objects in a picture, or name colours, then match their names to the pictures or colours. Even a non-reader can sound out the initial letter of his colours and if you are careful not to duplicate first letters (e.g., purple and pink), there is little room for error. Once they have mastered reading colours successfully, you can use the colour words separately to accomplish other tasks; for instance, arrange the words alphabetically, illustrate with own colour scheme, find another word beginning with same letter, graph number of vowels, consonants, etc. All of these activities can be accom-

plished successfully while he is being exposed to the colour words as frequently as possible. Each task leads to success and reinforcement of the words at the same time.

Given the level of the child and his ability, these tasks can be expanded to make sentences, stories, books. Each assignment builds on what he already knows and offers no fear of failure or ambiguity over the task itself. While starting well below his level of knowledge, the task was short, varied and successful which kept him motivated and allowed him to work independently. He is comfortable and eager to show you he can do these activities. In a regular setting, he may balk at such 'childish' tasks or may be ridiculed by his classmates. It is often difficult to find a low enough, meaningful task for an LD student in order to ensure success yet provide motivation for completion. In an isolated setting, it is easier to achieve this when there is no comparison to the achievements of others.

In searching where to start in the teaching of concepts, the teacher often has to painstakingly go backward step by step until the threshold of success and understanding is reached. This requires much time and analysis as well as innovativeness on her part in order to keep the student's interest. The necessary repetition challenges a teacher to produce new and interesting methods of delivery taking each student's deficit into consideration.

This kind of instruction involves close liaison with parents who are involved with the children's education at home. In order for them to reinforce the same principles at home, frequent meetings and discussion must take place. Often they are encouraged to come into the classroom in order to view their children in a good learning environment. This may prove difficult for a mainstream teacher who has twenty-five to thirty students that she is accountable to and must provide for in the regular classroom.

Before an LD child can become involved in group work successfully, he must develop strategies that help him overcome or compensate for his disability. Since his handicap

is invisible, it is often difficult to identify and thus, difficult to ameliorate. Staying on task, completing assignments, working independently, transferring old learning to new, acquiring appropriate social skills, are all prerequisites to group work. Having an LD child join small groups as they work themselves around activity centres will fill his time, but it will not address his learning deficits nor enhance his understanding of the concepts being taught without the aforementioned skills in place. It may appear that he is accomplishing the goal of mainstreaming and integration, but if his accomplishments are analyzed, if his new learnings are applied to problem-solving tasks, if he is questioned closely on his understanding and the usefulness of his activities, it will be found that he is sadly lacking in all the areas necessary for success as he proceeds through school. Structured, sequential tasks and keen questioning to ensure understanding, are prime requisites for ensuring learning is taking place. Application of the knowledge and skills he has mastered to new problem-solving tasks, is a good indicator of the success of the programme.

A child who finds it difficult to write or is conscious of his poor spelling or handwriting, a restless child who finds it difficult to sit and attend or stay in one place quietly, must have alternatives in place and the activities geared to his deficits. Tasks should involve some kind of physical activity like matching, computer work, finding information, measuring, drawing, charting, interviewing, etc. "LD students might not comprehend the language of instruction, or find the distractions of a populous class, or the demands to sit in one place for long periods extremely stressful" (Kronick, 1989, p. 6). It has long been recognized that stress plays a major role in contributing to an LD child's problems. The environment of the LD should be geared to reducing anxiety as much as possible in order to facilitate learning and to allow the child to focus on the tasks at hand. Allowing the child some freedom of movement as well as choices helps reduce this stress. However, in a regular classroom, with three or four children constantly moving about the room (perhaps socializing, perhaps distracting the other students, purposely

or accidentally), the regular teacher who is not prepared for this type of integration may find this additional distraction extremely difficult.

It is imperative that the LD child has an opportunity to verbalize, discuss and comment. Often, talking is a strength for these children. Therefore, it should be encouraged, enhanced and offered as an alternative at every opportunity. This will build on their strength, enabling them to progress elsewhere. Also, as they discuss their weekend, their family, their viewpoints, their interpretation of a story or an event or a problem, the teacher may gain some insight into what they think and how they think. In a regular class, it is difficult to encourage and maintain this strength where there are twenty or thirty children all eager to voice their opinions.

In order to teach comprehension, children participate in discussing what they have read. This establishes whether the story was understood or not. LD children often miss the point of the story. So the discussion afterward offers diverse points of view. If the group consists of all LD children, there is less of a risk in expressing opinions than in a heterogeneous group, where often the main ideas are quickly established. In the latter setting the LD has not received any strategies for determining the key points and soon learns his answers are often incorrect. This does not lead to enhancement of his self-esteem. In a small setting, these problems can be addressed without him 'losing face' with his peers as, by the very nature of the group in the segregated setting, most of the children would have the same or similar problems. Much more time could be spent on strategies for determining main ideas than would be possible in a mainstream setting.

In a segregated classroom, the teacher is able to take full advantage of a small group setting by arranging much of the learning in a unique or game-like atmosphere. While this may cause some noise and disorder, it involves the children in an academic goal that may otherwise prove unattainable. For example, if the research question of the day is to find Newfoundland on a map, excited and eager children spurred by reward or

recognition, may go from map to map in the room trying to locate the correct area. The novelty of the task orchestrated by the teacher, keeps the motivation high. Over a period of time, maps take on new meaning for these children and become familiar and comfortable to work with. A written medium makes sense, they can use it to attain satisfaction and success. Use of road maps can be encouraged at home, thus making the knowledge more meaningful as well as useful.

If, instead, this were taught as a lesson, it would be difficult to maintain interest. Moving from map to map in a large class of twenty-five children would soon become a safety concern. Having maps at their desk as an alternative, would defeat the purpose of allowing the child to move around the room. The teacher can watch all their progress when they move, while at a desk, she has to check each individually.

Another critical factor is the importance of getting the attention of the LD learner. This is often difficult, for it may appear that he is attending when in fact he is not. It is necessary to keep checking on whether you still have his attention when teaching. Often, “memory is a function of attention” (Handbook, 1985, p. 10), so it is doubly important to persevere on this point. The lesson, whether individual or in a small group, should be peppered with his name, questioning him at every opportunity, touching him on the shoulder, having him paraphrase your words, giving alternate examples, having him explain the lesson to another, having him show you, etc. His senses are bombarded with stimuli and thus it is necessary to be sure the dominant one is the teacher’s. Singling him out in this manner in a regular class will bring to the notice of others his hesitancy, his often incorrect interpretations and his restlessness. In a segregated class, the class is small and expressing himself is encouraged. Since most of the children in this class have similar problems, he does not appear any different from the others in the class. Also the teacher is able to stop and address the wrong answers at once, the lesson plan is easily changed to meet the needs of the small group. On his part, he will feel ‘on the spot’ and



may become either belligerent or even more retiring. The intent of the teacher (to keep his attention) will be lost and in fact, may cause secondary problems. In a segregated class, the class size is small and expressing himself is encouraged. Since most of the children in this class have similar problems, he does not appear any different from the others in the class. Also the teacher is able to stop and address the wrong answers at once, the lesson plan is easily changed to meet the needs of the small group. In a segregated class, everyone is experiencing some difficulties, all have obvious deficits. It is up to the special education teacher to create an atmosphere within which the student feels comfortable and safe and each child's unique or common problems may be addressed without embarrassment to the individual child. At the same time, she is able to reinforce each child's strength, no matter how insignificant, in order to allow him to shine in some area that would not be possible in a regular classroom (where strengths are many and diverse and the students are in greater number).

One of the reasons LD children have difficulty learning school skills, is their varying capacity to remember information they receive. "Most people will retain information that contains a strong affective component. Thus, for example, when significant events occur, most people will retain the details involved" (Handbook, 1985, p. 10). If the material is "less attention provoking", less meaningful, most will not retain the information. The key word for teaching LD children is 'meaningful'. Unless the instructions, skills or concepts are presented in a fashion meaningful to them, there is very little retention or for that matter, attention given to the material. For example, there is little incentive for Jason to learn about money as he does not have any experience with it. His parents take care of his purchases or tend to give him exact change for purchases. This rapidly changes if he is told he can help in the class cookie sale if he masters how many pennies make a nickel, dime, etc. (It is up to the teacher to find out what motivator to use). Or the

older non-reader who has resisted all attempts to motivate him, may change his mind if the text is the drivers' manual necessary for a driving test. The patient struggle to help each child find meaning in the material presented to him is tedious but necessary. This becomes exceedingly difficult in the mainstream when the non-reader is aware that he is unable to keep up with his peers in their day to day activities. Even meaningful material loses its attraction when the student is faced with the seemingly insurmountable task of 'catching up'.

The help of a SERT in the class is not the answer. First, there is usually only one full-time or one half-time special education resource teacher in a school of four hundred or more. She cannot be all things to all types of LD children all the time but especially the sub-group who require such in-depth assistance. Logistics suggest that approximately forty (ten percent of the school population) children scattered over grades one to eight (and not including kindergarten) see the SERT approximately thirty to forty minutes a day and many more share that time with several of their classmates. This is not the case in a segregated class because the teacher is the special education teacher and is with them all day, not just an hour or so. This will not provide these children with the necessary strategies, social, emotional, physical and instructional procedures that ensure the success they are entitled to under Bill 82.

The concerns of school boards that there are stigmatizing effects of self-contained classes, reduced opportunities for children to observe competent social skills, and the fact that "labels dwell on the less functional aspects of persons" are well founded. However, without the label, these children do not receive the services they are entitled to be provided by Bill 82. Placing these children in the mainstream does not eliminate their social problems nor upgrade their social skills (Kronick, 1989, p. 6). More knowledge about how these children learn would benefit teachers and administrators who would then

play their part in removing the “stigma” and help create the positive atmosphere necessary (but sometimes lacking) in school systems, classrooms, and the public arena. Better education for teachers dealing with these children would be necessary in order to dispel some inadequate teaching practices, (e.g., fostering dependence rather than independence.) The emphasis would be on the children’s strengths and their contributions to the school and their classmates. The difficulty in bringing about change in these children is not easily overcome and thus, perhaps, preference is given to the simple solution of mainstreaming. With greater knowledge and more resources at the youngest level (kindergarten and grade one), we could change the focus and thus the stigma attached to these children who learn differently.

## SECTION VII

### SUMMARY

My aim in this paper was not to make the definitive statement on the subject of educating children with learning disabilities, but to alert educators to the importance of recognizing and understanding the significance of a 'failure to thrive' sub-group of learning disabled students and the importance of early identification and appropriate intervention.

Examples have been given that suggest LD children are often placed in environments that are not conducive to meeting their needs. This Board's reluctance to adequately serve these children has been a source of discontent for informed and concerned parents and parent organizations.

A sub-group of LD children has been identified and their progress in a segregated setting has been documented and compared to their progress in the mainstream setting. I have suggested an approach that appears to work consistently over the years with this sub-group of LD children who have failed to master the reading process and I have cited the current research to support this approach.

The importance of a wholistic approach in an appropriate setting has been argued. The research supporting this approach has been noted and examples of how to implement and design curriculum wholistically has been explained. It is important to understand the pedagogical reasoning behind this premise.

Working within a theme gives the LD student the familiarity and dependability that are necessary before he is willing to take a risk with new material. It facilitates the

transfer of skills to generalize to new material within the theme because of the longer time frame and the comfort of working with similar material. The thematic approach provides variety, and alternatives, depending on his strengths. He learns to make appropriate choices and he learns the consequences of these choices. The material is consistent, the expectations challenging. Constant repetition of the material provides re-enforcement for his new vocabulary, spelling, reading, knowledge and skills. This helps generate over-learning, giving him successes and the confidence and motivation to complete new and more challenging assignments. Within this framework, he learns to organize, take responsibilities and develop strategies that can be applied to new material. As his skills improve, he experiences more success which leads to more risk-taking. He begins to take ownership of his learning and his behaviour.

Structure is built into the programme using goals that are short-term and rewarding. The student participates in the decision-making when the goals are generated. He is involved in the rule setting governing classroom expectations and behaviours. This gives sense and meaning to his environment.

The social-emotional aspect of the student should not be neglected. The wholistic approach deals with the whole child. While the theme provides him with new experiences, every opportunity is taken to address his social deficits. Through sharing, role playing, field trips, modelling and discussion, insight and consideration for others are stressed. The egocentric LD child often has not yet learned how to deal effectively with his peers who frequently misinterpret his intentions. He requires insight into how to deal with his frustrations and anger, his fears and his rejections. This plays a major role in the programme. As well, the physical needs of the LD student are important. The concentration expended at the cognitive level is very tiring for these students as they try to focus on one stimulus. A child with attention deficits requires a variety of activities that will allow him to move about as well as provide novelty within a structured environment. Activities

that enable him to improve fine or gross motor skills should be built into the curriculum. Games and exercises that involve coordination and/or cooperation are a necessary component of his programme.

The 'whole child' approach takes into consideration his interests after school as well. Outside community activities are stressed and the help and cooperation of parents are a necessity. It is important to involve them in the school programme as much as possible and frequent meetings and discussions about their children's progress are important. When dealing with the whole child, the trust and confidence of the parents is vital. Consistent expectations at home and at school provide the child with the parameters within which he is comfortable and which he understands. This consistency assists him in making sense of his environment and enables him to bring structure and meaning into his chaotic world.

This theory of teaching, however, will not be effective unless it is administered by a knowledgeable and caring professional who is trained in the observational techniques necessary to carry out these methods. Generally, teachers are not against mainstreaming, but they feel that they have not been adequately trained to deal with many exceptionalities (Mainstreaming, p. 109). As Dr. Tom Humphries of the Child Development Clinic at the Hospital for Sick Children in Toronto states, "The problem is in operationalizing the philosophy of integration" (Communique, Sept. 1989, p. 4). No theory can transfer LD children into effective readers unless it is coupled with an appropriate teaching style as well as a system of administrators that support these efforts (Rourke, 1989).

Administrators should take note that there are effective methods, supportive research and knowledgeable, caring professionals available to serve the 'hard to serve' children effectively in order to produce "life-long learners" (Stephenson, 1980, p. 8).

This paper has argued that the requirements for success in the school system must address the unique strengths and weaknesses of these children and this is difficult to achieve in a regular classroom setting. "There is little research on the suitability of mainstreaming for the LD child", so says a search of the literature on Mainstreaming prepared by Mary Howarth for the Federation of Women Teachers' Associations of Ontario in August of 1983. The results of the search indicated, "if there is to be one overwhelming conclusion from this entire report, it must be that mainstreaming is being poorly done in many cases" (p. 106). Many researchers who began in support of the concept of mainstreaming, "found important variables being neglected when they visited actual school situations" (p. 106). All researchers caution against the "belief" that mainstreaming is "good" (p. 109). While it may be "good" for some LD children, I maintain it is not "good" for all LD children. Statistics indicate too many LD children are not succeeding in the school system. "It's absurd to think every child fits in the mainstream" (S. Lewis, Communique, June, 1989, p. 5).

Examples of failures to progress have been cited to counter the school board's thesis that mainstreaming is the only solution to these students' ills. Inordinate delays in recognizing, identifying and adequately programming for LD children may have longlived consequences. Examples of how the system can fail these children have been outlined. Problems that may surface due to delay in an alternative placement have been detailed.

Professionals and experts have been cited to support the claim that these children require a specialized setting in order for them to progress in the system. Research has been explored to give an overview of how children learn to read and the deficits in some children that appear to impede their progress in this area. While it is not fully understood how children learn phonics, etc., and why some children fail to master the

process, educators and researchers alike agree this failure to master the reading process does happen and that children who fall into the category of LD need a specialized programme to assist them.

The importance of early identification and the often heartbreaking consequences of failure to do so have been addressed and cases in real life have been used to illustrate these outcomes. Methods of early identification have been suggested and studies cited to emphasize the importance and necessity of early and immediate implementation of an appropriate programme.

Awareness of early precursors would allow both the teacher and SERT to intervene quickly, programme individually and offer effective methodology in an effort to reduce future inadequacies in the learning process. Long term tracking would guarantee the student the full resources available in a school system to help subvert future problems and to ensure that all subsequent teachers of these students address their unique styles of learning with the same consistency and environment deemed necessary for their programme.

As the Celdic Report, based on the survey of one million children, so succinctly sums up the problem:

It is our problem, not theirs [LD children], and we must be ingenious. We are the ones that must pay the price. We cannot ask the child to pay for our failures of knowledge, our unwillingness to try, our resistance to the expenditure of time and money, our rejection of the challenge . . . we must marshal our forces to identify the problem at the earliest moment (CELDIC Report, p. 2).

The field of special education is fraught with strong feeling about the value of particular approaches . . . for every strong commitment there is an equally strong opposing point of view. Each child is unique and requires a unique blend of factors to meet his/her needs. It is my belief, however, that children who fall into this sub-group of learning disabilities will not thrive in the mainstream setting, have not thrived in the mainstream



setting, and their special and diverse needs can only be met in a setting that sets up an environment conducive to their particular style of learning. I have tried to outline the main points of an environment that encourages risk-taking yet offers the security and consistency not available in a mainstream setting. Some data has been offered to support the success of this sub-group in a specialized segregated setting.

I suggest that their survival in our present system will be achieved in an environment using a wholistic approach, supervised by a caring professional who is well versed in the learning style of this particular sub-group. As an educator with over twenty-two years experience with this board, I feel I bring both knowledge and expertise to bear on this subject. My experience encompasses kindergarten to grade nine in special education in many schools as well as a teacher of 'regular' children in primary, junior and intermediate classes. I have taught LD students in a segregated setting, in the mainstream with withdrawal, as well as in the mainstream without withdrawal. My views have been changed and skills honed over time until I was able to provide success for LD students. No doubt, it will continue to evolve as knowledge, experience and research about learning disabilities continue to grow and expand.

Although lip service is paid to individualizing the programme for LD children in the mainstream setting, in truth, this is not the case. Instruction, testing, and grading are not individualized in the regular classroom setting. "Grouping practices are usually concerned with pacing or the depth of instruction rather than making any real modification of modes of presentation, content or testing procedures." (Diamond, p. 44). LD students in the mainstream classroom are exposed to the same curriculum and the same teaching style, if at different rates, and are reminded in many subtle ways that they must work harder, faster, oftener, in order to 'catch up' to their peers. This atmosphere contributes to their feeling of inferiority and inadequacy and adds daily to their feeling of low self-esteem.

Of paramount concern should be what is best for the LD student, not what particular philosophy a school board promotes. As the Ministry of Education states: "It is the position of the ministry that the placement of exceptional pupils into either regular classes or special classes on the basis of philosophical principle, without due consideration of each situation, is directly counter to the best interest of individual pupils" (Hansard, Jan. 1989, Ministry of Education).

School systems everywhere should be in the business of 'promoting' LD students. They should not be in the business of working contrary to their needs by 'failing' them whether through ignorance, indifference or misplaced zeal.

## APPENDIX

1. Examples of Student Improvement

Number	Reading Recognition	Comprehension	Spelling	Gain/Loss	Average Yearly Gain
Year	1989 / 88	1989 / 88	1989 / 88		
1	3.0 / 2.4	4.5 / 4.2	3.6 / 2.9	1.6 / 3	0.53
2	3.3 / 1.6	3.1 / 0 *	1.8 / 0 *	6.6 / 3	2.2
3	4.7 / 3.6	4.4 / 5.0	3.5 / 3.5	0.05 / 3	0.016
4	3.0 / 1.3	3.4 / 0 *	2.9 / 0 *	8.0 / 3	2.6
5	3.8 / 3.4	3.1 / 3.1	3.5 / 3.2	0.7 / 3	0.23
6	6.0 / 4.1	5.0 / 5.0	4.1 / 3.4	2.6 / 3	0.86
7	5.6 / 3.9	5.3 / 3.9	3.7 / 3.3	3.5 / 3	1.16
8	3.9 / 3.4	4.4 / 0 *	2.8 / 2.3	5.4 / 3	1.8
* Student's score was not measurable as it was below the standardized measure (i.e., below grade one).					

Reading recognition or sight vocabulary is what they can read; comprehension, what they understand; and spelling, orally dictated, the recognition of the correct spelling of a word.

The average gain for the above eight students is 1.174 (1.2) grades in 1 year in language skills.

The gain in reading recognition is 1.2, gain in comprehension is 1.5, gain in spelling is 0.91—giving an average of 1.2 grades in one year. The greatest gain was in comprehension with the least gain in spelling. Although not all students gained a full year, the gains in all cases were greater than they had been making in the mainstream with remedial help or withdrawal (as well as most having to repeat a year). This is known because each student came into a segregated class two or more years behind his or her peers as identified on standardized tests.

The test used to measure their growth while in a segregated setting was also a standardized test (PIAT).

These are only a few examples of student progress. It is not an exhaustive list. This data was selected to be illustrative of the sort of gains that are typically experienced using the programme outlined in this project.

## GLOSSARY

### Abbreviations

<b>ACALD</b>	Association of Children and Adults with Learning Disabilities
<b>ADD</b>	Attention Deficit Disorder
<b>ADHD</b>	Attention Deficit Hyperactivity Disorder
<b>CALD</b>	Canadian Association of Children with Learning Disabilities
<b>CAP</b>	Central Auditory Processing
<b>CATC</b>	Children's Assessment and Treatment Centre
<b>CCW</b>	Child Care Worker
<b>CYCW</b>	Child and Youth Care Workers
<b>ESL</b>	English as a Second Language
<b>FOS</b>	Area or Family of Schools
<b>IPRC</b>	Special Education Identification, Placement and Review Committees
<b>LDAC</b>	Learning Disability Association of Canada
<b>LDAO</b>	Learning Disability Association of Ontario
<b>LDA of Halton</b>	Learning Disability Association of Halton
<b>OACALD</b>	Ontario Association for Children and Adults with Learning Disabilities
<b>OSR</b>	Ontario School Records
<b>SERT</b>	Special Education Resource Teacher
<b>SRT</b>	School Resource Team

<b>ST</b>	School Team
<b>PJ</b>	Primary Junior
<b>PTR</b>	pupil/teacher ratio

### Tests

<b>PIAT</b>	Peabody Individual Achievement test (PIAT) by Lloyd M. Dunn and Frederick C. Marwardt, Jr. for all ages, to provide an overview of individual scholastic attainment. Used to screen for areas of weakness requiring more detailed diagnostic testing.
<b>PPVT-R</b>	Peabody Picture Vocabulary Test–Revised by Lloyd M. Dunn and Leota M. Dunn for ages to measure receptive vocabulary for Standard American English, estimates verbal ability and assesses academic aptitude.
<b>Otis Lennon School Ability Test (OLSAT)</b>	by Arthur S. Otis and Roger T. Lennon, for children and adolescents (grades 1 – 12), to measure abstract thinking and reasoning ability. Used for predicting success in cognitive, school-related activities.
<b>WISC R (Wechsler Scales):</b>	Wechsler Intelligence Scale for Children—Revised (WISC-R) by David Wechsler for children and adolescents (ages 6 – 16) for assessing intellectual ability in children.

### Drugs

<b>Ritalin®</b>	(Ritalin® SR),CIBA. Methylphenidate HCl Mild Central Nervous System Stimulant that activates the brain stem arousal system and cortex to produce is stimulant effect. It has stabi-
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lizing effect in children with behavioural syndrome characterized by the following group of developmentally inappropriate symptoms, chronic history of short attention span, distractability, emotional lability, impulsivity , moderate-to sever hyperactivity.

### Terms

**Affective** Pertaining to emotion.

**Etiology** The theory of the causation of any disease or dysfunction: the sum of knowledge regarding causes of any condition or disorder. When trying to determine the origin of a learning problem, medical history, emotional factors, and educational information give clues to etiology.

**Body image** An awareness of one's own body and the relationship of the body parts to each other and to the outside environment.

**Cognitive** Pertaining to the processes of knowing and thinking.

**Dyslexia** A partial word blindness or an inability to read with understanding. It is not related to general intelligence. It often exists concurrently with symptoms of hyperactivity, difficulties in directionality and poor integration skills.

**Expressive language skills** The skills that help us to communicate with each other.

Speaking and writing are expressive language skills. A marked discrepancy between writing and speaking skills may indicate a learning disability.

**Eye-hand coordination** The ability to synchronize the working of eye and hand in motor activities. This skill is necessary to many gross and fine-motor tasks, such as: sports, walking, eating, slicing food, and mechanical operations. The hand usually leads the eye; seeing first then doing.

- Fine motor** Pertaining to small-muscle activity, such as that involved in writing or drawing.
- Fine-motor skills** Those skills necessary to perform precision tasks such as manipulating a pencil properly or, when fingers begin to work smoothly, enabling the child to grasp small objects, operate tiny buttons and knobs. The child's fingers respond efficiently to his brain's command.
- Gross motor** Pertaining to large-muscle activity, such as that involved in physical exercise.
- Hyperactivity** A highly active behaviour level. Hyperactivity is excessive activity, but does not necessarily interfere with learning or behaviour.
- Learning style or mode** The way a child is best able to understand and retain academic learning. We all learn best through one or more channels—visual, auditory, motor, or a combination of these (experiential).
- Maturation lag** A slower rate of development in certain specialized aspects of neurological readiness.
- Mnemonic devices** Methods of association of images, words or ideas to assist memory.
- Morphology** Patterns of word formation.
- Orthography** The art of spelling.
- Overlearning** The process of ensuring that material is learned by thorough mastery.
- Perception** The conscious mental registration of a sensory stimulus or how one receives impressions via the senses. How we understand what we see, hear and smell. It is a highly complex system involving the central nervous system, for relay of impulses. Any slight imperfection in the system can cause the whole process of integration to break down. Learning is based on the smooth integration of perceptions and well-developed modes of expression.



<b>Perseveration</b>	The tendency to repeat words or actions in order to make the ones learned previously appear more secure and predictable.
<b>Phonic skills or phonetics</b>	Learning to associate sounds or phonemes with letters or combinations of letters (graphemes). Phonetics is the overall study of sounds of speech and language and how these sounds are produced.
<b>Phonological</b>	Of the phonetic and phonemic system
<b>Receptive language</b>	Language that is spoken or written by others and received by the individual. The receptive language skills are listening and reading. Example: The child with a poor understanding of what he hears or reads may be a child with poor receptive language skills.
<b>Reinforce</b>	Emphasize and strengthen through practice.
<b>Reversals</b>	Errors appearing in reading and writing, reversal of single letters (b and d); of the order of letters within a word (pat or tap); or of the order of a whole line.
<b>Self-concept</b>	An individual's opinion of him-/herself.
<b>Semantic</b>	Meaning
<b>Soft neurological signs</b>	Neurological abnormalities that are mild or slight, and difficult to detect in contrast to the gross or obvious neurological abnormalities. Most youngsters exhibiting learning problems exhibit soft neurological signs rather than any gross discernible symptoms.
<b>Space relations</b>	The relationship among objects in space that takes their three-dimensional (length, width and height) attributes into consideration within the relationship.
<b>Syndrome</b>	A set of symptoms that usually occur together and make a discernible pattern.
<b>Syntax</b>	(also syntactic) Grammar (word order).

## Bill 82

**The Education Amendment Act, 1980 (Bill 82)** is an act that requires school boards to provide or purchase from another board special education programs and services for their exceptional pupils.

**Exceptionality Identifications and Definitions** (Education Act, section 8[2]). Currently, five categories and twelve identifications and definitions of exceptionality are prescribed in the Special Education Information Handbook, 1984.

**Exceptional Pupil** (Education Act, section 1[1]), par. 21 An exceptional pupil is one whose behavioural, communicational, intellectual, or physical needs, or a combination of these, as determined by a committee of the school board, in consultation with the parent(s), are such that the pupil may benefit from placement in a special education program.

**Identification, Placement, and Review Committee (IPRC)** (Regulation 554/81) An Identification, Placement and Review Committee is established by a school board to identify a pupil as exceptional (or not exceptional) and to determine and review the placement of an exceptional pupil, in consultation with parent(s).

**Integration** Integration in the provision of instruction for an exceptional pupil in a regular classroom.

**Range of Placements** A range of placements for exceptional pupils includes, but is not limited to, the following:

- Full integration is placement in a regular classroom for the entire school day with support services provided to a regular teacher, or with individual or small-group instruction provided by a special education teacher within the regular classroom for a portion of the school day.

- **Integration/Withdrawal** is placement in a regular classroom, with specialized instruction provided by a special education teacher outside the regular classroom for a portion of the school day.
- **Partial Integration** is placement in a special education class, with integration in a regular classroom for a portion of the school day.
- **Self-contained Class** is placement in a special education class, a special school, or a residential Provincial or Demonstration School.

**Special Education Advisory Committee (SEAC)** (Education Act, section 182)    A

Special Education Advisory Committee comprises trustees, representatives of a local associations, and other, and makes recommendations to the school board on special education matters.

**Special Education Program** (Education Act, section 1[1], par. 63)    A Special Educa-

tion Program is an educational program that is based on and modified by the results of continuous assessment and evaluation and that includes a plan containing specific objectives and an outline of education services that meets the needs of the exceptional pupil.

**Special Education Services** (Education Act, Section 1[1], par. 64)    Special Education

Services are the facilities and resources, including support personnel and equipment, necessary for developing and implementing a special education program.

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