

A MODERN HISTORY OF EDUCATING STUDENTS WITH MILD  
INTELLECTUAL DISABILITIES IN SASKATCHEWAN (1900-2002)

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By

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## ABSTRACT

This study is an historical analysis of the education for students with mild intellectual disabilities in Saskatchewan from 1900-2002. The thesis analyzed the beginnings of thought on the construct of intelligence, its hereditarian orientation, and the IQ test that originated in 1904 to measure individual differences in intelligence. The use of the IQ test was traced as it progressed through the eugenics movement that dominated from approximately 1900-1940, as well as the mental hygiene movement that was present during roughly the same time period. The importance of the concept of intelligence and the IQ test was analyzed for how it affected the identification of individuals with an intellectual disability, and how the identification process affected their treatment and education. The classification and educational placement of students identified with an intellectual disability had parallel affects on the curriculum for these students.

The changes in attitudes from eugenics and institutionalization of those identified with an intellectual disability and their subsequent deinstitutionalization, beginning in the 1960s, are examined for the effects these attitudinal shifts had on the education for these individuals. Education developed a system of special education that was based on measuring individual differences and making placement and curriculum decisions based upon these results. The education system in Saskatchewan developed from a segregationist philosophy to integration beginning in the 1970s. As the belief in the educability of these individuals and information on how to educate the intellectually disabled increased, a move towards full inclusion of these students began in the 1990s. As early as the 1970s, Saskatchewan Education began to develop specific curriculum guides and policies on the education of students with an intellectual disability. The

progression of these documents up to 2002 is analyzed to determine the shifts in curriculum and student placement policy that occurred during this time period. The continuance of a reliance on the IQ test to identify and place students with an intellectual disability in the education system was analyzed. The attempt of Saskatchewan Education to deal with difficulties in providing for an appropriate education for students with an intellectual disability and suggestions for future directions are discussed.

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## DEDICATION

I would like to dedicate this thesis to my family, who thought I was crazy for going back to school for my Master Degree, but supported me nonetheless. Thank you to everyone who volunteered to be a subject for my thesis and attempted to get a free assessment out of the deal.

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## TABLE OF CONTENTS

PERMISSION TO USE	i
ABSTRACT	ii
ACKNOWLEDGEMENTS	iv
DEDICATION	v
TABLE OF CONTENTS	vi
LIST OF TABLES	ix
1. DISCOVERING INTELLECTUAL DISABILITY	1
1.1 A Consideration of History	1
1.2 A Perspective on the Future	8
1.2.1 The Need to Look Forward	8
1.2.2 Questions to Guide the Study	9
1.3 The Path to Understanding	10
1.3.1 Historiography	10
1.3.2 Sources of Data	12
1.4 Limitations of the Study	14
1.5 Significance of the Study	15
2. FEEBLEMINDED: ASSESSMENT PRACTICES AND IMPLICATIONS FOR CURRICULUM (1900–1930)	18
2.1 The Construct of Intelligence versus the Measurement of Intelligence	18
2.2 Eugenics and the Search for the Moron	28

2.3 Custodial Care and the Protection of Society	35
2.3.1 Protection of the Public	37
2.4 The Use of IQ Tests	38
2.5 Compulsory Attendance and Curriculum Differentiation	41
2.6 Tracking and Student Placement	47
2.7 Early Conceptions of Individual Differences	49
3. MENTAL RETARDATION AND IQ TESTING (1930–1960)	54
3.1 Education and IQ Testing	54
3.2 Mental Hygiene and Effects on the School	55
3.3 The Need to Accommodate Special Students	61
3.4 Increased Focus on Individual Differences	62
3.5 Laycock and Special Education	64
3.6 Labelling	67
4. MENTAL HANDICAP TO INTELLECTUAL DISABILITY: ASSESSMENT, DEFINITIONS, AND CURRICULAR IMPLICATIONS (1960–2002)	72
4.1 Deinstitutionalization	72
4.2 Special Classes and At – Risk Students	73
4.3 Increasing Work on Defining Intellectual Disability and Assessment	79
4.4 Growing Unease with Segregation	83
4.5 A Move to Integration	87
4.6 Legislative Action and the Move to Desegregation	92
4.7 Focusing On Curriculum	94



4.8 The Regular Education Initiative	96
4.9 Normalization	98
4.10 Legislation and Policy Based on an Integrative Model	100
4.11 Alternative Assessment Procedures	105
4.12 Upgrading to Inclusion	110
4.13 A Cognitive Elite for Present Day	112
4.14 Provisions in Curriculum and Instruction	113
4.15 Reconceptualizing Special Education in Saskatchewan	118
4.16 A Direction for the Schools of Present Day	126
4.17 A New Direction for Children's Services	131
5. A LANDMARK FUTURE: WHAT EDUCATION HOLDS FOR STUDENTS WITH MILD INTELLECTUAL DISABILITIES	136
5.1 Considerations for 2002	136
5.2 Funding Initiatives	141
5.3 Positive and Negative Effects of Labelling	143
5.4 Increasing Need for Parental Involvement	145
5.5 Curriculum Reform	147
5.6 Early Intervention and Prevention	149
5.7 The Need for Action Toward School <sup>Plus</sup>	150
5.8 Assessment and the Need for Collaboration	152
5.9 An Ideal School Environment	155
REFERENCES	157

## LIST OF TABLES

Table 2.1	Terms Used During the Period of 1900-1930 to Describe Individuals with an Intellectual Disability	52
Table 3.1	Terms Used During the Period of 1930–1960 to Describe Individuals with an Intellectual Disability	70
Table 4.1	Terms Used During the Period of 1960–2002 to Describe Individuals with an Intellectual Disability	134

## CHAPTER 1

### DISCOVERING INTELLECTUAL DISABILITY

#### 1.1 A Consideration of History

An IQ test can be given in an hour or two to a child, and from this infinitesimally small sample of his output, deeply important predictions follow – about schoolwork, occupation, income, satisfaction with life, and even life expectancy. The predictions are not perfect, for other factors always enter in, but no other single factor matters as much in as many spheres of life. (Richard Herrnstein, as quoted in Block & Dworkin, 1976, p. 118)

The constructs of intelligence and intelligence testing have had major repercussions for the treatment, educational placement, and curriculum for students identified with an intellectual disability. The attempt in history by some professionals to relegate the entire worth of an individual to one score on an intelligence test will be examined throughout history for how it led to significant decisions and changes for individuals identified with an intellectual disability. The present thesis is concerned with a history of the assessment of persons identified with mild intellectual disabilities and with how the assessment process subsequently affected the educational practices and curriculum developed for students. An historical analysis in this area will do much to reveal how assessment can affect educational practices. A main posit of the thesis will be that intelligence testing was the main and often sole criterion for establishing educational practices and curriculum for students identified with mild intellectual

disabilities. The thesis topic was devised mainly from the author's experience working with individuals with intellectual disabilities. As the author began work on her master's degree in Educational Psychology, her interests in persons with intellectual disabilities began to include an interest in their education and how they are taught. It became readily apparent that a thorough understanding of this area would necessarily include a study of the historical processes that had moulded the present educational system. The author's personal bias is that a complete understanding of the current state of affairs in special education cannot be accomplished without an interpretive knowledge of a history of the placement process.

Within history, the identification of those individuals with mild intellectual disabilities had been conducted by referring to physical stigmata apparent in the individual (Gould, 1996). However, those individuals who were mildly intellectually disabled rarely had such physical stigmata and went unnoticed within society until the use of the intelligence test came into favour (Gould, 1996). It was through the work of Alfred Binet and Theodore Simon in France, beginning in 1904, that the intelligence test was recognized for its applicability in determining students unable to benefit from instruction within the regular curriculum (Binet & Simon, 1973). Binet and Simon developed the first intelligence test to determine those students in need of special education. While Binet and Simon used the intelligence test to aid students identified with an intellectual disability, others used them to segregate and negatively label these individuals.

Over the course of the past century, the assessment process has had an immense impact upon educational services provided for individuals with an intellectual disability. The area encompassing mental testing and intelligence tests has a large body of research

devoted to its historical analysis and its effects on individuals identified with an intellectual disability (Block & Dworkin, 1976; Gould, 1981; Vitello & Soskin, 1985).

In an article by Wilson (1992), the following is introduced as a stance on the use of intelligence tests for working with students with intellectual disabilities:

This [intelligence testing], along with a measurement indicating significantly impaired adaptive behavior, may be enough documentation to prove that a child qualifies for special education, but it would be of little help in deciding what type of intervention would be most beneficial (p. 82).

Unfortunately, this sentiment was not often apparent in professional thought during the 1910s. The history and role of assessment of the intellectually disabled is one grounded in the political and societal cultures of the time (Gould, 1981; Griffin, Laycock, & Line, 1940; Scheerenberger, 1987; Terman, 1923). The common assumptions regarding people with intellectual disabilities greatly affected how the intellectually disabled were assessed. The assessment of intellectual disabilities carried strong implications for the education of students with intellectual disabilities because it was through the testing and assessment processes that placement and curriculum for the intellectually disabled were provided (Smith & Hilton, 1994; Terman, 1923; Ysseldyke & Algozzine, 1982). A knowledge of the history of assessment will lead to an understanding of how the intellectually disabled have been treated by society and also of the special education process. Early conceptions of intellectual disability considered them to be feebleminded and a number of variations on intellectual disability were evident throughout history. The inception of the construct of intelligence and intelligence testing, beginning in the early 1900s, became the avenue for diagnosis of intellectual disability. In many ways, the concept of intelligence has instigated both positive and negative attitudes in the education of those identified as intellectually disabled.

Political and scientific factors during this time, from the 1900s to approximately the 1940s, had a large impact upon the treatment of individuals with an intellectual disability and the use of intelligence tests. One such factor, the hereditarian view, encompassed the belief that intelligence was inherited and passed from generation to generation in the same fashion as a person's genetic makeup (consider physical height, for example)(Gould, 1996). An area that increased the validity of the hereditarian argument was Charles Spearman's work on general intelligence (Gould, 1996), beginning in 1904. Spearman's work led to the belief that all aspects of a person's mental capacity could be encompassed within a general factor of intelligence, which he termed *g*. With the concept of *g*, scientists believed they had the proof they required to determine that intelligence was an innate characteristic capable of being measured by means of the intelligence test. The eugenics philosophy was based upon these hereditarian beliefs of intelligence. Henry H. Goddard used the intelligence test to detect those he considered *morons*, those individuals he believed to be mildly intellectually disabled (Goddard, 1916). Through his widespread intelligence testing, Goddard espoused the eugenics practices of sterilization and segregation of the intellectually disabled, based upon the idea that they would spread their innate mental defects if not properly cared for.

As a result of segregation, individuals considered intellectually disabled were institutionalized (Dickinson, 1989). During the first part of the 20<sup>th</sup> century, education for this population was largely nonexistent. In the era of institutionalization, education of individuals identified with intellectual disabilities was not an issue. Custodial care was central, and the area of academics was largely regarded as a waste of time for those identified as intellectually disabled (Dickinson, 1989). The principles of eugenics (such

as protection of the public from persons identified with an intellectual disability) and sterilization (so that individuals with an intellectual disability could not pass on their *innate feeble-mindedness* to the next generation) were predominant (Gould, 1981).

Education began to change and progress when the deinstitutionalization of the intellectually disabled (Sarason & Doris, 1979) began in the early 1960s.

Even as those identified as intellectually disabled began to leave the institutions, their education was not high on the agenda. Compulsory attendance laws mandated that students with an intellectual disability attend school, the first attendance laws being enacted in Ontario in 1871 (Tomkins, 1986). The education of students with intellectual disabilities was concerned mainly with training them to be contributing citizens and with curbing what was believed to be their natural tendencies toward criminality (Tomkins, 1986). Education and curriculum were largely based on a mental hygiene model, which dominated educational thought from 1920-1940, in which society and the regular stream of students were seen to require intervention to protect their mental health (Tomkins, 1986). As education and its policies began to change with the emergence of compulsory attendance laws, the curriculum of the education system for individuals with intellectual disabilities began to change as well (Tomkins, 1986). With the increased realization of the diversified needs of all students, it became apparent that current curricula were not adequate or effective. The curriculum was seen to be too rigid, and there needed to be considerations for students' individual differences when teaching students with intellectual disabilities. Considerations of these differences led to curriculum differentiation, seen in programs such as the tracking system of Terman conducted in the United States during the 1920s (Terman, 1923). Samuel Laycock was influential in

Canada and Saskatchewan in the area of special education, developing the first special education class in Saskatoon in 1929 (Cherneskey, 1978).

The philosophies of the eugenics and mental hygiene eras began to lose favour and were replaced by a more positive regard for students with intellectual disabilities, in which their educational capacities were considered. A number of legal cases were brought to the courts in which the rights of individuals with an intellectual disability to an equal education with their nondisabled peers were argued. Shifting philosophies towards integration and legal cases led to the integration movement in the 1970s. Changes to education policies were enacted in the United States in the form of the *Education for all handicapped children act* of 1975 and the comparable act in Canada in 1980, *The education amendment act*. A number of factors, such as the laws and policies of educating all students with an intellectual disability and the responsibility of the schools to incorporate these children into the school system, then came into play, with the emergence of the idea of inclusion in the 1990s (Winzer, 1996).

The concept of inclusion in education brought new factors into play regarding education of the intellectually disabled. Inclusion principles and an inclusive school have different connotations, and the struggle for Saskatchewan Education to incorporate inclusion to create an inclusive school has also resulted in many changes which will be discussed. While in some instances the American model provided the impetus for change within Canada, in many ways Canada engendered change on its own terms. More specifically, each individual province was responsible for how education for the intellectually disabled was structured (Winzer, 1996). As each province generated its policies and practices for assessment and education for students with intellectual disabilities, differing approaches became apparent. From custodial care to



deinstitutionalization and then to the principle of inclusion within the schools, those identified as intellectually disabled have endured results of the political and social implications of the time (Dickinson, 1989; Sarason & Doris, 1979). The need for change and for special education practices was widespread throughout North America.

Historically, those students identified as mildly intellectually disabled have formed a large area of interest within research and modifications to the definition of intellectual disability have succeeded in changing how these individuals are classified and placed in educational programs. For instance, the definition of mental retardation went through significant changes from 1950-1990, making for differences in how to assess those with an intellectual disability and what level of IQ was required to be considered mentally retarded (Beirne-Smith, Ittenbach, & Patton, 1998). Other changes have also occurred that have affected the placement of those identified with an intellectual disability. For instance, with the advent of *learning disability* as a category there has been a shift in interest away from intellectual disabilities, and the area of learning disabilities has seen an enormous growth in research interest (Winzer, 1996). According to Winzer (1996), many students who before were identified as mildly intellectually disabled are now classified as learning disabled. The term learning disability is seen to be more socially desirable and less stigmatizing for the student. As well, Winzer goes on to reveal that students identified with a mild intellectual disability tend to have greater disabilities than those identified in previous years.

These labelling processes within the education system encompass trends and dramatic changes in the education of students with mild intellectual disabilities. Changes within modern history and legal and social impetus have set the stage for changes within the schools and the education system. As these changes have occurred,

there has been a shift in the way in which individuals with an intellectual disability are educated. During the 1970s specific curriculum recommendations were produced by Saskatchewan Education, such as the *Teacher guide for division III educable mentally handicapped students* (1978). As integration and inclusion principles progressed, other documents were produced to include functional curricula, community involvement of individuals with an intellectual disability, and full inclusion within the regular classroom. *The adaptive dimension in core curriculum* (1992) is one example of documents which determine appropriate methods to educate students with an intellectual disability. New documents, such as *Children's services policy framework* (2000) continue to make changes. The principles of inclusion are further engendering change in education, and ways to enhance the capacities of the school to educate individuals with intellectual disabilities can be seen in documents by Saskatchewan Education, such as *School<sup>Plus</sup>: A vision for children and youth* (2001).

## 1.2 A Perspective on the Future

### 1.2.1 The Need to Look Forward

Changes to how those with intellectual disabilities are defined and assessed (Feuerstein, Rand, & Rynders, 1988; Fuchs & Fuchs, 2000; Mercer, 1989) have resulted in many changes to how these individuals must be educated and where they fit in the education system (both in Canada and Saskatchewan). Saskatchewan Education responded with new developments and new policies and practices for students with intellectual disabilities. The impact of these changes and how they should be acted upon are discussed in the final chapter of the thesis. Questions of placement and assessment and the funding for these students are important for future directions in the field of

special education. Also, as Saskatchewan Education has been attempting to redefine, or refine, the purpose and role of education, these considerations have not gone unnoticed for their repercussions on special education. The direction that the future needs to take will be discussed.

### 1.2.2 Questions to Guide the Study

In order to understand and analyze the history of the education for students with mild intellectual disabilities in Saskatchewan, it will be useful to consider some questions to be posed to guide an understanding of the historical progress:

1. The history of intelligence and IQ has had several implications for the education of individuals with intellectual disabilities. While many of these implications have been negative, it remains to be seen if the concept of intelligence and IQ testing can continue to have a place in the education of individuals with an intellectual disability. Is intelligence and IQ testing necessary in order to provide for an appropriate education of individuals with an intellectual disability?

2. Curriculum for individuals identified with an intellectual disability has seen a number of changes. Custodial care, and its inherent lack of an educative aspect, made way for an emphasis on the responsibility for the education of those with an intellectual disability. As a result, individual differences were considered and curriculum differentiation was necessary. In today's culture and education system, does the current curricular content best serve individuals with an intellectual disability?

3. Education has changed drastically for individuals with an intellectual disability, with a major shift in the education system occurring with the passing of compulsory attendance laws. The attempts of the education system to adjust to these

changes and incorporate individuals with an intellectual disability have seen many progressions from the beginning of the 20<sup>th</sup> century to the 21<sup>st</sup> century. How can education and its roles, with its present limitations in resources, improve to best accommodate individuals with an intellectual disability?

### 1.3 The Path to Understanding

#### 1.3.1 Historiography

Historiography is the research method chosen for this thesis. Historiography is “the theory and practice of historical enquiry and writing” (McCulloch & Richardson, 2000, p. 130), further,

[H]istory is far more than an assembly of facts. It is the writer’s interpretation of facts that raises questions, provokes curiosity, and makes us ask the question *who, what, where, when, and why*. The writer’s interpretation adds up to what we call a “thesis”, a point of view that binds everything in an essay together (Marius, 1999, p. 13).

The assessment process, including its effects on development of education and curriculum for persons identified with intellectual disabilities, has a history of its own. This history provides evidence for how the assessment process has changed over time and has arrived at the current practices in the school systems today. The emphasis of historiography on understanding the process of history and the intricate relationship between society and historical progression is the reason why historiography is so important to this thesis. The method of historiography is unique and led to its use within the thesis. To better understand this choice for method of inquiry, the following quote from Tosh (1991) is useful: “History is collective memory, the storehouse of experience through which people develop a sense of their social identity and their future prospects.” (p. 1). This reflective and interpretive quality was of paramount importance in the

author's deciding upon a method of inquiry. True to the qualitative method format, historiography and historical research have narrative forms. Historical narrative and the historical researcher's goal is further seen in Tosh's (1991) work when he refers to the work of another author, "her obligation to the people of the past as being 'to restore their immediacy of experience'" (p. 113). When a history of the assessment process and how it affects the education and curriculum for persons identified with intellectual disabilities is employed, the experience for those who encountered the difficulties of the time can be regained and understood from a current perspective. As a result, reflections on the past and suggestions for future improvement and progress are possible. This *improvement and progress* upon history is the main goal of this thesis. History is important because it serves as a reminder of where we came from, the strengths we can build upon, as well as the weaknesses we now have to overcome and should avoid in the future.

The history of education is especially important within this thesis, as the practices within the education system and assessment within this context are the cornerstones for this research. McCulloch and Richardson (2000) clearly state these perspectives when they discuss "the impact of education upon society being stressed in place of the traditional concern of educationists with the impact of society on education." (p. 42). Education and its practices do have a large impact upon society, and this is extremely evident within an historical analysis. While history does, and continues to, shape the education system, it is important to critique the reverse interaction. This thesis intends to incorporate this reciprocal dichotomy into its analysis so that the impact of education on society and the students can be discussed. This reciprocal dichotomy is apparent in how history has impacted education, but also in how education has impacted upon the history of individuals who have been identified as intellectually disabled.

### 1.3.2 Sources of Data

The primary source is important to an historical study and consists of original works by authors. Primary sources are important because they provide an understanding of the perspectives of the time and the biases inherent in them. The secondary source is important as it provides an interpretation of the historical events. Secondary sources incorporate original, primary, sources and use the information to inform their argument. Of course, it is necessary to be cognizant of the assumptions of the society at the time the secondary source was written. As a result, both sources will be integral to gain an understanding of the thesis topic. The thesis will encompass a study of assessment practices and education and curriculum for students identified with an intellectual disability from the years 1900-2002.

The primary sources utilized within the thesis will include the early works of some authors mentioned earlier in the thesis. These works will include, but not be limited to: Alfred Binet and Theodore Simon and their work on intelligence tests, Henry H. Goddard and eugenics, Lewis Terman and tracking, and Samuel Laycock and special education in Canada. The work of the Canadian National Committee for Mental Hygiene and some of its members, such as Peter Sandiford, will be detailed for information on the eugenics and mental hygiene movements. While these works were not intended directly as a consideration of assessment and its effects upon education and curriculum for these students, they will be interpreted for their significance within this context. These interpretations are necessary due to the fact that these primary sources provide information about how intelligence tests were used for placement purposes, as well as how the placement decisions related to education and curriculum for students identified with an intellectual disability.

Secondary sources used within the thesis include a significant amount of attention in reference to Stephen. J. Gould's work *The mismeasure of man* (1981, 1996) and its information on the beginnings of intelligence testing and the hereditarian views that permeated the construct of intelligence. Harley Dickinson's (1989) work will also be important to understanding the history of custodial care and deinstitutionalization for individuals identified with an intellectual disability. Other secondary sources will be reviewed for their relevance in regards to assessment practices with individuals identified with an intellectual disability, as well as the education and curriculum of these students.

An overview of educational policies for students identified with an intellectual disability in Saskatchewan will be conducted to gain an understanding of how education and curriculum for students identified with an intellectual disability has changed over the years. This will include a review of the policies and practices produced by Saskatchewan Education, from the period of the 1970s to 2002, for information on assessment practices, educational practices, and curriculum for students identified with an intellectual disability. A review of these documents will include, but not be limited to, the following: *Meeting challenging needs - A handbook for teachers of students having intensive educational needs* (1989), *Directions for diversity: Enhancing supports to children and youth with diverse needs* (2000), *Creating opportunities for students with intellectual or multiple disabilities* (2001), and *School<sup>Plus</sup>: A vision for children and youth* (2001). The thesis will analyze these materials and study changes in the direction of policy.

#### 1.4 Limitations of the Study

Throughout this thesis, mild intellectual disability will be the focus of research. Unless otherwise specified, when the term intellectual disability is used throughout the paper, the reference is to mild intellectual disability. Within the literature that has been considered thus far, the issue is how assessment was historically practiced and how it affected education and curriculum for students identified with an intellectual disability. In consideration of this issue and the problems inherent in what has been discussed so far, it is proposed that the current study will be conducted in four stages. First, an analysis of assessment and of the prevailing definition of intellectual disability during the period of 1900-1930 will be conducted. The impact of assessment and definitional issues upon education and curriculum for individuals with mild intellectual disabilities will be explored. Secondly, assessment and definitions of intellectual disability for the period of 1930–1960, and the impact resultant on education and curriculum, will be analyzed. Thirdly, the period of 1960–2002 will be discussed, including assessment, definitional issues, and the impact on education and curriculum. Finally, implications of the research for future assessment practices and curriculum for students with mild intellectual disabilities will be discussed, as well as areas for future research.

As the thesis progresses, a specific Saskatchewan perspective will be introduced. How assessment within the province has affected education and curriculum will provide a basis for the interpretation of current practices and how the system can change more effectively to provide for students identified with mild intellectual disabilities. The analysis of Saskatchewan policies and practices will contribute to the argument that assessment and resultant placement is not the best way to serve this student population. The thesis will illuminate how the educational system in Saskatchewan arrived at its



present state. Through this historiographical analysis, the real contribution of the thesis will be to ensure that the understandings gained from the thesis are used to promote increased quality of education for the future.

When considering the historical analysis of the thesis, it is important to keep in mind a few assumptions that mediate the analysis. First, the study is an historical analysis, and as such no data collection or resultant analysis is involved. Secondly, the thesis will be limited to considerations of mild intellectual disabilities and special education in Saskatchewan. However, before a definite assessment process was established with designating mild, moderate, and severe distinctions of intellectual disability, differentiating the levels of intellectual disabilities was not practiced. Indeed, students identified with intellectual disabilities were considered as a whole, with no differentiations made. For the analysis of the history where no such distinctions were made, this paper will discuss those students who were marginalized, because of their delayed capacity in learning from the school environment and/or from the community at large. Thirdly, a large part of the initial analysis will concentrate on changes in the United States and Canada, as these changes created the impetus for changes implemented within Saskatchewan. A limitation of the study is that it is a consideration of the history of assessment and its implications, as well as the policies relevant to the education of students identified with a mild intellectual disability. It is not a study of the actual practices within education; these considerations are reserved for future research.

### 1.5 Significance of the Study

The thesis is a consideration of a history of the education of individuals with an intellectual disability, how their education and curriculum was affected by assessment

practices. One of the implications of this historical analysis will be to understand how society and practices for individuals with an intellectual disability has changed, and the peculiar ways in which it has remained the same. For instance, the work *The bell curve: Intelligence and class structure in American life* (1994) has illustrated the degree to which the constructs of intelligence and IQ testing, and their supposed inherited capacities, are still embraced within some areas of professional and popular thought. The significance of the study also lies within the changing role of the school that Saskatchewan Education has come to realize. The ramifications of a changing role of the school is significant for how individuals with intellectual disabilities will be treated and served within public education

The philosophy of inclusion within the education system has continued to grow since it entered the education scene in the 1990s. While Saskatchewan Education has worked to weave the inclusive philosophy into its practice, the degree to which inclusion is sanctioned by the public is still debateable. Those who support inclusion assert that the elimination of special services for those identified as intellectually disabled would negate the need for considerations of the least restrictive environment and continuum of services (Beirne-Smith et al., 1998). Proponents of inclusion also relate that special education services have proven ineffective in meeting the needs of students with an intellectual disability, as well as the fact that “methods used to classify students are questionable, arbitrary, and discriminatory” (Beirne-Smith et al., 1998, p. 324). However, there are those who oppose inclusion and suggest that eliminating special education services, which were so difficult to obtain, may be dangerous, due to the uncertainty of the success of full inclusion. Those against full inclusion say that students, parents, and teachers are largely satisfied with the system of special education

as it is, and charge that the resources to sustain full inclusion do not exist in regular education (Beirne-Smith et al., 1998). While the principles of inclusion are considered to be in the best interest of the student, and widely accepted, the veracity of these claims is not enforced by all individuals with interests in special education.

The next chapter will consider the hereditarian view of intelligence and the origins of the intelligence test. The degree to which IQ testing affected those suspected of an intellectual disability will be discussed, and the progression and infiltration of the IQ test into the schools and the education system will also be interpreted. The segregation and institutionalization of individuals identified with an intellectual disability will be traced. As compulsory attendance laws and individual differences began to affect the education system, the further entrenchment of the IQ test into the schools will be analyzed.

## CHAPTER 2

### FEEBLEMINDED: ASSESSMENT PRACTICES AND IMPLICATIONS FOR CURRICULUM (1900-1930)

#### 2.1 The Construct of Intelligence versus the Measurement of Intelligence

The advent of intelligence testing was the work of Alfred Binet, the director of psychology at the Sorbonne (Universite de Paris). In 1904, Binet worked with Theodore Simon, an intern at a colony for retarded children, and was asked by the minister of public education in France to develop techniques to identify children unable to progress in the normal classroom and in need of special education (Binet & Simon, 1973). Binet saw the need to separate the intellectually disabled from normal children so that the intellectually disabled could receive the special education they required (Cleland, 1991). The intelligence measure was to ensure that “no child suspected of retardation should be eliminated from the ordinary school and admitted into a special class” without a means to identify that the student could not benefit from regular education (Binet & Simon, 1973, p. 9). Gould (1981) detailed how Binet’s early purpose for intelligence testing was to determine which students required special education. Only later did the purpose of intelligence testing change to the concept that children’s educational opportunities would become limited because they were classified as disabled (Gould, 1981). Binet’s work with individuals with intellectual disabilities was based on helping them to learn to learn, before attempting to teach them what was deemed useful (Cleland, 1991).

Gould (1981) explained how Binet developed a long series of short tasks aimed at measuring the individual's general potential. Based upon this work Binet developed a scale to measure *mental age*. Children whose mental ages were sufficiently behind their chronological ages were identified for special education. In attempts to diagnose those individuals who were retarded, Binet was concerned only with the individual's present mental state and natural intelligence. He was not concerned with determining whether an intellectual disability was acquired or congenital nor with making any decisions about the future, such as if the disability was curable (Binet & Simon, 1973). Binet was not intent on defining intelligence, having given up on such a project, and was instead interested in determining *normal* from *backward* children. In order to do so, he decided to consider "normal" those abilities that were common to 65–75% of children of a particular age, as measured by his testing (Block & Dworkin, 1976). Through this arbitrary definition he considered at least 25% of children as backward. Binet, showing some prophetic sense, was aware that his method could be used to label children instead of to identify children who needed help. The original work of Binet was initiated with the warning that "Intelligence . . . is too complex to capture with a single number. This number, later called IQ, is only a rough, empirical guide constructed for a limited, practical purpose" (Gould, 1981, p. 151). This demarcation of intelligence as a construct, versus the measurement of intelligence through IQ testing, marks the beginning of controversy over how to define intelligence and whether it can be reliably and validly measured. Binet did not want sole emphasis placed on the measurement of intelligence. He developed his measures to serve as a guide for identifying children who needed help and not as a permanent marker of one's ability. Binet was aware of the ambiguity that could accompany the measurement of intelligence, and stated that "a

peasant, normal in ordinary surroundings of the fields, may be considered a moron in the city” (Binet & Simon, 1973, p. 266).

The invention of the intelligence test served to dramatically increase the statistical prevalence of feeble-mindedness (Vitello & Soskin, 1985). Before intelligence testing, those who were feeble-minded went undetected, due to the fact that they possessed no physical stigmata to identify themselves as intellectually disabled. Those individuals suspected of mild intellectual disabilities were tested, and with the results a great number of individuals were identified as intellectually disabled. Especially due to the high upper limits many conducting intelligence tests placed upon mild intellectual disabilities (the label of mild intellectual disability was often allocated to those individuals with an IQ as high as 85), there were many people who, after intelligence testing, carried the stigma of being labelled intellectually disabled, or feeble-minded. The classification of many individuals as feeble-minded was challenged since those individuals clearly were capable of functioning independently in the community. The only basis for labelling them feeble-minded was their scores on an intelligence test, through the assessment process.

The assessment of intellectual disability is largely connected to the definition of the construct of intelligence, especially due to hereditarian theories of intelligence which were prevalent at the time. The hereditarian theory of intelligence, which will be discussed at length shortly, consisted of the debateable theory that intelligence was an inborn trait within an individual that was carried on through genetic transmission from parents to child. Intelligence as it was beginning to be understood was shaped by the work of Charles Spearman (Gould, 1981), Professor of Psychology in Britain at the University College, London. Spearman was the pioneer of factor analysis, a

mathematical technique for reducing complex systems of correlations into fewer dimensions, work which he began working on as early as 1904. Spearman's work centred on the idea of intelligence encompassed by *g*, a general intelligence, which was determined through factor analysis. With the concept of *g*, it was proposed that all common attributes of intelligence would reduce to a single underlying entity (Gould, 1981). As Gould goes on to point out, the use of *g* promoted the idea that a true *general intelligence* could be measured for each person and might afford an unambiguous criterion for marking in terms of mental worth. Testing was now possible since intelligence could be accounted for by one general factor that was intelligence. The concept of *g*, as measured by intelligence tests, accounted for all the abilities a person may have (Gould, 1981). Intelligence was now understood to be the overall entity that encompassed a person. With the advent of general intelligence, or *g*, the practice of factor analysis began to be used to further analyze and test intelligence. Factor analysis made the measurement of intelligence into a *science*, with Spearman believing "he had found the innate essence of intelligence" (Gould, 1981, p. 261). While factor analysis and the concept of a general intelligence were breakthroughs at the time, it brought with it a danger of relegating a person's worth to their score on an intelligence test. General intelligence conceived of as a single, measurable *thing* (Gould, 1981) provided the theoretical justification for hereditarian theories of IQ. The concept of *g* was believed to measure some physical property of the brain, and thus justified the hereditarian view that intelligence was inherited.

The concept of a *g* in intelligence is still considered in current practice and continues to produce a great deal of research. The link of the *g* factor to intelligence and its' legitimization, in some professional minds, of wide-scale IQ testing led to the great

debate around Spearman's work. The ramifications on the nature (genetics) versus nurture (environment) debate are still present today. The development of IQ testing, and other ways to understand cognition as a problem-solving ability, have concentrated on a theoretical model and concept of intelligence (Lautrey, 2002). These differing theories of IQ have led to subjecting a number of measures of intelligence or cognition to factor analysis. Factor analysis comparing psychometric measures of intelligence (such as that of Binet's intelligence testing) and Piagetian tests of cognition have been conducted. Piagetian tests were developed not to measure individual differences, but to determine different stages of cognitive development (Lautrey, 2002). When conducting factor analyses between these two types of measures, it was found that there were differing results on general and primary factors of intelligence. In some cases, the variance between measures suggested a general aspect to intelligence, whereas in other instances, there was evidence that the two ways to measure intelligence indicated intelligence as measured by Piagetian techniques was distinct from a psychometric measure of intelligence (IQ test).

Other research conducted on the veracity of *g* states that there are certain ways in which to demonstrate the general nature of intelligence (Berg & Klaczynski, 2002). For instance, Berg and Klaczynski (2002) state that the generality of intelligence would be demonstrated if individuals with high intelligence (as measured by traditional intelligence assessments) showed consistently high performance across tasks believed to tap aspects of intelligence. As well, consistency of intelligence across developmental ages and cultural contexts would provide evidence that intelligence is general in construct. However, the authors cite literature that shows great variability in the expression and meaning of intelligence in response to context (Berg & Klaczynski,



2002). Such studies measure intelligence in everyday situations of a person's life that is comparable to the cognitive operations on an IQ test. The results of these studies found that for those intellectual tasks couched in everyday life, subjects performed well, but performed poorly on standardized intelligence tests. There are context-specificities of intelligence inherent in how people demonstrate their intellectual abilities, which suggests there is little evidence for intelligence that is general and similar across contexts (Berg & Klaczynski, 2002). Intelligence is not viewed as general across context and culture. Within everyday lives, intelligence can be defined as "the degree to which the individual corresponds to his or her culture's prototype of an exceptionally intelligent person" (Berg & Klaczynski, 2002).

Within these parameters, an IQ test is not accurately a measure of intelligence, since intelligence as it manifests itself varies greatly depending on individuality and circumstances. This is a problem when using an IQ test to measure intelligence, where a more practical and realistic use of the IQ test may be as a measurement of the degree of success an individual may be expected to experience in the school environment. The question of *g* in intelligence would have less bearing on a discussion of special education if special education placement and classification of students were not the result of IQ testing alone, and when curriculum and placement is not based on a funding scheme reliant on classification and diagnosis, as is still often the case in current education systems.

Louis L. Thurstone, working in the 1930s, denied the *g* concept in favour of a theory of several primary mental abilities (PMA) (Gould, 1981). Thurstone, a professor of psychology at the University of Chicago, worked towards dispelling the notion of general intelligence. Using Thurstone's method, each individual could not be measured

and ranked by *g*, but rather had their own individuality and strengths and weaknesses. However, Thurstone still believed in ranking based upon these differences, and did not go against hereditarian views of the time (Gould, 1981).

The contentious issues of hereditarian views and the construct of intelligence were debated at the turn of the 20<sup>th</sup> century largely due to the entrance of the intelligence test on the popular scene. Researchers and practitioners of modern day still debate the hereditarian view of intelligence. One well popularized example of this continuing debate is a work by Richard Herrnstein and Charles Murray entitled *The bell curve: Intelligence and class structure in American life* (1994). This modern work will be discussed here as it serves to parallel early conceptions of intelligence, and highlights the continued work being done in the area. Herrnstein and Murray contend that there is an emergence of cognitive elite within present American society which is apparent in statistics, such as the trend to cognitive elite within university graduates (Herrnstein & Murray, 1994). The authors cite evidence that within the 1930s graduates from university were well within the ordinary range of ability and did not differ much in IQ from those who did not graduate from university. Conversely, there is a trend within the 1990s for those graduating from university to be within the higher ranges of intelligence and those at the bottom of the educational scale comprise lower and narrower ranges of IQ than they did in the 1930s. Herrnstein and Murray (1994) report that low intelligence is the best predictor of school failure, those who drop out of school are highly self-selected for low IQ.

When considering education and the educability of those individuals with low IQs, the authors contend “critics of American education must come to terms with the reality that *in a universal education system, many students will not reach the level of*

*education that most people view as basic*” (Herrnstein & Murray, 1994, p. 436). Above all, the work by Herrnstein and Murray goes toward intimating that intelligence is the demarcation of cognitive elite from the lower classes, that a cognitive elite is synonymous with high IQ, and high IQ is predictive of success beyond such other markers as social background or ethnicity.

Not surprisingly, Herrnstein and Murray’s book was met with wide media attention and a resultant outcry from professionals who had denounced theories of IQ and its link to social degeneracy. Steven J. Gould (1996) spends a great deal of time criticizing Herrnstein and Murray’s treatment of the intelligence literature. Gould asserts that *The bell curve* (1994) is riddled with a number of errors or misconceptions with the work. Gould details that Herrnstein and Murray’s claim that the measuring of intelligence through the use of IQ and the general factor, or *g*, of intelligence is well documented and areas of non-debate is wholly untrue (Gould, 1996). While Herrnstein and Murray contend that IQ tests are not biased, they only use arguments determining the fact that IQ tests are not statistically biased. They do not deal with the issue of bias in the sense of social or cultural bias, which is of great consequence to the validity of IQ scores and their applicability (Gould, 1996). Arguments pursued by Herrnstein and Murray that social factors (such as crime and unemployment) are affected more by low IQ than by the factor of low parental socioeconomic status (SES) fail to reveal that these factors are poorly explained by IQ or SES. In fact, variation in factors such as crime is only marginally explained by IQ or SES (Gould, 1996). Herrnstein and Murray support a genetic theory of intelligence: that average differences in intelligence between racial groups are real and are largely innate and immutable. Gould (1996) debates Herrnstein and Murray’s argument for reinforcing old beliefs that intelligence, as measured by IQ,

is innate and a person's social rank and achievements are strongly correlated with their IQ scores.

Individuals with experience in the debate on IQ and its history gathered in an edited book by Steven Fraser (1995) to further answer the assertions of Herrnstein and Murray. Howard Gardner, professor of education at Harvard University, denounces Herrnstein and Murray's suggestion that interventions to help individuals with low IQ's should be abandoned. Gardner states that hereditarian theories of intelligence were questionable when first raised a century ago, and have now been replaced by the development of cognitive sciences and neurosciences (Fraser, 1995). Herrnstein and Murray provide evidence that IQ has increased by 15 points around the world during this century, a fact which can not be explained by genes alone. As well, Herrnstein and Murray note that black children adopted in households of high socioeconomic status demonstrate improved performance on aptitude and achievement tests. Despite these acknowledgements, Herrnstein and Murray continue to propose a genetic theory of IQ which relates black ethnicity to low IQ (Fraser, 1995).

Richard Nisbett, professor of psychology at the University of Michigan, reveals that Herrnstein and Murray do not explore the evidence that early intervention that continues into the school years results in sustained IQ gains. Herrnstein and Murray discuss intervention programs to raise IQ, and accept conclusions by experts that vigorous intervention programs can produce IQ gains of around seven points by the time children enter school. However, Herrnstein and Murray see this improvement as unimpressive, due to the finding that IQ gains begin to fade and have mostly disappeared several years after the programs are completed. The benefits of early intervention are lost over time and any IQ gains are lost and IQ deficits continue, despite the earlier

intervention. However, Nisbett reveals that continued intervention into early school years results in intellectual gains that are largely sustained (Fraser, 1995). Dante Ramos, reporter-researcher at *The New Republic*, suggests that Herrnstein and Murray's call for the discontinuance of affirmative action is misplaced. Herrnstein and Murray discuss studies which state there are proportionally far more blacks than whites in high-IQ occupations like law and medicine when blacks' relatively lower IQs are taken into account. Herrnstein and Murray cite this as an argument against affirmative action, but Ramos states that "another reasonable possibility is that IQ tests underestimate some individuals' – in this case, many blacks' – cognitive ability" (Fraser, 1995, p. 64).

Thomas Sowell, a senior fellow at the Hoover Institute at Stanford University, argues for Herrnstein and Murray, stating that the predictive validity and social implications of intelligence test results are carefully explored in their book. Also, Sowell states that Herrnstein and Murray were being comprehensive when considering inter-group differences in IQ. Sowell debates that Herrnstein and Murray provide both sides of the argument and reach the conclusions that seem most consistent with the facts. However, while Herrnstein and Murray discuss the rising of IQ scores, they fail to discuss how this undermines the case for a genetic explanation of inter-racial IQ differences. Herrnstein and Murray claim that individuals of low IQ are bearing children at an increased rate over those with high IQ, and the national level of intelligence is in danger of lowering due to this differential birth rate (Fraser, 1995). In fact, the opposite trend of an increase in national IQ is evident, as Sowell points out. While Sowell reveals some inconsistencies in Herrnstein and Murray's arguments, he states that the authors are not suggesting some type of intellectual glass ceiling. Sowell

suggests that Herrnstein and Murray's work requires critical attention, not public smearing or uncritical acceptance.

While the ideas of Herrnstein and Murray are couched within modern times, they parallel views from the beginning of the century that posit a genetic intelligence that manifests itself in social ills for those with low intelligence. Claims such as these remain today, and it is these same claims that date back to Binet's time and set precedents for the use of IQ tests. Herrnstein and Murray's claims in *The bell curve* (1994) are strikingly similar to arguments from the 1920s forwarded by eugenicists, although Herrnstein and Murray claim not to be espousing eugenics views. The statement of Herrnstein and Murray that their views are beyond dispute is reason enough to doubt the authors' claims (Smith, 1995).

## 2.2 Eugenics and the Search for the Moron

Assessment and its practice should be viewed in its connections to the eugenics, or mental hygiene, movement. The eugenics and mental hygiene movements can be viewed as parallel movements that began in the 1910s, but had some divergence in philosophy. The term *eugenics* was coined by Francis Galton in 1883 and proposed the regulation of marriage and family size according to hereditary endowment of parents (Gould, 1981). Galton gave up his career in medicine and spent his time as a gentleman scholar pursuing his interests, his main interest being the heritability of individual differences. Eugenics based its work on the theory that intelligence was heritable and that those with low intelligence were responsible for a number of social ills, such as crime, alcoholism, and prostitution. As a result, eugenics proposed that these social ills could be controlled by sterilizing individuals who were identified as feeble-minded, or by

controlling marriages so that feeble-minded were not able to carry on their *defective* genes. Mental hygiene also had hereditarian beliefs, but as the movement progressed hereditarian values began to soften. Replacing these ideas was the belief that many social ills were a matter of degree, in that individuals within society were seen to have the same mental health problems as those labelled as insane or defective who were in the mental institutions. The difference was that those within society were not mentally ill to the same degree as those in the institution. As eugenics lost favour, mental hygiene was practiced as a way to further the social stability and ensure mental health and morality. Personality problems, such as shyness and temper tantrums, were seen to contribute to poor mental hygiene. Mental hygiene was concerned with the population in general, not just the defectives, although strong links between mental defects and intellectual disability and poverty were suggested. Personality problems were seen as malleable and capable of being remedied. As a result, mental hygiene was committed to preventing mental illness and defect by intervening in the area of mild personality problems. When World War II ended and the eugenics program of the Nazi regime was revealed, eugenics lost favour. Mental hygiene carried on the work of morality and responsible citizenry, while curtailing some of the negative repercussions associated with eugenics.

The eugenics movement carried on and was embodied in the work of Henry H. Goddard. Goddard was appointed the director of research at the Vineland Institute in New Jersey, a training school for the feeble-minded, in 1900. Goddard translated the Binet-Simon tests of intelligence into English for use in America. Gould (1981) explicates how Goddard espoused the necessity of detecting *feeble-minded* people, to identify them and prevent them from breeding. They were characterized by mental defect, but were viewed as able to be trained to function in society. The eugenics

movement espoused the view that just as intelligence was inherited, so was intellectual disability. The hereditarian view of the intellectually disabled was a source of fear for society, and it was believed that the intellectually disabled should be separated from general society so that they could not infect the general public (Gould, 1981). Goddard believed feeble-mindedness obeyed Mendelian rules of inheritance and therefore that individuals who were normal but who had feeble-mindedness in their ancestry should also not be permitted to marry (Goddard, 1916). Goddard thus assumed, as many eugenicists purported, that intelligence could be limited to one single gene.

Goddard worked on tracing the pedigrees of mental defectives in his Vineland School (Goddard, 1916). From his studies at the Vineland School, Goddard (1916) concluded that a “large percentage of paupers, criminals, drunkards, prostitutes, and other ne’er-do-wells are mentally defective” (p. 268). In order to slow the spread of feeble-mindedness, Goddard proposed conducting mental examinations of the pauper, criminal, prostitute, and others suspected of feeble-mindedness so that they could be identified and cared for as feeble-minded. Goddard did include considerations of the environment in his definition of intelligence, in that he proposed intelligence to encompass the degree to which the individual could adapt to the complexities of the environment (Goddard, 1916). Therefore, he supported the idea that feeble-minded individuals did not lack intelligence but rather lacked a particular degree of intelligence, that which would allow them to adapt to a more complex environment.

Goddard concluded that if a single gene caused mental deficiency, it could be eliminated by disallowing people with this gene to bear children (Gould, 1981). His theorizing was the embodiment of the eugenics movement, and formed the basis for policies such as involuntary sterilization as a control for intellectual disabilities. As the



eugenics movement progressed, the practice of involuntary sterilization was introduced to prevent those of lower intellectual ability from producing children. Goddard made a strong case through his work on feeble-mindedness and heritability for prohibiting feeble-minded individuals from mating and producing offspring. Goddard (1916) characterized the feeble-minded individual as “a social encumbrance, often a burden to himself” (p. 258). The policy of sterilization was practiced and often compulsory, resulting in persons with intellectual disabilities undergoing surgery, without their consent, so that they were unable to produce children.

Goddard did not view the education of students identified with an intellectual disability as a priority; if anything, he saw such an education to be a necessary evil. Although he proposed an ideal of permanent segregation, he accepted the necessity for training to occur in the public schools since the institutions were already so overpopulated (and fiscally were creating a burden) and any schooling of the feeble-minded would prevent them from engaging in criminal activity (Sarason & Doris, 1979). Custodial care was promoted to deal with the feeble-minded, but as the number of individuals identified as intellectually disabled was so great, the public schools were seen as a way to offset the burden of intellectual disability (Kliewer & Fitzgerald, 2001).

Goddard’s work centred on the emergent need to identify the *moron* (Goddard, 1916). The difficulty with morons, in his view, was the fact that they went undetected and were not recognizable based on physical stigmata. The fact that morons could go undetected allowed them to become menaces to society. By properly identifying the moron, this population could be properly treated so that they did not become menaces (Goddard, 1916). In fact, Goddard believed society was doing morons an injustice by not treating them and then punishing them for their inherent criminality. Goddard

believed that a registration bureau where the intelligence of each child was recorded would aid in the treatment of morons (Goddard, 1916), and that intelligence tests should be used to determine those people who were morons (Gould, 1981). With the advent of the intelligence test, Goddard in essence produced the moron who had before gone undetected. He believed the schools were important for the purpose of disclosing the moron due to the fact that a registration bureau was not available at the time. The schools could determine the mental capacities of each child in order to best train him or her, and then pass this information on to future employers to help determine the work that each individual was capable of based upon his or her level of intelligence (Goddard, 1916). Mental examinations through the school were designated to be the most effective way to identify the moron and begin his or her appropriate training.

Goddard later softened his view on mental deficiency, and considered the place of students with intellectual disabilities in education (Gould, 1981). Goddard was quoted as having stated, “[W]hen we get an education that is entirely right there will be no morons who cannot manage themselves and their affairs and compete in the struggle for existence.” (Gould, 1981, p. 172). However, the line had already been drawn that students with intellectual disabilities were to be classified by a system of intellectual testing. The numbers generated by this testing were used as the basis for educational placement and programs. Within Canada, the Canadian National Committee on Mental Hygiene (CNCMH) was formed in 1918 to expand custodial facilities for the feebleminded, who the CNCMH believed were spreading *unsound stock* through procreation (Weber, 1994).

Eugenicists’ views were not uncommon and were also popular in Canada. Peter Sandiford, a professor of education at the University of Toronto and a member of

CNCMH, had views based upon biological bases of intelligence, and he stated that “the struggles of parents of puny intellect, even though they ultimately command an honourable position in the world, will not ease the burden for their offspring. Hence the claim of the Eugenicists that improvement of environment alone will not produce a higher and permanently better race receives great support.” (Sandiford, 1913, p. 16). However, Sandiford asserted that in regards to the measurement of intelligence, it did not matter whether hereditarian or environmental theories were adhered to (Sandiford, 1921). Where theoretical bases of intelligence did have consequence were in the possible repercussions either theory had for practices aimed at raising intelligence. Sandiford (1913) criticized the schools for ignoring the importance of heredity to the capacities of children, accusing the schools of a “waste of much valuable time and effort.” (p. 25). In 1924, Sandiford conducted his own intelligence testing of British Columbia school students, finding hereditarian support for intelligence, in that the brightest students were from the professional classes and the slowest students from the unskilled classes (McLaren, 1990). Sandiford unabashedly asserted that education could make one moron better than the next moron with no education, but it could not make him normal (Sandiford, 1938).

Eugenics theories were well-received in the western provinces of Saskatchewan, and eugenics was embraced as containing scientific confirmations of natural inequality. Helen MacMurchy, a doctor who received her medical degree in 1901 from the University of Toronto, was a prominent figure in the Canadian eugenics movement. She held many prominent positions important to the eugenics movement, such as inspector of the feebleminded between 1906 and 1916 and as inspector of auxiliary classes in 1914 (McLaren, 1990). MacMurchy proposed school medical inspection as necessary,

especially to separate normal from abnormal pupils. Medical examinations and mental testing were employed to label and segregate the intellectually disabled, not to provide for their special needs. MacMurchy asserted that 80% of feeble-minded could be eliminated within one generation through segregation and sterilization programs. Canadian eugenicists were concerned, as were American eugenicists, with the influx of immigrants of *poor stock*. Immigrants were believed to have subnormal intelligence, although intellectual capacity was often measured as an indication of appropriate cultural behaviour that was based on professional class Canadian standards.

Eugenicists were pleased with the establishment of the Department of Health in Canada in 1919, whose mandate was to suppress dangers to population efficiency, such as the threat of feeble-mindedness (McLaren, 1990). Increasing numbers of feeble-mindedness that resulted from IQ testing caused alarm and the medicalization of schools was seen as an answer. IQ testing was practiced on a large scale to determine *causes* of feeble-mindedness and develop *cures* for the problem. The medicalization of the British Columbia school system began in 1907, with school medical inspection instituted throughout Vancouver. Increased efforts to curtail the genetic spread of feeble-mindedness resulted in the disturbing, by today's standards, passing of legislation enacting a *Sexual sterilization act* in Alberta in 1927 (McLaren, 1990). British Columbia enacted its own sterilization legislation in 1933. The creation in 1930 of the Eugenics Society of Canada solidified the belief that biology was the most important cause of the nation's social problems. MacMurchy lamented the fact that physical stigmata could not be used to determine feeble-mindedness, but that social failure was the clearest indication of mental deficiency. Madge Macklin, who taught in the department of histology and embryology at the University of Western Ontario from 1921-1945, was

also a eugenics defender. She proposed that when considering defectives, the level of intelligence within the schools was dropping due to the increased number of defectives in the schools (McLaren, 1990). Macklin believed that the efforts of the school should be spent on the brightest students, and the parents of incompetents who wanted their children to receive an education should have to bear the costs of their education.

### 2.3 Custodial Care and the Protection of Society

The eugenics philosophy was successful in garnering support from the public and promoting the placement of those considered defective into custodial care. The institutions and psychiatric hospitals for the mentally ill comprised custodial care (Dickinson, 1989). This point in time, including early 20<sup>th</sup> century up to the 1960s, encompassed the era of institutionalization. Initially it was common practice to segregate those identified as intellectually disabled from the rest of society. In doing so, no differentiation was made between intellectual disability and mental illness. Categories of affliction were lumped together and all designated to belong to this crude category were put into custodial care in large groups not unlike the warehousing of individuals. Clients in these institutions and hospitals were grouped under the umbrella term of feeble-minded (Dickinson, 1989). The treatment policies of the hospitals were the training and supervision of the feeble-minded, with particular attention given to guarding the mental health of society at large, as well as that of school children. The beliefs and concerns of the Eugenicists were at the forefront at this time. They argue that placing individuals with intellectual disabilities in institutions served to protect the public from *infection* and to rid society of the feeble-minded (Dickinson, 1989). As can be deduced, the education of the intellectually disabled was not a priority, and very

likely was not considered a viable or useful option. But with the passing of time, psychiatry and its control over the intellectually disabled began to undergo changes, causing changes beginning in the 1940s (Dickinson, 1989). The most influential transformation of psychiatry was provoked by the large fiscal burden that psychiatric hospitals were placing on the government. In an attempt to offset this burden, the hospitals attempted to secure federal cost-sharing agreements, with Saskatchewan becoming the first province to implement free psychiatric services.

Dickinson (1989) explained how the psychiatric hospitals were grossly overcrowded, which resulted in the increase of specialization in the hospitals. As a result, mentally ill began to be separated from mental defectives and epileptics. Those classified as mental defectives were the individuals who were viewed as having low intelligence, which separated them from the mentally ill who largely were seen to be cognitively intact. Mental clinics were suggested, which would guide children with emotional and behavioural problems as well as give mental hygiene training to health, educational, and welfare personnel. The first Canadian institution for those identified with an intellectual disability was opened in Orillia, Ontario, in 1876, and a proper school was organized there twelve years later (Winzer, 1996).

A large part of the history of custodial care, which spanned from the beginning of the 20<sup>th</sup> century to the 1960s, can be examined by looking at the work of Stephen Gould in his book *The mismeasure of man* (1981). Gould has a second edition of his work (1996), which does not differ in content from the 1981 edition, but includes some considerations of modern day treatment of intelligence, which were discussed earlier as a rebuttal to Herrnstein and Murray's modern genetics view of intelligence. Gould (1981) details that the treatment of those identified as intellectually disabled and their

lives in custodial care can be understood by looking at how society regarded the intellectually disabled as a population, or more accurately, how they were disregarded. Gould's (1981) work highlights how prominent academics of the time, such as Cesare Lombroso, believed that criminality is biological and that criminals could be screened on the basis of physical characteristics inherent to them. Lombroso was an Italian physician who used his theory of innate criminality to establish the profession of criminal anthropology. The intellectually disabled were placed in custodial care because these attitudes prevailed during the early 20<sup>th</sup> century. Not only was criminality believed to be biological, and hence inherited, it was the common attitude that the intellectually disabled were inherently criminal. As a result, those identified as intellectually disabled were institutionalized to protect the public at large from the deviants of society.

### 2.3.1 Protection of the Public

This attitude was not only widespread, but was also proposed and popularized by the prominent scientists and social leaders of the time. Well-respected professionals such as Henry H. Goddard, as mentioned earlier, devoted their lives to informing the public that *mental defectives* were innately criminal, and that their characteristics were inheritable (Gould, 1981). Consequently, those identified as intellectually disabled were institutionalized to protect the public and to ensure that they would not be able to reproduce and infect the public at large. In this sense, custodial care did not have much to do with *care* at all. The large-scale warehousing of the intellectually disabled in institutions and mental hospitals was done to rid society of what professionals, such as doctors or scientists, saw as defective citizens. Dickinson (1989) explained that by the 1940s, however, the institution and its operation regarding the care of the mentally ill

and mentally defective were beginning to shift, with this shift beginning to be apparent in Saskatchewan during the 1940s. Admittedly, the shift was largely due to fiscal reasons. Society's increased compassion for the intellectually disabled appeared at first to be a secondary consideration to the financial reasons for this shift. The advent of community psychiatry was partly due to the financial stress of the mental hospitals and institutions, and custodial care in Saskatchewan began to shift from large mental hospitals to general hospitals and mental hygiene clinics, which were based in the community (Dickinson, 1989). Within Saskatchewan, the Saskatchewan Hospital North Battleford and Saskatchewan Hospital Weyburn were the two provincial mental hospitals in charge of custodial care.

#### 2.4 The Use of IQ Tests

During the eugenics and custodial care periods, work continued on how to identify those individuals with an intellectual disability. The fervour to identify the intellectually disabled also progressed in the area of education, where earlier identification of intellectual disability was viewed as useful to train and properly control for those who were intellectually disabled. Spearman's successor, Cyril Burt, combined the concept of an IQ (as measured by an intelligence test) with factor analysis into a hereditarian theory of intelligence, drawing upon Spearman's work with *g*, and forwarding the concept of intelligence as a super-ordinate factor governing moral behaviour, that intelligence is innate and that differences between social classes are the product of heredity. Burt, who succeeded Spearman at the University College, London, based his work on citing the very high correlation between IQ scores of identical twins raised apart. Burt worked at the University from 1932-1950, during which time he



published many works buttressing his hereditarian theory of IQ through the use of twin studies. Burt tested the sons of tradesmen versus sons of upper-class families using twelve tests he believed measured intelligence (Gould, 1981). He found the upper-class boys to perform better on all the tests he designated to be correlated to cognitive import. Discounting environmental factors, he proposed that the differences were due to heredity.

Burt had a vision of a single ranking system of children based on inherited ability. His testing, referred to as 11+ testing, which was conducted beginning in 1915, was used to stream children into different secondary schools (Gould, 1981). Originally, Burt's testing was initiated to provide a way to determine which children were capable of benefiting from a higher education. The determination was to be used to provide for supports for those children capable of succeeding in further education, so that children were not held back from a higher education due to a lack of financial resources (Burt, 1959). Children took an extensive test at the age of ten or eleven, and as a result it was determined what 20% were sent to a school to prepare for university and what 80% were sent to lower schools and regarded as unfit for higher education. During this time, there were recommendations for the establishment of qualitatively different schools to educate the different streams of students based on their abilities. There were to be *grammar schools* for the most able students; technical schools to prepare students for the trades; *central type* schools based upon practical work; and for the dull or backward children, schools were to be developed with a slower pace and an increased emphasis on practical work (Burt, 1959). Burt believed that intelligence was innate and that it entered into everything a child did. He also proposed that as children aged, the differences in their mental capacity increased, and by the age of 11 the differences were large enough to no

longer justify separating children of varying mental capacities into different classes within the same school. Consequently, testing was proposed at the age of 11 to determine which school the individual student should be placed in. This early work set the precedent for categorizing a person's abilities and their placement in school based upon his or her intelligence as measured by tests.

Burt's (1959) belief in "innate, general, intellectual ability" (p. 117) led him to the 11+ testing and the development of a group test for measuring intelligence and for classifying students for school placement. The test was to incorporate problems "to assess sheer efficient thinking, regardless of acquired skill, knowledge, or experience" (Burt, 1959, p. 110). Burt made concessions that other indicators, such as teacher assessment and academic ability, should be considered when assessing a child, but he still believed that intelligence sets the upper limit on an individual's abilities and capacities. Burt also proposed that progress in welfare provisions had ameliorated the poverty and lack of environmental stimulation that had been considered the cause of lower intelligence in *humbler classes* (Burt, 1959, p. 115). He determined that there had been a rise in general knowledge and educational attainment over the past 50 years, but saw no evidence for a rise in innate ability in the population of the under-privileged group. This was seen as evidence that intelligence was innate and that environmental considerations did not affect intelligence and its measurement. Through his testing, Burt developed a method to divide individuals on intellectual levels at a very young age to a division of labour that would allow for largest benefits for the most able individuals in society. Burt continued to uphold intelligence as inheritable, and to maintain that environmental differences affected school attainment more than intelligence did (Burt,

1955). That is, Burt attested that improving environmental factors would not result in intellectual gains, but merely improve school achievement.

The interesting concept here is that throughout history, it has been debated that intelligence (IQ) tests are basically a measure of school attainment and do not measure inherited ability. The use of intelligence tests can be seen as effective only to the degree to which they give valuable information about how a child learns. Even in current usage, IQ tests serve as a dominant source of educational information for treatment and intervention purposes (Esters, Ittenbach, & Han, 1997). Modern understandings of intelligence debate older versions of intelligence and the notion of a unitary construct, or *g*. Ideas of crystallized and fluid intelligence are one example of new theories in intelligence, theories which are now incorporated into the construction of IQ tests (Esters et al., 1997). Crystallized intelligence are those forms of intelligence which are more permanent in nature (such as perceptual acuity), whereas areas of intelligence, such as verbal intelligence, are considered more fluid in that they are amendable to change and can be greatly influenced by individual experience, such as level of education.

## 2.5 Compulsory Attendance and Curriculum Differentiation

A major problem for the educational system, dating back to the latter half of the 19<sup>th</sup> century, was the increasing student population. In response, a class-graded system was developed which placed students together based on age and degree of academic achievement (Sarason & Doris, 1979). Compulsory attendance laws required students to stay in school even when they were unable to pass through the newly developed graded system. Early concepts of disability were related to age and class placement. If a

student was of a chronological age that was not in accordance with the grade he or she should be in for that age group, that student was considered intellectually disabled or *retarded* (Terman, 1923). Terman (1923) explained the need for special classes within the education system so that those identified as mentally defective were segregated and thus would not affect the *normal* children. However, students' different needs were becoming evident and the realization was reached that curriculum was too rigid to service the students with intellectual disabilities. Intelligence tests were used, with widespread employment beginning in the 1920s in Canada and the United States, to sort students and provide curriculum differentiation (Valencia & Suzuki, 2001). The compulsory enrolment of all children was placing a greater demand on the schools. Compulsory attendance was first instituted in Canada in Ontario in 1871, and by the end of the century was introduced in some form in most provinces (Tomkins, 1986).

Tropea (1987) analyzed how the development of special education and special curricula could be viewed as a reaction to having to deal with *difficult* students after the enactment of the compulsory attendance laws. Prior to compulsory attendance laws, the exclusion of children seen as unfit for an education was necessary for school order. The advent of special classes was a way to act in accordance with compulsory attendance laws while still continuing exclusionary practices within schools in order to maintain order in regular classrooms (Tropea, 1987). The introduction of a manual curriculum (such as sewing) coincided with the forcing back to school of children, some of them considered intellectually disabled, who had previously dropped out of the education system in order to work. Tropea indicated that specialized staff, such as examiners who conducted individualized intelligence tests, was used to legitimize the placement of students in special classes, and IQ tests were viewed as a scientific measurement.

However, *backstage* rules inherent in the schools for placing difficult students in special classes clashed with these scientific standards (Tropea, 1987). For example, in Detroit in 1912 it was stated that the “condition of the child ‘should be used as the basis of placement decisions and decisions based on classifications by specialized staff were secondary’” (Tropea, 1987, p. 37). Therefore, students could be sent to special classes whether or not they had a special classification that warranted such placement. Special classes were also relied upon for the placement of *laggards*, those pupils falling behind in grade achievement. Special class placements for these students, who were considered retarded allowed for school efficiency to increase, since such students were then no longer considered part of the regular classroom. Grade promotions in the schools were modified by lowering standards so that students who were intellectually disabled could be promoted through the grades and difficult students were advanced. Terms used to refer to special classes were interchangeable, for example *Special Education* or *Dull Normal First Graders*, so as to best accommodate the need to place students in order to maximize school order (Tropea, 1987, p. 45). During the Depression years, there was a great increase in the number of students classified as *mentally handicapped* and placed in special classrooms due to the fact that fewer students were leaving school to work and were staying in school longer. These students who could not meet academic standards were creating problems for the regular classrooms and special class placements were used as a solution to rid the regular classroom of the problem students. With compulsory attendance laws, examinations of those suspected of mental defect would be possible within the school system, with major repercussions for education in both the United States and Canada (Mundie, 1919; Wills, 1919).

Curriculum differentiation was a response to compulsory attendance laws and the increased difficulty that was experienced with educating students in one classroom with a general curriculum for all students (Franklin, 1989). During the beginning of the 20<sup>th</sup> century, Canada was grappling with developing its curriculum, expanding in both theoretical underpinnings and subject area (Tomkins, 1986). Curriculum differentiation was a reaction to the need for special education after attendance laws, and the medicalization of the curriculum that was occurring in Canada during the period of 1920-1945 (Tomkins, 1986). Grouping students with similar achievement allowed the teachers to teach to large groups with the same academic ability. Franklin (1989) goes on to explain that the grouping of students and curriculum differentiation also served as a method to handle diversity within the classroom and stream students into occupational and citizenship roles based upon their measured abilities. The advent of special classes was a reaction of the time that allowed the educational system to educate students seen to be defective by providing segregated special classes. The curriculum differentiation at the time contained an emphasis on vocational training to lead towards gainful employment for those students designated to be intellectually disabled.

Edward Thorndike, Peter Sandiford's doctoral thesis supervisor, worked in psychology and attempted to promote psychology as a scientific construct (Thorndike, 1940). Thorndike was an American educational psychologist who taught at the Teachers College, Columbia University, in New York, beginning in 1899. He was convinced of the necessity to eliminate *bad* genes through the use of sterilization (Thorndike, 1940). He stated that

[A]lmost any practice based on it [the principle of eliminating bad genes] is likely to do more good than harm. Add to it (1) the facts of correlation whereby defects and delinquencies imply one another so that moral degenerates tend to be

dull, imbeciles to be degraded, etc. (2) the facts of homogamy, that like tends to mate with like, and (3) the fact that genes which make able and good people also tend to make competent and helpful homes. (Thorndike, 1940, p. 195).

Thorndike's view on the mentally defective was not positive. He believed that if mental defectives wanted to die they should be allowed to, as this would then be a burden removed from their families and society. However, he did attempt to temper this with the idea that when defectives could live a useful life their defect should be minimized so that they were not stigmatized. Thorndike also felt that the expense of allowing a defective to earn a living was too great and not worth the investment, and that the lives of incurables should not be prolonged (Thorndike, 1940).

Thorndike's views on education, that education was a scientific means of social improvement, interested Canadian educators (Tomkins, 1986). Thorndike's major impact in Canada was from his work on individual differences and intelligence, mental testing, classroom grouping and retardation (Tomkins, 1986). Peter Sandiford also had an impact in Canadian education through his dedication to experimentalism and testing. Sandiford argued for an increased focus on individual differences, which could be identified by tests, and used to enhance curriculum differentiation (Tomkins, 1986). Tomkins (1986) details that in Sandiford's view, test results could indicate needed changes in content, materials, and teaching method. Testing could be used to help determine the mental age at which various skills and knowledge could be introduced so curriculum could be most efficient. Special education and special class placement were largely related to the mental hygiene movement in Canada, where mental hygienists were concerned with feeble-mindedness and its impact on the schools. As early as 1910, special classes were developed in Toronto for those identified as mentally deficient or

feeble-minded (Tomkins, 1986). The Vancouver curriculum began to look at the curriculum for the feeble-minded students, and placed emphasis on manual work in order to promote growth of the individual child. In Victoria, intelligence testing was employed to identify students for special class placement who could not be identified by objectionable appearance alone. In 1914, Ontario passed an *Auxiliary classes act* for children who could not cope with the regular curriculum (Tomkins, 1986).

In the early 1920s, the Canadian National Committee for Mental Hygiene estimated there were 161 classes for subnormal children throughout the country. At this time, the belief that IQ tests were an accurate measure of inherited intelligence was questioned, and the educability of subnormal children was emphasized (Tomkins, 1986). In the early 1940s there were 525 special classes for low ability children throughout Canada. However, the belief that mental measurement and testing could solve all problems of pupil classification was losing favour. According to Tomkins (1986), it was at this time that mental hygiene approaches in Canadian schools seem to have had its greatest impact on the development of special education as a more positive view of the educability of those identified as mentally and morally deficient gradually developed. The concept of adapting the curriculum for students with intellectual disabilities was introduced early. The feeble-minded needed adapted curriculum and adaptation was to focus on establishing useful habits, to provide varied instruction rather than repetition, and maintain attention by concentrating on facts of interest to the students (Sandiford, 1913).



## 2.6 Tracking and Student Placement

Lewis Terman, who worked at Stanford University in the United States, was the man who revised and standardized the Alfred Binet intelligence test for American children in 1916. Terman (1923) was working on concepts surrounding the organization of students in classrooms. He was concerned with the fact that the organization of students into classes, while essentially promoting homogeneous groupings of students based upon ability, was largely discrepant based upon factors of age, accomplishment, and mental capacity. During this time, classes in school were based upon the graded system. Terman (1923) found the system in need of revision in terms of gradation and promotion of students. He proposed that the mental level of the child should be used as the factor of classification of students. He instituted the concept of *tracking*, based upon a three-track plan adapted to the needs of accelerated, normal, and *limited* classes. Terman's work was introducing curriculum differentiation, including the need to classify students based on individual differences and to segregate students based upon these differences. All classes, except for those designated as normal, were considered *special classes* (Terman, 1923). The special classes were designed to deviate from regular classes by varying the content of the course of study, the rate of progress of the students, or both. Students in special classes were promoted through the grades based upon progress, not upon completion of each level of work. The goal for these students was to prepare them for industrial life and for citizenship. Terman's work is an early example of placing students in alternative programs based upon their measured mental capacity through the use of mental tests.

Intelligence tests were seen to be useful for determining an individual's educability and the most appropriate curriculum for students, leading to curriculum

differentiation and homogeneous groupings based on IQ results (Valencia & Suzuki, 2001). Valencia and Suzuki (2001) detail that Terman promoted intelligence testing for every student in grade one, with subsequent testing as students progressed through school. Terman believed that a child's limits, in the sense of educability, could be accurately determined within the first year of school. Critics of tracking systems argued that ability grouping, and the tests used to establish them, measure past socio-economic disadvantage as much as presumed ability (Block & Dworkin, 1976). While Terman believed his tracking system was promoting equality of opportunity, it did not promote equality in the modern sense as we understand it. Equality, in Terman's view, meant an individual was to be trained and educated in accordance with their innate ability (or lack of it), which could mean excluding some students from the opportunities of others.

The beliefs of Terman, and his practice of student placement in special classes, indicated how the construct of intelligence affected a student's treatment. Terman, writing about a woman and her mentally handicapped son, stated that,

[T]he mother is encouraged and hopeful because she sees that her boy is learning to read. She does not seem to realize that at this age he ought to be within three years of entering high school. The forty-minute test has told more about the mental ability of this boy . . . for X is feeble-minded; he will never complete the grammar school; he will never be an efficient worker or a responsible citizen (Gould, 1981, p. 179).

Whereas progress was being made, the fact that the student's intelligence was deficient based upon an intelligence test of only 40 minutes negated that progress, and that progress was seen as insignificant in light of the fact that he was below average intellectually. Terman believed in the need to eliminate those with low intelligence because they were unlikely to lead an effective or moral life, and further believed that

the cause for feeble-mindedness was social pathology (Gould, 1981). Terman wanted universal testing of all students to determine the mental defectives.

## 2.7 Early Conceptions of Individual Differences

Terman found that individual differences of students were creating a problem within the schools, and the solution was seen to be individualization of instruction and the formation of more homogeneous classes for group instruction (Terman, 1923).

Terman (1923) suggested grouping students into five classes:

1. Very superior (gifted)
2. Superior (bright)
3. Average
4. Inferior (slow)
5. Very inferior (special)

Each group should be in a separate track with specialized curriculum. Terman (1923) also believed that special education curriculum for the *inferior* or slow group should be mainly vocational and practical.

Terman (1923) espoused that innate differences, as measured by the intelligence test, were responsible for students who were not achieving in the normal classroom. In his model, special education and special classes were incorporated so that the other students did not have to remain in the same classroom as the intellectually disabled. In fact, in his system, the categorization of children was most useful to determine the gifted students and concentrate on their education, not to further the education of students identified with intellectual disabilities. Terman (1923) believed that students should be classed based on mental level and those students with the same mental level should be

grouped together. The idea was that by keeping the levels separate and the same students together, they would work and behave better and more would be accomplished. It should be kept in mind, however, that his concern was largely with the welfare and education of the gifted student. Terman stated that “for the intellectually superior, however, the ones upon whose preservation and right education the future of civilization most depends, no special provision is made” (Terman, 1919, p. 165). It was Terman’s (1919) belief that students identified with an intellectual disability were getting more out of education based upon their natural ability than the students of normal intellectual capacities. He believed that the regular and gifted students were being done a disservice in their education, because the curriculum was being modified and slowed to the level of the students with an intellectual disability. The main emphasis in Terman’s work was to save the gifted students through specialized instruction.

The inference was that this model considered individual needs, and was therefore an improvement upon the current system of the time. Again, curriculum differentiation was proposed within this new model, but no real effort was being made at this time to improve or change the curriculum for individuals with intellectual disability to provide for a better education to meet their needs. Terman’s work was based more on exclusionary practices to eliminate slow learners from the regular classroom. Special classes for students with an intellectual disability were formed, and students were able to progress through their own grades, but these did not approximate the progress of regular classes and grades. The first Canadian special school was for students who were deaf, and it opened near Montreal in 1831 (Winzer, 1996). As Terman (1923) suggested, segregated classrooms were incorporated into elementary, junior, and senior high schools. For slow students, adjustment rooms were utilized, where work was

individualized. As can be seen, the testing movement was largely influential in curriculum. The changes to curriculum were based upon mental tests as the measure of where to place students in curriculum. Intellectual ability was used as the standard to judge each individual student's ability and school placement (Terman, 1919). The use of intelligence tests was deemed to be worthy as a method of organizing society so that human resources were used most efficiently (Spring, 1972).

The following is a table that indicates some of the changes the definition of intellectual disabilities went through during the period of 1900-1930, as indicated by the terms that were used to refer to individuals with intellectual disabilities. An analysis and awareness of the differing terms used to refer to individuals with intellectual disabilities is important due to the social impact these terms had for the individuals so identified. The labelling of intellectual disability had strong ramifications for how these individuals were treated in society, including considerations of institutionalization and sterilization. As well, these terms serve to illustrate the negative regard associated with these labels, and the long-term effects intelligence testing could have through the labelling process.

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Table 2.1

*Terms Used During the Period of 1900-1930*

*to Describe Individuals with an Intellectual Disability*

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Backward

Feeble-minded

Moron

Mentally deficient

Retarded

Laggard

Deviant

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Information and research discussed within this chapter has shown the progression of thought and theory that had occurred throughout the period of 1900-1930 in regards to individuals with intellectual disabilities. The importance of intelligence testing was discussed, with its initial beginnings to help determine those individuals in need of a different education. However, the progression of thought and use of intelligence testing was also recognized for its detrimental effects on those identified as intellectually disabled. Intelligence testing was used to denigrate the position of those with intellectual disabilities in our society, resulting in their institutionalization and harsh practices, such as sterilization. The education of these individuals was conducted in order to prevent them from becoming a menace to society. As compulsory attendance laws were enacted, the education system was faced with having to educate students they were before able to ignore. Special education was initially a response to these

difficulties and the need to respond to individual differences now apparent within the school system. The next chapter will take into consideration the continuing effect of intelligence testing on the education system and how education was further advancing special education to respond to those with intellectual disabilities, including changes to curriculum content, as well as how curriculum was to be taught. The mental hygiene movement will be considered for how it affected individuals with intellectual disabilities, and its contribution to the furthering of curriculum differentiation.

## CHAPTER 3

### MENTAL RETARDATION AND IQ TESTING (1930-1960)

#### 3.1 Education and IQ Testing

During the three decades 1930-1960, educational professionals cautioned that while behaviour, knowledge, and general intellectual habits of the intellectually disabled might greatly improve, intellectual ability was not amendable to change (Griffin et al., 1940). However, the fact that many educational professionals of the time were placing sole emphasis on the intelligence of a child, as measured by an IQ test, negated the possibility of providing for improvements in other areas of the child's life. To the Eugenicists, the factor of intelligence was considered to be of greater importance than other factors. Factors such as deviance and bad attendance were largely ignored as factors affecting academic achievement, and instead were seen as part of the factor of intelligence. Intelligence was seen as the cause of differences in individual ability (Terman, 1923). The placement of students in educational programs was based almost solely on assessments of their intelligence (Laycock, 1963). In order to identify someone with an intellectual disability, all that was necessary was the time to conduct an IQ test. IQ testing in the 1930s related to curriculum and its development in that testing was seen to help determine at what mental age certain skills and knowledge could be introduced so that curriculum would be most effective (Tomkins, 1986).



### 3.2 Mental Hygiene and Effects on the School

As research continued and debate on the construct of intelligence and its measurement intensified, research was conducted that indicated feeble-mindedness was not due to a lack of intelligence. With these new ideas the attitude shifted from a eugenics view to a consideration of mental hygiene (Flynn, 1991). Flynn provided evidence that special education as it was incorporated in Canada, as elsewhere, was based upon ideals of functional psychology, the guiding precept of which was “social science should accept religious ideals as the normative standards for an empirical process of social and moral evolution” (Flynn, 1991, p. 65). Functional psychology had a strong basis in morality and social conformity. Behaviour not conforming to functionalist standards was seen as the result of mental disease, and those individuals not conforming were considered to be suffering from emotional or neurological abnormalities. Functional standards of behaviour were considered to be an indication of intelligent behaviour. With the medical model dominant in schools beginning in the 1920s, emphasis turned to the prevention of mental problems in school and teachers were to concentrate on students’ personality development, not on their intellectual development (Tomkins, 1986). This shift from the firm eugenics ideals that had dominated education had repercussions for individuals with intellectual disabilities in theory more than practice. Considerations of the personality were still concentrating on the moral behaviour of individuals, and promoting standards that individuals with intellectual disabilities could not, and should not have had to, measure up to. High intelligence, in the mental hygiene philosophy, was synonymous with moral and normal behaviour.

As a result, those with lower intelligence were seen to deviate from these norms and were cast in disrepute as a result. The infusion of morality considerations into the school progressed into the 1930s and beyond with professional sanctions to decrease emphasis on the educative aspect resulting in further scapegoating of individuals with intellectual disabilities. Standards of moral behaviour were instituted that promoted upper class ideals as the desired norm. Where many individuals identified as intellectually disabled were from the lower and poorer classes, a precedent was set that intellectual disabilities were synonymous with aberrant behaviour, and the education system was responsible for responding to these aberrations. Psychology, while always struggling to be regarded as a science, began with ideas “seeking a ‘natural’ method for the pursuit of salvation and self-knowledge, emphasizing the teaching of proper moral action and the ‘cure of the soul’” (Rieber, 1998, p. 192). Education was seen as playing an important role in the cultivation of morality, in that “The child’s mind is to be institutionalized to the greatest extent, so that the child’s life may follow the prescribed image” (Rieber, 1998, p. 193). Intelligence, and its measurement through IQ tests, were hailed as a major advance in realizing psychology as a science. However, psychology and intelligence find their historical roots in considerations of morality and developing man in an appropriate social image. It is no wonder, therefore, that intelligence and IQ testing began, and in some instances remains today, as a means to classify and define individuals based upon social notions of worth and *normality*.

The mental hygiene movement was first initiated to improve the care and treatment of the mentally ill by placing an emphasis on the environmental factors that can affect mental illness, as well as inherited deficiencies (Thompson, 1994). Intervention in child behaviour problems, mainly through the schools, was enacted to

prevent mental illness. The mental hygiene era in the schools advanced the idea that mental disorders, including intellectual disability, were the result of personality disorders. Since personality was developing during the childhood years and children were viewed as especially vulnerable to personality disorders, the school was seen as the most efficient institution to prevent and treat personality disorders (Cohen, 1983). The shift from the eugenics era toward the new emphasis on personality development, indicated that social pathology was not the result of innate feeble-mindedness but rather was caused by personality disorder. This emphasis was an important shift in perspective, due to the fact that personality was seen as amendable to change, whereas feeble-mindedness and its innate causes were not. Cohen (1983) discussed how mental hygienists were concerned with student failure within the schools. Failure, according to the hygienists, led to feelings of failure and unworth and resulted in personality maladjustments. Based upon this idea, the hygienists wanted schools to concentrate on personality development and to deemphasize the academic content of curriculum. The hygienists believed the academic focus of curriculum to be too concerned with the intellect, and that a misfit curriculum was producing misfit children. The ultimate goal of the mental hygienists was to change the attitudes of practitioners and professionals in the schools, and a massive campaign was launched to reach professionals dealing with children with intellectual disabilities, as well as their parents. However, some mental hygienist proponents wanted emphasis placed mainly on the schools, believing the home environment “offers the least encouragement” because in their opinion there were no means to alter the home situation, except perhaps in a superficial manner (White, 1920, p. 148).

Changes based upon mental hygiene saw the advent of considerations of the *whole child* within the school, and the emphasis that it was the schools' responsibility to educate students beyond curricular considerations. Cohen (1983) argued that by emphasizing personality as the root cause of social ills, there was no need to reform institutions to respond to student difficulty, nor to consider society's overall attitude to students and maladjustment as a contributing factor to how students were educated and treated within the education system. Personality was malleable and the wisdom of the time determined that it could be moulded to prevent social pathology.

Clarence M. Hincks, the director of the Canadian National Committee on Mental Hygiene (CNCMH) instituted in 1918, worked towards the promotion of mental hygiene in Canada and conducted a survey of the feeble-minded in British Columbia in 1919, as well as a survey of Alberta that was published in 1921 (McLaren, 1990). Hincks also conducted a mental hygiene survey of Saskatchewan in 1945 (Hincks, 1945). In the Saskatchewan survey, Hincks espoused the view that normal individuals needed their mental health protected and conserved. Hincks' views on mental hygiene centred on intellectual disabilities and controlling for their spread. His proposal for protection was based upon identification of individuals with poor mental hygiene, and on prevention. Hincks believed there was a need to stay alert for symptoms of poor mental health in the schools. These symptoms included "shyness, over sensitiveness, pronounced feelings of inadequacy, morbid fears" to name a few (Hincks, 1945, p. 2). His work continued to promote the idea that there was a need to identify morons and provide for their proper training and guidance so that they would not contribute to social problems. The proposal was to identify both those individuals with an intellectual disability upon entering school and also all children retarded by three or more years in their academic

work. Professionals affiliated with mental health clinics were to be responsible for identification. The mental hygiene clinics consisted of diagnostic services where systematic examinations of children entering school could be conducted to identify cases of mental defect. Screening in these clinics were to be conducted annually and were at times instituted as travelling clinics in order to identify those suspected of mental deficiency, as well as a general screening to detect any mental health problems. Residential schools were the answer to prevention, where education for the intellectually disabled was to be provided in the “three R’s” (Hincks, 1945, p. 15) and vocational training.

Hincks saw the need for large expansion of special classes to educate morons. Far from wanting to provide a sound education for those identified morons, Hincks (1945) stated that 50% of defectives were “from poor stock” (p. 17) and require sterilization, especially attractive females who were released from the training schools. He suggested the need for nursery schools in public elementary schools to properly socialize individuals with intellectual disabilities. As well, Hincks promoted intelligence testing in schools and colleges to facilitate training in line with each individual’s measured capacity. Samuel Laycock provided a section in Hincks’ survey, in which he proposed that schools would be most effective through providing early treatment for “minor mental disorders” (Hincks, 1945, p. 26) such as temper tantrums and sullenness. Laycock was appointed in 1927 to the School of Education at the University of Saskatchewan, where he produced numerous works on special education, as well as working directly with the public school system to institute special education practices. In 1944, Laycock surveyed the mental health climate in 167 classrooms in 5 provinces in Canada to determine how well the education system had incorporated

mental hygiene objectives into their aims, as well as into curriculum and teaching methods. Laycock promoted the idea of the whole child and the development of the child's emotional, physical, and social capacities, as well as intellectual capacities. A change in curriculum was suggested to fit the curriculum to the child, not the child to the curriculum (Hincks, 1945). The survey emphasized the need for parent education to make parents aware of child development and how to prevent mental hygiene problems.

The CNCMH was concerned with developing preventative programs for mental hygiene. While parent education and child socialization, such as that promoted by the CNCMH, has been interpreted by some as a positive area of intervention within the family dynamic, it has also been viewed as an oppressive means resulting from the medicalization of deviance (Dickinson, 1993). This can especially be seen in the area of intellectual disability, where inclusion of parents in the intervention for their children with intellectual disabilities may be a positive means to provide improvement, but may in actuality be a further invasion of professionalism into the everyday functioning of families. The goal of mental hygienists was to provide scientific methods of child rearing, based on the belief that parents have no instincts to work upon for parenting, and parental rearing practices of the past were seen to be detrimental to the mental health of children (Dickinson, 1993). The mental hygiene movement served to legitimize the role of medical intervention into the everyday problems of people's lives, that before had gone relatively unnoticed and certainly untreated (Everett, 1994). Overall, the CNCMH was dedicated to promoting their principles and practices throughout Canada, largely through increased research and educating professionals to engender mental hygiene provisions in their daily practices with the public (Canadian National Committee for Mental Hygiene [CNCMH], 1928, 1932). While the methods and

theories of current day may differ from what the CNCMH was proposing, the dedication to interagency that was inherent in the CNCMH philosophy was significant in order to further the best interests of the individual.

While Laycock's work and interest in mental hygiene was conducted with a degree of respect and concern for individuals with intellectual disabilities, the sentiments that were at times proposed by the CNCMH did not always emphasize such positive regards. A report on proposed directions for a mental hygiene program in Saskatchewan estimated approximately 17,000 mentally deficient individuals in Saskatchewan (CNCMH, 1945). At this time the sentiment was that individuals classified as morons were to be aided in taking "full advantage of their limited capacities and be prevented from contributing to such social problems as dependency, delinquency, illegitimacy, vagrancy, and the spread of disease" (CNCMH, 1945, p. 11). Residential training schools, special education in the public school system, community supervision, and selective sterilization were also seen as necessary to treat mental defectives.

### 3.3 The Need to Accommodate Special Students

Education of students with an intellectual disability up to the 1940s was based upon theories of mental hygiene and the need for protection of the public from people identified with an intellectual disability, not with educating them. Prevailing ideas of the time still treated people with an intellectual disability as inferior and education as the omnipotent power with the responsibility to cure the educational system of misfits and repair the mental hygiene of those suffering from low intellectual ability (Griffin et al., 1940). People identified with an intellectual disability were seen as a eugenic threat to the society, as well as an economic threat, in terms of their care and treatment.

Education for students with an intellectual disability was viewed as necessary, but not entirely attractive. William Henry Maxwell, the first city superintendent of Greater New York, saw the education of students with intellectual disabilities as a method to neutralize their inherited evil tendencies (Barton & Tomlinson, 1984). While he would have preferred sterilization, as long as such children existed, Maxwell saw education as a way to control them in order to protect society as much as possible.

The terms used in the area of special education in the 1930s were, and to some degree continue to be, the language of management, not of education (Barton & Tomlinson, 1984). Barton and Tomlinson (1984) stated that those terms such as management, training, and rehabilitation reflect a medical model of education. The medicalization of special education treated those with an intellectual disability as ill, based on a therapeutic model for children with disabilities. Curriculum was striving to provide for a group of students that was still largely considered an enigma in the education system.

#### 3.4 Increased Focus on Individual Differences

Education during the 1930s was still viewed as a cure for poor mental health (Griffin et al., 1940). The prevalent belief was that those students identified with intellectual ability so low as to be called imbeciles or *idiots* should not be able to go to school, but should be put in *training* schools. Griffin et al. (1940) defined imbeciles and idiots as those individuals unable to manage themselves. They were “recognizable by their retarded development, lack of ability to learn, and by various physical stigmata” (Griffin et al., 1940, p. 131). However, the actual intellectual criteria for categorizing students as imbeciles or idiots were not stated.



The underlying purpose of education that directed the intellectually disabled to specialized classes was still to produce children who would become good citizens (Terman, 1923). The social and cultural aspect of education is apparent in this idea. Within Canada, the provinces wanted a central registry to identify students with an intellectual disability as soon as possible and to track services provided to them (Laycock, 1963). The Canadian Association for Retarded Children was making estimates on the number of trainable children who should be in their own homes, versus the number of those who required institutional treatment (Laycock, 1963). The distinction was still being made as to educable mentally retarded who could live independently and support themselves with unskilled or semi-skilled labour, since these were the students seen as the definite responsibility of the educational system.

The curriculum was beginning to change during the 1930s so that work was individualized for each student and tailored to each student's mental age. Their mental ages suggested when they were ready to progress from one level to the next. Curriculum was modified so that the child could achieve results and gain feelings of personal growth (Griffin et al., 1940). The need for flexibility was recognized regardless of whether the dull students remained in the regular classroom or were placed in special classes. The curriculum was broadened to include extra classroom activities, athletics, and classroom responsibilities where children identified with an intellectual disability could participate and even excel. The flexibility of the curriculum was seen to be most important. Griffin et al. (1940) suggested a flexible curriculum should encompass the following:

1. Curriculum should be suited to the capacity of the child.

2. Curriculum should be suited to the needs of the students. For example, the student should be taught with regard to the reality of the child's life and outlook.
3. Curriculum should provide for the social and emotional development of the child, as well as for his or her intellectual development.
4. Curriculum should develop initiative in children and encourage spontaneity.

The flexibility of the curriculum emphasized the need to promote children, taking into account individual differences.

### 3.5 Laycock and Special Education

Where students with an intellectual disability were segregated to special schools, the emphasis was placed on handwork and crafts. At the beginning, segregation of students did not result in a curriculum that took into account their need for academic training. As can be seen in Laycock's (1963) work, the programming was based solely upon classes aimed at attempting to make students identified with an intellectual disability conform to the educational system's idea of producing contributing citizens. Special education served to enhance the potential productivity of students with an intellectual disability. Laycock organized the first special class in Saskatoon for students with an intellectual disability in 1929 (Laycock, 1963). Laycock included the following in his definition of special education: "[T]he educational program . . . which is planned by public or private agencies for the education of the various groups of exceptional children" (Laycock, 1963, p. 19).

Laycock had a special interest and worked extensively to promote the relationship between parents and the school, believing a positive relationship between

the two would be beneficial to the child (Cherneskey, 1978). He served as an officer of the Canadian and Saskatchewan Home and School and Parent-Teacher Federations. Laycock regarded special education as a part of all education, and by the time he retired in 1953, there were six classes within the Saskatoon public school system for the educable mentally handicapped (EMH). While Laycock believed that special class placement was best for the students, he also endorsed placing students with intellectual disabilities with regular education students so that they could observe normal behaviour and participate (Cherneskey, 1978). Laycock's devotion to mental hygiene objectives was obvious in his work, and he recommended classifying defective children by intelligence testing, the establishment of a psychiatric hospital, and mental hygiene clinics. He served as Consultant Psychologist with the Saskatoon Public School System from 1929-1933, and it was through this role that he directed the examination of Saskatoon school children for admission to special classes for learning and behaviour problems. Laycock believed in the promotion of mental health, citing that a large proportion of retarded achievement was the result of emotional, not intellectual, difficulty (Laycock, 1962). Laycock used the analogy of inoculating for character, which encompassed allowing the child to face difficulties under controlled situations and helping them to respond to these difficulties (Laycock, 1972, vol. 2).

Laycock (1963) believed it was important to vary the curriculum so that all students would have an equal (although not the same) chance to develop and progress. In regards to the educational needs of students with an intellectual disability, Laycock believed education must consider the whole child, provide education through preschool to adult years, and provide a partnership between parents, peers, teachers, and the community (Laycock, 1972, vol. 1). He believed that a uniform curriculum did not

provide for individual differences apparent among students, especially in the rate of learning (Cherneskey, 1978). A rigid and uniform school curriculum was seen as detrimental to the students' mental health. By teaching a standard curriculum, Laycock believed the schools were denying individual differences, and as a result were denying students the ability to succeed (Laycock, 1962). The curriculum at this point was seen to be making some progress in meeting the needs of the trainable mentally retarded, but not as much for meeting the needs of the educable mentally retarded. Laycock proposed that teachers had a responsibility to respect special students, and that below average pupils are challenged by their own scholastic inability and feelings of inadequacy, as well as by the teacher's dismissive unwillingness to modify the curriculum, techniques, and method to help the child (Laycock, 1972, vol. 2). The curriculum should be suited to the child in reference to their mental ability, interests, and what they require for a successful life in the community.

Laycock's work suggested that in primary classes, stress was placed in the area of personality development, oral language, self-care, social skills, and sensory-motor readiness experiences (Laycock, 1963). As the child reached a mental age of six to six and a half years, she or he are considered ready for more formal instruction and should be transferred to an intermediate class. At this level, students are taught *tool* (math, life skills) subjects through individual instruction. After completion of this level, the student was transferred to a vocational school with less stress placed on academics. The curriculum was being altered with the trend moving toward training students identified with an intellectual disability for specific jobs in the community. Special teachers worked with the students to assist them in getting jobs and visited them at their job sites (Laycock, 1963). The practice was that, as academics became harder for the student, the

focus of the curriculum should turn to vocational training. Advances were still needed to help meet individual needs and student diversity, and further categorization of students was seen as a means to address diversity. Categorization resulted in the labelling and segregation of students.

### 3.6 Labelling

When students identified with an intellectual disability were assessed and tested by means of intelligence, the end result could often be the labelling of the child based upon these results (Barton & Tomlinson, 1984). Labelling, in the education system, occurred when an individual was referred for a difficulty (behavioural, learning) and assessed to determine the cause of this difficulty, an assessment which often included an IQ test. Once the results of the assessment were known, the cause(s) of the difficulty were assumed to be known. As a result, the person was labelled based upon these results. For example, an individual whose IQ results were 70 would be labelled as mildly intellectually disabled. A diagnosis based on intelligence was made and placement and curriculum were developed from this information. A diagnosis was the starting point of specialized placement for students. Diagnosis was, and is, largely still based upon the medical model, incorporating into special education and curricular practices the relationship between physician and patient (Barton & Tomlinson, 1984). Barton and Tomlinson illustrate that the medical model was apparent in the practice of testing and retesting, in diagnostic-prescriptive teaching, and in quantification of data for students with an intellectual disability. Categories such as educable mentally retarded and trainable mentally retarded were used to place students. The term *educable* was used to denote students who were mildly intellectually disabled and were considered to

be able to profit from education. The term *trainable* was used to refer to those who were severely intellectually disabled, and programming was based upon self-help, social adjustment, and economic usefulness (Scheerenberger, 1987).

Labelling was a process within special education, with varying outcomes for students with intellectual disabilities. Labelling could be seen to have positive results, such as:

1. Allowing for accurate treatment and treatment outcomes.
2. Determining prevalence of intellectual disabilities in order to gain insight into etiology, prevention, and development of new treatments.
3. Helping rally special interest groups.
4. Allowing for more financial support for research, training, and increased service delivery.

Negative effects of labelling were:

1. Over-representing minorities labelled as intellectually disabled.
2. Labels are resistant to change and permeate the child's whole life.
3. Excluding individuals from certain educational opportunities. The longer they are out of the regular classroom, the harder it is for them to catch up.
4. Focusing the problem on the individual, not on the social and ecological conditions that might need social reform.
5. Serving to keep labelled people at the bottom of the social hierarchy (Barton & Tomlinson, 1984).

Labelling based solely on intelligence scores could be dangerous because for accurate assessment factors such as adaptive behaviour and comparisons to the same cultural group also need to be considered (Barton & Tomlinson, 1984). It was also

important to remember that categories, labels, and diagnoses for students with intellectual disabilities were largely based on the political process. For example, the use of the term *intellectual disability* is applicable now because it is no longer politically correct to use the term *imbecile*, or other such pejorative terms, when referring to a person with an intellectual disability. As the definition of intellectual disability progressed, the hereditarian view, coupled with its historical practices of segregation and sterilization, began to lose favour.

The following table indicates the different terms employed to refer to individuals with an intellectual disability during the period of 1930-1960. Again, the terms used during this period provide some indication of how individuals with intellectual disabilities were received within society and the institutions in which they lived their daily lives, such as the education system. When considering the terms apparent during this period, it is evident that the education of individuals with intellectual disabilities was becoming more of an issue and receiving more attention. Terms such as educable and uneducable were used to make reference to the ability to educate these individuals and reveal the increased emphasis on incorporating them into the education system. Whereas the term feeble-minded was more a derogatory term used to sanction the exclusion of these individuals from society, their presence in education was now recognized.

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Table 3.1

*Terms Used During the Period of 1930–1960*

*to Describe Individuals with an Intellectual Disability*

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Educable

Uneducable

Trainable

Dull

Exceptional

Retarded

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Chapter three explores the effort, if somewhat begrudging, that was taking place to educate individuals with intellectual disabilities. Exclusionary and segregated education practices were still largely the preferred methods to incorporate those with intellectual disabilities. The chapter details the continuing effect IQ testing was having on the education for these individuals, in that IQ testing was widely practiced and the results employed to segregate students with an intellectual disability. However, the results of IQ testing were also being used to determine the education best suited to these students, and what the curriculum for these individuals should entail. The mental hygiene movement was detailed for its effect on curriculum and attitudes to individuals with an intellectual disability. The chapter detailed a further attempt to incorporate these individuals, an attempt that does not equate to increased effort at acceptance of individuals with intellectual disability. Chapter four will continue the exploration of the education of individuals with intellectual disability. The changing definition of mental retardation, and its resultant implications for practice with these individuals, is



discussed. As well, this chapter begins the exploration of an emergent attitude change, within institutions such as the education system if not society in general, towards the treatment and education of individuals with intellectual disabilities. The integration and inclusion movements are discussed, as well as how these movements were translated into Saskatchewan Education policies, and the ramifications for curriculum and student placement. How students with intellectual disabilities are continuing to grapple with placement decisions based on antiquated notions of how to use the IQ test are discussed.

## CHAPTER FOUR

### MENTAL HANDICAP TO INTELLECTUAL DISABILITY: ASSESSMENT, DEFINITIONS, AND CURRICULAR IMPLICATIONS (1960-2002)

#### 4.1 Deinstitutionalization

Depopulation of the hospitals and institutions in Canada began during the 1960s, with seemingly three options: discharge (the most fiscally attractive), trial leave, and boarding out to approved homes (Dickinson, 1989). Complete depopulation of mental hospitals became financially irresistible. The depopulation was used as a cost-cutting measure, and was aided by the specialization of service delivery through the transfer of programs for persons identified with intellectual disabilities. Dickinson (1989) further explains that there came into effect the principle of patient self-management, established in the 1950s and 1960s. This included attempts at individual behaviour modification and social skills training as part of the process of depopulation. An alternative to the approved homes was the group home. These group homes were staffed by persons in non-medical occupations and managed by non-medical community boards. The impact of deinstitutionalization was felt within the education system, especially as new sentiments of community involvement of individuals with intellectual disabilities and the responsibility of the education system for these individuals began to take shape.

## 4.2 Special Classes and At-Risk Students

Depopulation of the institutions affected the education system. As the education system reacted with special classes and segregation of students, the efficacy of special education efforts was questioned. Arthur Jensen, professor of educational psychology at the University of California at Berkeley, was a proponent of the theory that IQ was mainly the result of genetics, and believed that the use of education to remove differences in IQ was folly (Gould, 1981). Jensen's (1972) interest in the area began when he found that minority students in classes for the educable mentally retarded (EMR), those he referred to as "culturally disadvantaged" (p. 6), appeared much brighter socially and on the playground when compared to white, middle class EMR students. As well, minority EMR students were indistinguishable from children with normal IQ except in scholastic performance and scores on a variety of standard IQ tests. Jensen hypothesized that IQ tests may be assessing prior knowledge, where individuals from low socioeconomic status backgrounds (i.e.: minority children) may not have had equal opportunity to learn. Jensen (1972) developed a "direct-learning test" (p. 6) to assess the rate of learning something new within the testing situation. He found that children from low socioeconomic backgrounds performed much better on direct-learning tests relative to middle-class EMR children of the same low IQ.

Jensen's proposal was that the school system may not be taking into account innate differences in ability, which may affect educationally relevant traits and abilities. His proposal was the education system was in need of different educational goals and curricula to provide for the inevitable realization that schools are not able to eliminate individual differences. Jensen's view is based upon his analysis of past research and his conclusion that "Compensatory education has been tried and it apparently has failed"

(Jensen, 1972, p. 69). The failure of compensatory education was based upon the erroneous belief that children are basically homogeneous and much alike in mental development and capabilities. The schools were operating with the assumption that school failure was due to environmental differences and by treating all children alike, early enough, they could learn at basically the same pace. Compensatory education wanted to raise the IQ of disadvantaged students so that scholastic performance would improve.

Jensen's work proposed that the parents of those children who were mildly intellectually disabled were from lower social classes. What a person is capable of learning from the environment and the rate of learning has a biological basis (Jensen, 1972). Even given equal opportunities, individuals differ in the amount, rate, and kinds of learning. Children from minority backgrounds and low socioeconomic status are deficient in the cognitive, problem solving area of ability, which Jensen referred to as Level I abilities. Children from higher socioeconomic status show markedly better performance on higher cognitive and problem solving abilities. Low socioeconomic status students are competent in associative learning ability, which Jensen called Level II abilities. Therefore, the education system should take into account that all children can learn basic skills, as long as instruction does not depend largely on cognitive abilities, or Level I abilities (Jensen, 1972). Individuals with mild intellectual disability are referred to as "cultural-familial retarded" (Jensen, 1972, p. 206). These are the individuals with intellectual disability with no organic cause. These individuals are not as capable of higher order cognitive problem solving, the type of ability that is necessary to achieve in school and attain an education that will result in employment leading to high socioeconomic status. Students with low abilities in complex thinking are more capable

of manual jobs and practical intelligence, and should be educated accordingly. Jensen's solution for those lacking in intelligence (in his view, black children) was to attempt to capitalize on skills for which they were biologically adapted. However, Jensen's work has been debated. A study conducted to attempt to replicate Jensen's finding with White and Inuit children failed to do so (Taylor & Skanes, 1977). Taylor and Skanes (1977) found that White and Inuit children of low socioeconomic status did not differ significantly on scores of Level II abilities, which contradicts Jensen's claim that racial differences account for differential performance on Level II abilities.

Proponents of Jensen's view allowed the burden of scholastic failure to be placed solely on the student. According to Jensen, compensatory strategies that were instituted in the 1960s (such as Head Start programs in the U.S.A.) to produce higher IQs in black people were failing to do so. As a result, it was felt that more should be done to measure IQ, that a better method of measurement was all that was needed to produce gains in IQ's (Block & Dworkin, 1976). Of importance here is the predominant belief that those with a lower IQ were largely from the minority population, and, in fact, it was often the case that those of minority background were identified with an intellectual disability more so than white students.

Jensen's work and hereditarian view were readily denounced by Stephen J. Gould (1981). However, Jensen has replied to attacks against his views, many of which he finds to be overly zealous in their arguments. In response to Gould's *The mismeasure of man* (1981), with its views on Jensen's work as racist and not verifiable, Jensen states that Gould's arguments do not challenge any current scientific ideas on the issues of intelligence and genetic heredity (Jensen, 1982). Jensen reveals that Gould has misinterpreted much of his work, erroneously claiming that he views intelligence as a

distinct, measurable phenomenon. Jensen (1982) claims that he has always maintained the belief that intelligence is a theoretical construct. As well, Gould's claims that intelligence and the *g* factor have been reified, by those such as Spearman and Burt, are unfounded. Jensen (1982) asserts that the works of Spearman and Burt, as well as his own, were conducted as theoretical accounts to help explain the constructs of intelligence and *g*. While these debates lead to scholarly research, the modern importance of understanding a history of intelligence and intelligence testing may not be in the necessity to debunk and vilify past work such as that of Goddard and Burt, but to understand the progression of theory on intelligence and IQ and how it affected public sentiment. The affects of IQ testing on classification and placement of students with intellectual disability are important, and the emphasis (at times over zealous) on IQ scores in these decisions is of import to individual students and special education as a whole.

An article by Gelb (1989) details how through history and continuing into present time a large number of students labelled educable mentally retarded and placed in special education were from minority and poor families. Within today's society, "One might argue that in spite of shifting conceptions, EMR continues to provide support for existing social and economic relations ... redefining public problems as private troubles." (Gelb, 1989, p. 378). An article by Bersoff (1989) traces the progression of mental deficiency, including Goddard's conception of the moron, and how it was deemed to be the cause of criminality. The article relates how difficulties such as poverty and poor environment were masked by an emphasis on low intelligence. According to Jensen, low intelligence was the cause of difficulties in society and the

school, not impoverished environment, and therefore society was not deemed to be culpable.

Despite work by those such as Jensen, understanding and research of students with an intellectual disability was beginning to increase. As part of this better understanding, there was a great deal of research dealing with the early identification of intellectual disabilities and any benefits this may include (Sarason & Doris, 1979). Often intellectual disabilities were not identified until the child entered school and began to fail academically. Early identification resulted in the development of programs to group the same level of students together.

Urie Bronfenbrenner, the Jacob Gould Sherman Professor of Human Development and Family Studies and of Psychology at Cornell University since 1948, has done a great deal of work on early intervention practices and their effectiveness. His work evaluated early intervention strategies for families in poverty in which low IQs were evident in many of the parents. Bronfenbrenner found the most effective intervention programs were those based on cognitive and verbal training (Bronfenbrenner, 1999). Intervention programs that were continued on into the elementary school years showed greater achievement gains, and highly structured curricula also provided for marked improvement. Bronfenbrenner goes on to reveal that family factors, such as the number of children in the family and level of parents' education, account for the lack of intervention gains, not school factors. Most importantly, intervention strategies that concentrated on maximizing mother-child interactions produced gains in cognitive and emotional aspects and resulted in gains that endured past the period when direct interaction ceased (Bronfenbrenner, 1999). Parent involvement with the child increases the likelihood that later preschool program

intervention will be effective and have lasting effects. Bronfenbrenner's work brings increased awareness to the importance of intervening to improve home factors as well as school performance, and that the involvement of the parent is paramount to allow for enduring intervention gains.

While early intervention strategies have been widely researched, not all research is in agreement with Bronfenbrenner's findings on the efficacy of home-based intervention strategies. Some researchers agree with Bronfenbrenner, stating that while providing intervention in a centre setting is more cost-efficient and more accessible, long-term benefits are not as likely when compared to home-based intervention (Zahr, 1994). In other research with home-based intervention, initial findings indicated decreasing developmental scores as children aged and intervention continued (Ryan, 1976). Ryan (1976) concluded that more research needs to be conducted to determine the different factors that may affect success (or failure) of home-based intervention programs. The work of Powell (2001) acknowledges the significant influence of Bronfenbrenner's work on the effectiveness of early intervention when programs include ecological intervention in the form of family support systems. However, support for his work is mixed. Programs working with children beginning at two years of age result in only small effects on children's intellectual achievement, and no effects as the child reaches preschool, suggesting program effects are not sustainable (Powell, 2001). An alternative procedure where books and toys were provided, but no home visits were included, was as effective as the full program with home visits on benefits to children's IQ. In another program, intervention was provided for counselling with families, as well as a service plan where the needs of the family was assessed and they were helped to receive the necessary services (Powell, 2001). Results of this study found no important



positive effects on parents or children when compared with control group families.

Powell (2001) stated that the community environment for disadvantaged families may be impoverished, and therefore gains may be linked to efforts to support the community and parents and children, instead of focusing only on family dynamics without considering their community conditions.

#### 4.3 Increasing Work on Defining Intellectual Disability and Assessment

After 1950, the definition of intellectual disability was under more scrutiny and heavily debated. Indeed, the best way to measure and define intellectual disability was an area of much research and contention that began to have repercussions for formal definitions of intellectual disability. Whereas terms such as mental deficiency and moron were used in earlier conceptions of intellectual disability, the argument over what term to use to refer to individuals with an intellectual disability has continued. The term mental retardation has been in wide usage and often used as the term that is purely diagnostic, a practice which continues to present day. However, the specific operational definitions that encompass the term of mental retardation have also changed throughout time. The forerunner of the American Association on Mental Retardation (AAMR), known as the American Association for the Study of the Feeble-minded, published the first edition of a manual defining mental retardation in 1921, together with the National Committee for Mental Hygiene. Further revisions of the manual occurred in 1933, 1941, and 1957 (Beirne-Smith et al., 1998); after these editions, a number of further changes began to take place which affected the classification of mental retardation. In particular, the intelligence (or IQ) score necessary to identify children as intellectually disabled was debatable and changed throughout history. The AAMR was a major force

in determining definitions for mental retardation. The definitions established by the AAMR were used by medical practitioners, and other institutions practicing assessment, to determine which individuals were to be considered intellectually disabled.

The development of a definition of mental retardation as established by the AAMR is important to consider, because of the affect it had on assessment and intervention for individuals with an intellectual disability. The AAMR developed a definition of mental retardation in 1959: “Mental retardation refers to subaverage general intellectual functioning which originates during the development period and is associated with impairment in adaptive behaviour.” (Beirne-Smith et al., 1998, p. 68). In this definition, *subaverage general intellectual functioning* referred to an IQ score of at least one standard deviation below the average IQ score on a standardized intelligence test, which would indicate a score below 85. Prior to 1959, the cut-off score for identifying intellectual disability was accepted as an IQ of 70 (Vitello & Soskin, 1985). These changes were a reflection of the attempt to identify disadvantaged children in need of compensatory and special education programs (Vitello & Soskin, 1985). Within the AAMR definitions, the concept of adaptive behaviour is included as its intention is to refine the definition of mental retardation and acknowledge the fact that mental retardation was amendable to change. However, measures of adaptive behaviour have not met with consensus on their efficacy, and there are professionals who favour a definition based solely on an intelligence measure (Beirne-Smith et al., 1998).

H. J. Grossman, one of the authors of the definitions for the AAMR, in 1973, defined intellectual disability as two standard deviations below the mean on standardized intelligence tests (Vitello & Soskin, 1985). This new definition resulted in a dramatic reduction of the prevalence rate of intellectual disability. As can be demonstrated by the

variance between the 1959 and 1973 AAMR definitions, the debate about definition is contentious, as setting a lower cut-off score can make students ineligible for services they may require. The major differences between the two definitions was the cut-off score in intelligence and the 1973 definition further emphasized the relationship between intelligence and adaptive behaviour. While dominant definitions, such as those determined by the AAMR, consider a measure of adaptive behaviour important to any diagnosis of mental retardation, the degree to which adaptive behaviour is considered in assessment and diagnosis is not universal. The AAMR's 1977 definition remained much the same as the 1973 definition. The 1983 definition of the AAMR remained with a cut-off of two standard deviations below average intelligence, but deemphasized strict adherence to standard deviations. The 1983 definition allowed an extension of the IQ limit up to 75 or more, allowing for measurement error inherent in standardized tests. While institutions, such as education, indicate that relying on just an intelligence score is not sufficient for determination of an intellectual disability, the inclusion of an adaptive behaviour measure is not always practiced before placement in special education classes for individuals with a mild intellectual disability. Not coincidentally, the definitions developed by the AAMR reflects the measurement of human attributes which are deemed worthy by society – those attributes of intelligence and social competence (Vitello & Soskin, 1985). The 1980s saw a move toward the concept of developmental disabilities as a way to classify individuals with an intellectual disability. This incorporated a focus on functional abilities of the individual and was to serve to decrease the need to label people (Lowitzer, Utley, & Baumeister, 1987).

The 1992 definition of the AAMR signalled a shift in the definition of mental retardation. The definition was as follows:

Mental retardation refers to substantial limitations in present functioning. It is characterized by significantly subaverage intellectual functioning, existing concurrently with related limitations in two or more of the following applicable adaptive skill areas: communication, self-care, home living, social skills, community use, self-direction, health and safety, functional academics, leisure and work. Mental retardation manifests before age 18 (Beirne-Smith, et al., 1998, p. 77).

The definition was a shift to a more functional definition of mental retardation. The essential element of the definitional shift was that mental retardation was no longer conceived of as an absolute trait of the individual, but was conceived of as the interaction between the person with an intellectual disability and the individual's environment (Schalock et al., 1994). It was also divergent from earlier definitions in that it suggested a discontinuation of reference to levels of severity (mild, moderate, severe, profound) and suggested classifying on the basis of needed levels of support. The classification of the individual was deemphasized and classifying the services necessary to support the individual was seen as a positive shift. The 1992 definition was met with wide disfavor from the professional community, and few state departments adopted the definition (Beirne-Smith et al. 1998). As a result, the American Psychological Association developed its own definition of mental retardation in 1996 that returned to the classification of severity of mental retardation.

As has already been related, the changing conceptions and definitions of mental retardation had significant impact upon the education of individuals with intellectual disabilities. Depending upon the definition and criteria of intellectual disability used, a student could be classified as intellectually disabled or not, and this had extreme repercussions for the students educational placement and services provided for them. For example, Zigler, Balla, and Hodapp (1984) contend that "The problem with many of our common terms is [that] they lack rigorous definition and are therefore confusing. To

illustrate, where exactly does ‘training’ end and ‘education’ begin?” (p. 222). The authors provide evidence that illustrates prevalence rates for individuals with intellectual disability is greater for those of school age. This coincides with the conception of the *six hour retarded child*, which proposed that students are intellectually disabled when in the context of the school, but are not disabled within everyday life outside of school (Beirne-Smith et al., 1998). One of the difficulties of intelligence testing, as has been previously illustrated in this paper, is that many culturally disadvantaged or minority children are identified as intellectually disabled, and the dubious practice of using IQ tests to label individuals as intellectually disabled has led to these misclassifications.

Despite the difficulties with using intelligence as a parameter of the definition of intellectual disability, Zigler, Balla, and Hodapp (1984) indicate that the fundamental distinguishing factor of intellectual disability is a less efficient cognitive system, or decreased IQ. They propose that a definition of intellectual disability should be based solely on intelligence, and that a determination of how poor intellectual capacities must be to warrant a definition of intellectual disability should be agreed upon. They also indicate that an individual should be tested more than once due to measurement error in intelligence tests. The authors believe a measure of adaptive behaviour should be abandoned due to the fact that valid and reliable measures of the concept have not been found, and the prevalence of intellectual disability fluctuates too much when including it in a definition of intellectual disability.

#### 4.4 Growing Unease with Segregation

An article by Lloyd Dunn in 1968 proved to solidify a growing dissatisfaction with segregation practices and led to intense debate and new ideas on education and how

to educate students with learning difficulties within the United States. Dunn (1968), himself a professional from within special education, began to question special education, and promoted the idea that a better education was necessary for children he characterized as socioculturally deprived with mild learning *difficulties* who had been labelled as educable mentally retarded. He wanted to cease labelling deprived children as retarded, as well as a cessation to placing them within special programs. He charged that special education only served to relieve pressure from teachers within regular education and was done at the expense of the children. Dunn charged special classes as being no more than a tracking system and they were a disadvantage to students, who could learn better from being within regular classrooms (Dunn, 1968). Education for students in special classes seemed to end once diagnosis was complete and something was found to be wrong with the student. Dunn also condemned the practice of assessment by way of individual intelligence tests and the reliance on these scores to place students in special classes.

Special classes were less justifiable due to the belief that regular education was now better equipped to deal with individual differences, citing improvements in school organization, curriculum changes, and increases in professional school personnel (Dunn, 1968). Dunn promoted the mainstreaming of special class students, where special educators could serve as consultants and develop instructional materials to aid in the education of students with learning difficulties. The use of *Special Education Diagnostic and Prescription Generating Centers* was suggested, in which students would undergo psychoeducational testing to determine each child's baseline level of performance (Dunn, 1968). From there, a program would be designed for each pupil and the home school would be responsible for applying the individual programs within

the course of regular education. Special educators would serve as support and resource for regular education teachers and function as a part of the regular education system. The role of special educators would change and with these new procedures the necessity of disability labels would be reduced.

Dunn also saw the need for curriculum development; he believed there was an overemphasis on practical arts and practical academics. The new system of integrated education would require networking with other professionals to provide environmental modifications for students who required help. He envisioned collaboration with specialists such as social workers and public health officials. The needs of these students could most effectively be met by manipulating their environments, through such procedures as foster home placement, improved community conditions and out of school activities, and parent education (Dunn, 1968). Emphasis needed to be placed on social interaction training and vocational training to provide for success and independence for the individual student. Overall, Dunn believed special education was ineffective and only served as a way for regular education to ignore individual differences. He envisioned an ecological approach to education in which students were educated in response to their complete environment, including home and background. With the publishing of Dunn's article in 1968 many professionals began to question the efficacy of special education as a separate entity. The changes he proposed to the education system, from educational placement to curriculum development, produced a shift in education and a move towards new practices for the education of students with mild intellectual disabilities felt in the United States, but also with strong consequences for education in general, as well as special education, in Canada.

Dunn's article was well received in the 1960s, partly as a result of the time in which it was published. Professionals in special education welcomed Dunn's ideas due to the fact that students identified as mildly intellectually disabled and educable mentally retarded (EMR) consisted of such a large number, and special education programs serving these students were overcrowded (MacMillan, Semmel, & Gerber, 1994). MacMillan et al. (1994) go on to argue that Dunn's protest against special day class placement for EMR students was based on his observation that EMR students of the time were not a homogeneous group, and would not all benefit from segregated class placement. Due to the changes experienced in the definition of intellectual disability since Dunn's article, a decrease in the number of individuals eligible for classification as intellectually disabled has occurred, and as a result, arguments about the functioning of EMR students would not be the same today. The definition of intellectual disability has changed from including those with an IQ of 70-85, to including only those with an IQ of less than or equal to 70. Changes to regular education that took place after Dunn's article, such as a stricter curriculum focusing on increased achievement, as well as higher pupil-teacher ratios and less resources in regular education, served to minimize the success Dunn projected EMR students would enjoy in regular education (MacMillan et al., 1994). The authors warn that advocacy for regular education of all students classified as EMR fails to examine individual differences in these students, as well as failing to analyze what would be in the best interest of the individual student. While Dunn's article prompted major changes in special education, there are obviously those who would disagree with some of his arguments. The debate is carried on into present day, despite the fact that inclusion, which will be discussed later on, has been fully embraced by the education system. The degree to which inclusion can be successful is



also debateable, given the present state of education. However, these are considerations which are being grappled with in the 21<sup>st</sup> century.

#### 4.5 A Move to Integration

The use of specialized staff in the schools, such as counselling and assessment staff, were used by teachers to diagnose and place behaviourally or academically difficult students out of the regular classroom (Tropea, 1987). Special placement of students began to be questioned and litigation against segregation resulted in schools needing to find an alternative method to remove difficult students from the regular classroom. Consequently, students formerly referred to as *academic* problems were recast as having *behavioural* problems in order to escape court decisions disallowing segregation based on academic reasons that over determined minority groups. Diagnosis and placement of students would also shift due to court decisions, and specialized staff would re-label students as having behavioural or emotional problems and place them in new segregated programs for these newly labelled students. Another method used to deal with difficult students when elimination of the segregation of students was disallowed was the lowering of performance standards to compensate (Tropea, 1987). As practices in the schools were transformed, it was necessary to accommodate for students deviating from the norm, and the school system reacted by lowering standards to allow students to compete and be eligible for advancement through the graded system.

Progress in the education system was often initiated by the passing of laws and litigation to fight for appropriate education and the rights of persons with an intellectual disability (Scheerenberger, 1987). The landmark case of *PARC versus Commonwealth of Pennsylvania* (1972) in the United States, resulted in a judgement that it was a

violation of the rights of students with an intellectual disability to deny those with severe intellectual disabilities an education (Bersoff, 1982). The judgement from this case led to further litigation on the right to education. The cases brought on the right to education increased and sanctioned the move to integration and led to inclusive measures to come in the 1990s. Litigation at the time challenged the definition of *appropriate education* as set out in the *Education for all handicapped children act* of 1975. Litigation also challenged the schools' use of individual intelligence tests to classify students and place them in special classes for the educable mentally retarded. Two cases in the United States, *Larry P. versus Riles* (1979) and *PASE versus Hannon* (1980) challenged the use of IQ tests to classify black children. The *Larry P.* case saw the courts forbid schools from using standardized tests to identify black educable mentally handicapped students or place them in educable mentally retarded (EMR) classes. The court's decision stated that intelligence tests were discriminating against black students.

Bersoff (1982) details how the judgement of the court in the *PASE* case, however, did not find in favour of discriminatory practices and bias in intelligence tests. The judge ruled the placement of black students in EMR classes was not discriminatory due to the fact that assessment of the children was based upon more than an IQ test, and the examiner interpreted a variety of information to come to placement decisions. Litigation that occurred at this time had damaging effects upon the public's view of EMR classes. The view was that even for those students correctly diagnosed and placed in EMR classes, the conditions in the classes were damaging and not resulting in improved success for the students. Both the *Larry P.* and *PASE* cases condemned the use of intelligence tests as the only criteria for classifying and placing students in EMR

classes (Bersoff, 1982). The consequent move away from special classes to integration, which began in the 1960s, was based upon civil rights cases, such as those mentioned above, and efficacy studies detailing how special classes were not proving to be effective in teaching the students in special classes. Legal action was also evident within Canada, which can be seen in the case of *Bales v. Board of School Trustees (Central Okanagan)* (1984) (Stack, 2001). The case involved Aaron Bales, a student who received a segregated educational placement under direction of the school. Bales' parents argued that the school could not deny their son an ordinary education and that the school board had no authority to create segregated institutions. Stack (2001) details that the court did not agree with the prosecution and decided that the school had the authority to make placement decisions and that the school board's responsibility was only to provide a sufficient education. In today's situation, the Bales' case may have received a different result, based on the new section in the Canadian Charter of Rights and Freedoms, which deals with equality without discrimination based on mental or physical disability (Stack, 2001).

Integration made a progressive movement to ideas of mainstreaming during the 1970s. Mainstreaming was overtaking the school system, and causing many problems for curriculum and how students were being taught. The term mainstreaming was introduced to indicate that students with an intellectual disability should be educated in the regular classroom with their age peers (Ysseldyke & Algozzine, 1982).

Mainstreaming in the 1960s and 1970s resulted in the declassification of many students labelled as educable mentally retarded, or their reclassification as learning disabled (Vitello & Soskin, 1985). From the 1970s through the 1990s, there was an increase in the numbers of students identified with a learning disability, with a proportionate

decrease in the number of children identified as intellectually disabled (Valencia & Suzuki, 2001). Those now identified as learning disabled would previously have been labelled with an intellectual disability, but changes to definitions of intellectual disability, as well as the decreased societal stigma of learning disability, resulted in the shift. Mainstreaming during this period met with detractors, who believed that it was resulting in compromising the education of nondisabled students and the costs were too high. As well, Vitello and Soskin (1985) describe how mainstreaming was seen as the continuing *levelling* of education which constituted raising the academics of children at the bottom of educational achievement at the cost of lowering academically those children who are average or above average.

A review of educational policies in Canada, published in 1974, was conducted by Robert Sanche that reviewed the period from the 1960s to 1970s. Within this survey the term *children with special needs* was used and students were further categorized into educable and trainable retarded based upon the degree to which they were believed to be capable of education (Sanche, 1974). Sanche's review found that educational objectives for students with mild intellectual disabilities were seen to be the same as for other students, except for lower academic expectations. Deinstitutionalization was having an effect on education at this time, and there was also a shift to desegregation of educable mentally retarded. This was followed by a resultant decrease in special education teachers and an increase in resource teachers. During this time there began a shift towards shared services to better serve the needs of students with special needs in rural areas (Sanche, 1974).

Sanche notes that more attention is given to the diagnosis of children than to the remediation of intervention services for identified students. The same curriculum was

promoted for all students, with necessary adjustments made to accommodate individual students. However, for the population of students identified as retarded, special curriculum was developed. At the beginning of the 1970s, specialized curriculum for students with mild intellectual disabilities in Saskatchewan was authorized only at the secondary level, with a system based on a half-time work and half-time school program called Cooperative School-Work Training Program (Sanche, 1974, p. 20). The number of students with an intellectual disability served in the public and separate schools in Saskatchewan steadily increased from 1953 (168 students) to 1973 (3,215 students). The provision for specialized services within Saskatchewan changed when the 1971 legislation was enacted, making it mandatory to provide appropriate education and services to individuals with an intellectual disability (Sanche, 1974).

As sentiments toward integration progressed, agencies such as the Saskatchewan Association for the Mentally Retarded began to place the responsibility for the delivery of services for individuals with an intellectual disability on society and the way in which society regards these individuals (Saskatchewan Association for the Mentally Retarded, 1976). The association was promoting community-based services for individuals with an intellectual disability. Compulsory attendance was legislated for students between the ages of 6–21, but exceptions to compulsory attendance were allowed. The Association wanted the exceptions to be removed, and the schools to be made responsible for children five years of age or older, with permissive legislation for those with special needs less than five years of age. Furthermore, the Association claimed that if regular education teachers were properly trained, more children would be adequately taught and there would be less need for special services (Saskatchewan Association for the Mentally Retarded, 1976).

#### 4.6 Legislative Action and Move to Desegregation

In 1975, the *Education for all handicapped children act* (USA Public Law 94-142) was passed in the United States (Sarason & Doris, 1979). The litigation cases on the right to equality of education led to changes in special education policy and to the passing of the *Education for all handicapped children act* (Stack, 2001). Every person with an intellectual disability was seen to have the right to an education. Students identified with intellectual disabilities became integrated into classrooms and into ordinary environments. An interesting supposition is raised by Sarason and Doris (1979), in which they propose a major factor in the determination of an intellectual disability is the educational system itself. They base this upon the observation that often those with mild intellectual disabilities are not identified prior to school and may disappear from view upon leaving school. They state that

[T]o the extent that we have set goals of achievement for individual children that are either unrealistically high or low, we have ensured the development of that educationally disordered child, with cognitive and social handicaps, that we relegate to the special classroom (Sarason & Doris, 1979, p. 155).

The question of who sets these limits or expectations of achievement is debateable. While it is evident that the school divisions and the education system in general set these expectations, it is also true that society has an impact on the ideals of achievement that should be included in the education system. The law was passed to provide positive guidelines for the placement of students in special education. Testing procedures were to be non-discriminatory as well as comprehensive. Assessment was not to depend entirely upon one single criterion (such as an IQ score) for determining an appropriate placement for students.

*Education for all handicapped children act* (1975) made it policy that students with an intellectual disability were taught in the *least restrictive* environment, and the necessity for Individual Education Plans (IEP) for every student with an intellectual disability was incorporated. The least restrictive environment was incorporated to ensure that students with an intellectual disability were included in the regular classroom as much as possible (Sarason & Doris, 1979). An IEP was to be developed for every student with an intellectual disability, and was used to develop a program for each student and document their progress throughout the program. The comparative law passed in Canada was *The education amendment act* (Bill 82) in 1980 (Tomkins, 1986). The bill mandated universal access for all of Ontario's school age pupils to a public education, regardless of their needs. Tomkins (1986) outlines that the bill included special curriculum supports and required parents to be involved in the assessment, identification, and placement of exceptional pupils. While these movements were made to reduce the stigma of an intellectual disability, the opposite effect was noticed, with more pullout classes, where students were removed from the regular classroom and instructed in a different area of the school, or a different school altogether, and the use of separate resource rooms to educate students with an intellectual disability (Tomkins, 1986). The resource room was a separate classroom in the school with a separate teacher to provide instruction to the student with an intellectual disability. Within Saskatchewan, the *Education act* in 1978 made clear that integration was the preferred method of placement and mainstreaming was mandatory (Smith et al., 1995). The *Education for all handicapped children act* was amended in 1990 with the *Individuals with disabilities education act* (IDEA) (Winzer, 1996).

#### 4.7 Focusing On Curriculum

In 1978, Saskatchewan Education developed the *Teacher guide for division III educable mentally handicapped students*, a guide for teachers of educable mentally handicapped students. The guide was developed under the mainstreaming philosophy and was aimed at providing *optimum self-actualization* for students (Saskatchewan Education, 1978, p. 1). The guide came as a response to the realization that the instructional model for curriculum may not benefit all students within the education system. However, the development of the guide determined that the goals and purposes of special education curriculum should be the same as those for mainstream education. The teacher guide was moving forward with new information on mainstreaming and learning potentials for students with intellectual disabilities, and stated that students who were educable mentally handicapped (EMH) were limited only in their academic potential. As a result, instruction in life skills and a functional curriculum was emphasized. Those individuals classified as EMH were defined by an IQ of 50–70. Guidelines were set out for the comprehensive assessment of students with an intellectual disability, including teacher observation, psychological tests, adaptive behaviour, and tests of ability and achievement.

Showing adaptation to changes within the education system, namely a move to mainstreaming and deinstitutionalization, it was determined that teacher competencies required knowledge of institutionalization versus community-based programming, as well as the normalization trend and knowledge on cultural-familial retardation. The *Education for all handicapped children act* (1975) mentioned the need for the least restrictive environment when placing individuals with an intellectual disability. As a result, new research and knowledge on learning mechanisms (how children learn) and



development of individuals with an intellectual disability was incorporated into the guide, where information was provided on the necessity for students to over learn concepts and overlap concepts in curricular areas. The need to teach social skills was reinforced. As well, the realization that students required the opportunity to apply learnings in real life situations was highlighted. The mental health of students was still important at this time, and the teachers were instructed to be sensitive to students' interpersonal relationships. As well, the explicit teaching of the appropriate use of leisure time was incorporated into the guide, an adaptation to the offered curriculum that students within the regular classroom did not receive.

Changes to the curriculum, with a broadening of what students with intellectual disabilities should learn, resulted in the inclusion of specific standards and guides for vocational skills. These changes to curriculum were seen as necessary to provide the most appropriate education for these students and help them become successful within their community. As a result, the involvement of the community in teaching was described as important to student success. The curriculum proposed in the guide included functional academics, which included the areas of communication skills, mathematics, and science. The teaching of communication skills was seen as important in order to help students become socially competent. The areas of functional mathematics and science were also explained as to how they relate to everyday life for the student and necessary information the student requires to move toward independence. Within the teacher guide for EMH students it is apparent that mainstreaming principles were having an effect on curriculum considerations and the type of curriculum offered. Student diversity and individual differences were

highlighted, and an in depth analysis of how to provide an effective curriculum for students with an intellectual disability at this time was provided.

#### 4.8 The Regular Education Initiative

By the 1980s, ideas on integration and mainstreaming and their practice during the 1960s and 1970s began to shift. A by-product of segregation, which proved problematic for integration and mainstreaming initiatives, was that teachers from the regular and special classes were segregated from each other as well. The solution, proposed in the 1980s, was the Regular Education Initiative (REI) that would incorporate children with diverse needs into one classroom (Winzer, 1996). The idea was that students identified with an intellectual disability would benefit from the improvement of education for all students. The sentiment grew that two systems of regular and special education was conducive only to more divisiveness within the educational system and was not resulting in appropriate interventions and services for students. The belief was that the instructional needs of students did not warrant a dual system (Stainback & Stainback, 1984). Individual differences were realized to be inherent in all children and do not delineate *exceptional* from *normal* children. The idea that individualized programming should occur for all students based upon their specific needs was proposed. Saskatchewan Education, in 1991, developed some guidelines for placement decisions based upon mainstreaming and integration models (Saskatchewan Education, 1991). In regards to placing students with special needs, the word mainstreaming was “commonly used to refer to placement of exceptional children with peers” (Saskatchewan Education, 1991, p. 3). Integration was viewed as “a term often used synonymously [with mainstreaming], but, properly practised, involves a carefully

determined placement made after considering the needs and strengths of the home, school, and community environments” (Saskatchewan Education, 1991, p. 3).

Stainback and Stainback (1984) describe that the dual system operating at the time required classification of students to determine who required special services. However, the effort expended to this end did not lead to improvement in instructional methods. The dual system separates professionals and resources between the two systems and results in inefficiency. A needs-based approach which takes into consideration individual students was seen to better serve the students than a system based on classification (Stainback & Stainback, 1984). The unification of curricular offerings from special and regular education systems would result in students having access to resources based upon their need for them, and not on their classification and eligibility for them. A merger of professionals from both systems would result in a unified support personnel and the ability to work on improving instruction for students as it was needed. The special approach to education inherent in special classes included the belief that students with learning difficulties could not be effectively taught in the regular classroom, even with increased supports (Will, 1986). Will (1986) goes on to explain that often special programs address failure rather than focussing on prevention measures, and further elucidates the tendency of special classes to rely on classification, resulting in students in need of resources being ineligible to receive support. Special and regular education need to contribute skills and resources to carry out individualized student plans that are based on individual student needs. Will (1986) was supporting the REI initiative and promoted the acceptance of the general applicability of special education techniques beyond special education. The key to success and efficacy for

students within the school system lies in “the creation of a more powerful, more responsive education system” (Will, 1986, p. 415).

#### 4.9 Normalization

The principles of normalization were introduced into education to move beyond integration and mainstreaming (Barton & Tomlinson, 1984). The term normalization meant that individuals with an intellectual disability should be incorporated into everyday community life and grouped with their peers in regular education. Wolf Wolfensberger, Director of the Training Institute for Human Service Planning, Leadership, and Change Agency at Syracuse University, was responsible for a great deal of the work on normalization principles. Wolfensberger was concerned with the fact that even into the 1960s, *service* for individuals with an intellectual disability consisted only of the assessment of these individuals and no intervention (Wolfensberger, 1999). Normalization came as a reaction to institutionalization and the continued trend of segregation. Normalization principles centred on the belief that high expectations and adaptive environmental structures could accomplish a great deal with individuals with a disability. Normalizing an individual’s environment is necessary to lead the individual to a life which is normal by societal standards.

Wolfensberger found the integration and mainstreaming movement too simplistic and believed normalization, with its ideals based on enabling an individual to lead a normal life by providing them with normal conditions, was better able to serve individuals with an intellectual disability (Wolfensberger, 1999). Normalization principles required explicit, directive advice be given to families of individuals with an intellectual disability when necessary (Wolfensberger, 1983). Information is often

withheld from families because, in Wolfensberger's view, professionals want to remain in control of the situation by being the only ones to have the pertinent information. This sharing of information with families and involving them in service supports and intervention can be seen to be reflected in the progression of policy for how to conduct special education programs. Normalization principles were based on the philosophy that all individuals should be provided with an environment and education as close to normal as possible (Winzer, 1996). Individuals with intellectual disabilities fulfill a variety of roles within general society.

Curriculum reform that was initiated with the advent of the R.E.I. in the 1980s, largely addressed the at-risk population of students who were seen as being able to succeed in school with proper reforms, but individuals with mild intellectual disabilities were largely ignored (Pugach & Warger, 1996). While the trend has been towards individualizing education programs for all students, programs for students with mild intellectual disabilities have not been. The emphasis remains on a deficit approach to education that does not include an assessment of skills to teach the students. Pugach and Warger (1996) condemn the continuing trend of education to adapt the needs of the individual to make them successful in achieving the same curricular goals. Adapting the standard curricula has led to little curricular modification. The authors go on to say that the use of the Individualized Education Plan (IEP), which was meant as a method of curriculum reform, is used only to adapt instruction and not the curriculum (Pugach & Warger, 1996). An increased emphasis on curriculum reform may result in a lessened necessity of adaptation and special education.

#### 4.10 Legislation and Policy Based on an Integrative Model

*Special education: A manual of legislation, regulations, policies and guidelines*, developed in 1982, includes the philosophical position that “All handicapped children can be educated and/or trained for more complete and productive lives” (Saskatchewan Education, 1982, p. 1). As the ideas on integration progressed at this time the policy manual states that integration is to be practiced when it is *profitable* for the individual, indicating that the move towards integration was not currently considered necessary (Saskatchewan Education, 1982, p. 1). However, difficulties with assessment and placement were recognized, as the manual states that minority and/or individuals of low socioeconomic status should not be placed in special education as a reaction to the lack of other appropriate educational placement. Cautions were warranted to be vigilant against practices of labelling and generalizations of the special education population as a result. Allowances were still made within the policy to exclude from education attendance those pupils viewed as incapable of responding to instruction and those who may be detrimental to the education and welfare of other students. Integration was proposed where feasible, with special classes providing an alternative. Parental involvement as integral to special education programs was beginning to be recognized within policy, in that diagnosis and assessment of students for placement was to be conducted with the knowledge and consultation on the parents or guardians. Explicit permission from the parents or guardians is not mentioned.

*Special education: A manual of legislation, regulations, policies and guidelines* (1982) referred to students identified with a mild intellectual disability as *low-cost handicapped pupils* (Saskatchewan Education, 1982, p. 12). Those designated as low-cost disabled included the educable retarded. The classification was intended to provide

funding for long-term planning of services, and was incorporated “To acknowledge the unreliability that sometimes exists in approaches to identifying the mildly to moderately handicapped child” (Saskatchewan Education, 1982, p. 28). Provisions were set out for the identification of pupils with an intellectual disability, including annual surveys largely based on teacher nominations for those children suspected of having an intellectual disability. Screening by teachers “should be supplemented [by normative, group-referenced tests] whenever appropriate” (Saskatchewan Education, 1982, p. 24). Provisions were beginning to be instituted for services to pre-school children identified with a handicap, providing a focus on early intervention strategies. However, the child had to meet the criteria for a severely handicapped student. As a result, preventative measures and intervention strategies for children with mild intellectual disabilities was not provided. This may be related to the ambiguity of identifying mild intellectual disability and the fact that often mild forms of intellectual disability are not detected until school entrance. The necessity of the cooperation of agencies to serve students with an intellectual disability was recognized, and models for the planning and coordination of cooperative services were detailed. *Special education: A manual of legislation, regulations, policies and guidelines* (1982) incorporated a realization that identification and placement of students with an intellectual disability had been discriminatory and required a more integrative and cautious approach. However, classification and funding standards were still incorporated that made large scale changes to practices and provision of services difficult.

An updated *Special education policy manual* was published by Saskatchewan Education in 1989. The manual acknowledged the need for special education to incorporate new research and information determining that exceptional pupils have

varying abilities and levels of educational achievement (Saskatchewan Education, 1989). A burgeoning realization and acceptance of student diversity was beginning. A balanced curriculum consistent with the goals of education was emphasized. Earlier in the 1980s Saskatchewan Education had developed goals for education, as well as explicit guidelines on future directions for education, including determinations for a Core Curriculum and six Common Essential Learnings (CELs) that were deemed necessary for all students within Saskatchewan. These necessities were also seen as appropriate for students with an intellectual disability. The Core Curriculum and CELs could be provided by incorporating the Adaptive Dimension of curriculum to modify programs based on individual needs. Also, the manual stated the use of alternative education may also be necessary, which may range from qualitatively different programs to functional curricula.

According to the policies laid out in the *Special education policy manual* (1989), a modified curriculum was also necessary to properly provide for the education of those with an intellectual disability. A modified curriculum could be developed through means of modifying the content and process of curriculum, as well as modifying methods of instruction according to individual needs. The placement of students should be based upon identified needs and maximize opportunities for interaction between disabled and non-disabled pupils. Also, a realization of the need to provide for transitions within a special education program was incorporated. Programs with explicit transition planning were necessary to allow for maximum success and independence of students identified with an intellectual disability. These included transitions from home to school and within the school system. The needs of the student and an understanding of desired independence level were incorporated into transition planning. While it was



increasingly realized that individualization was integral to special education, it was also determined what an appropriate program consisted of for these students. An individualized and appropriate program was to be determined through a process of “comprehensive assessment, planning and consultation involving educators, parents or guardians, pupils and support personnel” (Saskatchewan Education, 1989, p. 22). The result of such a process was a personalized program plan (PPP) for each student.

The *Special education policy manual* (1989) stated that early childhood education was warranted for at-risk and disabled preschool children. However, it was again the case that the child must meet criteria for a high-cost disabled student to qualify for early intervention measures. The classification system was incorporated, resulting in the possibility that students in need, who would benefit from early intervention, may not receive services. Placement of students within the special education program was seen to be affected by a number of different factors, including the nature of the educational needs of the student, the range of services and sites available, and the wishes of the student and parent or guardian (Saskatchewan Education, 1989). Students classified as educable mentally disabled were still classified as low-cost disabled. These pupils were seen as possibly requiring an educational program more specialized than the regular curriculum, and programs based on identified needs were the responsibility of the school. However, high cost funding was not available for these students. The manual was developed with an increased understanding of the need for individualized instruction, but the classification and funding structure were still present and posed difficulties for necessary amendments to programming for students with needs who did not fit categories for increased funding. As Core Curriculum and the CELs were incorporated into special education programming, the integrative model was

increasingly realized. However, distinct provisions necessary for appropriate programming were still to be determined.

Also developed in 1989 by Saskatchewan Education was a document aimed at curriculum and educational programming. The *Meeting challenging needs* (1989) document included curriculum and programming envisioned for the population of students identified as trainable mentally retarded and multiply handicapped, and not necessarily for individuals with mild intellectual disabilities. However, the document did make progress in programming for special needs, in that it focused on the necessity of basing curriculum on the knowledge that students with challenging needs (a term used throughout the document) learn at different rates and in different ways than from students within regular education. The former practice of assessing developmental age and choosing curriculum upon the skills students were lacking was not efficient and effective. Curriculum should be based upon students' current and future needs, as well as the students' community within which they reside (Saskatchewan Education, 1989). Programming and curriculum was to be based on functional skills, involve parents and the community, be future-oriented, inclusive, and provide individualized instruction in the form of individualized education plans (IEP's). Suggestions for developing IEP's were provided within the document.

Programming should include the areas of cognitive, academic, motor, communication, and social skills, as well as work, leisure, and personal management. The least restrictive environment was again promoted, and defined as that environment which is "most enabling for the student" (Saskatchewan Education, 1989, p. 17). A continuum of placement was proposed, where students move to more enabling placements as the needs of the student change. An important departure was mentioned

in this document for the way in which services to students should be provided. The traditional multidisciplinary teams were often used, where professionals work with students and each professional provides an individual report. The team members were not involved in developing student programs and communication between professionals was minimal. A more favourable approach was suggested in the form of a transdisciplinary team, in which professionals teach others (teachers, parents) how to implement interventions for the students. Team members' work together to develop goals and objectives for the student. As well, the importance of community-based instruction is discussed, as it pertains to helping students develop beyond school experiences and become independent within their everyday lives. *Meeting challenging needs* (1989) may be viewed as a reaction to normalization principles and a shift to more inclusionary practices. As these shifts were incorporated into policy and practice, curriculum was increasingly seen to require a specific functional component that would allow students to participate in environments and society that others would participate in; and to participate on more equal ground with those not identified as intellectually disabled.

#### 4.11 Alternative Assessment Procedures

As Saskatchewan Education continued to develop policies and directions for special education, there was increased work on specific ways to assess students with intellectual disabilities. While Saskatchewan Education did make mention of necessary and appropriate practices for individual assessment of students suspected of intellectual disability, details on how to conduct assessments and what best practice might entail were not extensively dealt with. While largely dominated by the use of intelligence

tests, there are examples of alternative methods for assessment that have been researched and garnered attention. While these alternatives have been noteworthy and have been recognized for their methods and proposed effectiveness, their acceptance and adoption for use within the education system may be debated. While such research into alternative assessment practices have been warranted for their ability to remedy some of the problems with intelligence testing that have been mentioned so far (e.g.: over-representation of minorities based on intelligence testing), their ability to make the transition to everyday use within schools has not been noted.

One alternative method of assessment that garnered interest in the 1970s was goal attainment scaling (GAS). GAS is an alternative method of assessment which allows for specific goal setting and subsequent monitoring of progress to evaluate outcomes in a program or intervention method (Carr, 1979). Within the system, goals are specified and behaviours indicating the achievement of these goals are described in concrete and measurable terms and placed on a continuum of success. Goals are to be mutually determined by the individuals involved, such as the student, teacher, and parents. Outcome behaviours should be established that approximate the behaviours, or performance, that can be expected (Carr, 1979). The continuum of outcomes is set from the most unfavourable outcome which is likely, to the most favourable outcome likely. To begin assessment, a baseline of current performance is established and progress is monitored from this point. An important and attractive component of GAS is the fact that it involves the different interested parties in setting goals which are mutually agreed upon, increasing the interaction and cohesiveness of the group to aid the student in being successful (Carr, 1979). The GAS method remains in use today, capitalizing on its use

with determining and monitoring outcomes to be able to enhance accountability for program success.

Another alternative method of assessment and intervention that was introduced in the 1980s was the work done by Reuven Feuerstein, who from 1970 to present, holds the position of Professor of Educational Psychology in Bar Ilan University School of Education in Israel. Feuerstein's work developed an assessment method he coined Structural Cognitive Modifiability (SCM) (Feuerstein et al., 1988). Feuerstein contended that the basis of SCM and its utility for working with individuals with intellectual disabilities lay in its belief that those with intellectual disabilities, no matter how severe, were capable of modification within their general competence. In order for this approach to assessment to be successful, it required an active-modificational (AM) approach to working with the individuals. This approach is distinguished by "unwillingness on the part of the parent, caregiver, teacher, employer to accept the person's impairment – be it physical, mental, educational, or behavioural – as it is" (Feuerstein et al., 1988, p. 13). The alternative approach to AM is the passive-acceptant (PA) approach. The PA approach may be considered to represent much of what assessment based upon intellectual testing encompasses. The PA approach works upon considering the individual's test outcome, or results, as representing that individual's capacities, both at the present moment, as well as their abilities in the future. The AM approach as practiced in SCM takes into account each individual's ways of functioning, where specific strengths and weaknesses are, in order to allow for effective teaching.

Feuerstein's assessment practices includes the use of the learning potential assessment device (LPAD), which is a dynamic assessment approach to measure the individual's ability to react to both formal and informal opportunities for learning

(Feuerstein et al., 1988). The LPAD is used to determine the amount to which the individual is open to modification, the reasons for low functioning and the best methods to employ to lead to more efficient functioning. The key to this dynamic assessment is the belief that the individual is modifiable beyond their apparent low level of functioning. The LPAD first determines a baseline of individual functioning and then moves on to mediating the individual's learning and determining how the mediation is affecting the learning process. In essence, Feuerstein believed that assessment through intelligence testing underestimated an individual's potential and progress could not be achieved when it was not believed to be possible.

Work by other professionals such as Jane Mercer have highlighted the inefficiency of intelligence testing and the antiquated paradigm under which such wide scale testing has been practiced. Mercer (1989), who is professor of sociology at the University of California, states that diagnosis and its practice becomes a problem "when it is applied to socially constructed disabilities such as mild mental retardation, emotional disturbance, or learning disabilities" (p. 348). Mercer's extensive work includes research on multiethnic education and she served as an expert witness on the *Larry P. versus Riles* (1979) case concerning the use of IQ tests to segregate minority students in public education (Bond & Compas, 1989). Mercer contends that diagnosis in such cases is faulty and flawed because the labels, such as mild mental retardation, are not based upon scientific practice, but are the construction of society and how society at large reacts to persons they view as deviant. In effect, such categories as mild mental retardation evolved only after the IQ paradigm evolved and gained acceptance. Furthermore, Mercer contends that diagnosis is not necessary for treatment and intervention on behalf of students diagnosed, but is necessary only for funding purposes.

Mercer (1989) reviews the work of Arthur Jensen and his proposed model of the IQ paradigm. Within her analysis, Mercer reveals that intelligence tests are in actuality achievement tests, to the degree that they are essentially measuring what an individual has learned, and what a person has learned is not solely independent upon intellectual capacity. Mercer (1989) proposes services for students should be based upon individual need, rather than being based upon “some socially constructed disability identified by psychometric measures interpreted within a medical-diagnostic model” (p. 355).

Mercer suggests two different models that could be effective for assessing and educating students that do not rely on IQ testing and classification and labelling of students. Firstly, she suggests a process referred to as the Edumetric Paradigm (Mercer, 1989). This paradigm involves testing the student directly on their knowledge of their current curriculum. Education plans for students are based upon the student’s performance level in their current curriculum. Students are repeatedly tested to continue monitoring their academic progress. Secondly, the Learning Process Paradigm is based upon the premise that students who are having difficulty learning are employing ineffective learning strategies. By understanding the individual’s learning process, a plan can be initiated to teach the student learning strategies they can use for various learning tasks. Mercer’s proposal of alternative methods for assessing and educating students is a reaction to dissatisfaction with diagnosis based on IQ testing and a system of education that is reliant upon classification.

A method called curriculum-based measurement (CBM) has also received a great deal of attention within the education system. CBM is based on a program of research conducted at multiple sites since 1977. CBM is favoured due to the fact that it is developed and conducted within the schools by teachers. The method consists of

teachers developing tests or assessment measures based on local curriculum in academic areas (Fuchs & Fuchs, 2000). Students are assessed with the CBM method on a routine (e.g., weekly) basis and assesses how well each individual student has mastered content in a specific academic area. It provides information on a students' current knowledge base, and with repeated measures, how much each student progresses over time (Fuchs & Fuchs, 2000). The information gathered is then used to determine specific areas of strength and weakness, and as a result has applicability for determining goals for instructional methods to improve performance. CBM results can aid in determining when special education may be necessary, as well as when students may be ready for reintegration. Fuchs and Fuchs (2000) state that while CBM assessment does not provide information on authentic application of skill acquisition to natural situations, as on area of assessment, especially with its ability to provide information for instruction purposed, it provides useful information. The authors also suggest that one way to increase the efficacy and CBM utility, is to work with teachers and provide information on how to incorporate results of CBM assessment to modify instruction for improved student performance. CBM, and the other alternative methods of assessment mentioned in this section, suggest some ways to better determine individual student needs to better determine appropriate placement and curriculum for these students.

#### 4.12 Upgrading to Inclusion

One of the most current changes in curriculum is a shift toward a community-referenced curriculum (Biklen, Ferguson, & Ford, 1989). This shift is inherent in the most current trend towards inclusion including special students in regular classes, which began during the 1990s (Winzer, 1996). Biklen et al. (1989) detail how a curriculum



focusing on community interaction teaches students identified with an intellectual disability to function in the real world. The education system began to consider how students with an intellectual disability learn (basic learning principles) to derive appropriate curriculum and methods of teaching (Biklen et al., 1989). Scheerenberger (1987) reveals how the advent of normalization, seen as a predecessor to inclusion, increased care for students with an intellectual disability, as well as bringing more attention to rights and curriculum for students identified with an intellectual disability. The movement towards inclusion can be seen as leading to increasing responsibility for all students to be educated in the regular classroom (those students with an intellectual disability, as well as those with a learning disability, behavioural or emotional disorder). Winzer (1996) sets inclusion apart from integration, in that integration suggests a need to force oneself into the mainstream. However, there is no legal mandate within Canada on a definition of inclusion. Only two education policies – Saskatchewan and the Northwest Territories – explicitly refer to inclusion. As a result, there has been an increase in demands and responsibilities placed on teachers and the school. These forces within the education system have had a major impact on the system and have led to the need to reconceptualize the role of the school in today's society. It is these issues which are currently being addressed within the education system and have led to discussions and investigations into the education system which are being addressed at length and will have major repercussions for the future of education and how it is organized. The *Meeting challenging needs* (1989) document discussed earlier began developing some provisions for inclusion. Further development of these ideals was found in later documents and policies by Saskatchewan Education.

#### 4.13 Cognitive Elite for Present Day

Despite a supposed elimination of eugenics belief and intellectual disability as the cause of social evil, the continuance of such beliefs does exist and receives support from professionals within current times. The continued debate on the nature versus nurture of intelligence was discussed in chapter two, with the analysis of Herrnstein and Murray's (1994) work. The ideals of inclusion set out in the 1990s and reaching fruition today are contrasted with the popular resurgence of beliefs, such as those set out in Herrnstein and Murray's critically acclaimed work. The fact that the education system will have to deal with these ideas is apparent in the continued use of IQ tests and the reliance on concepts of intelligence to classify and place students with an intellectual disability. In sentiments highly reminiscent of Goddard, Herrnstein and Murray go on to highlight a link between cognitive ability and criminal behaviour. They provide evidence that a disproportionate amount of crime is perpetrated by individuals in the low levels of intelligence. They review past trends to raise intelligence of children and increase their ability to achieve within school, which they report to largely have failed.

As quoted earlier in chapter two, the authors state that "critics of American education must come to terms with the reality that *in a universal education system, many students will not reach the level of education that most people view as basic*" (Herrnstein & Murray, 1994, p. 436). Herrnstein and Murray go on to suggest public policy and practices that would best serve society and make the best use of the demographics we have to date. They state as fact that a society with citizens of higher IQ is likely to be a society with fewer social ills. Consequently, they propose that the most efficient way to raise the IQ of society is for women of higher IQ to have higher birth rates than women of lower IQ. They highlight their belief that "*If the United States*

*did as much to encourage high-IQ women to have babies as it now does to encourage low-IQ women, it would rightly be described as engaging in aggressive manipulation of fertility”* (Herrnstein & Murray, 1994, p. 548). The agenda of *The bell curve* (1994) was to promote the idea of cognitive elite and to propose wide scale public measures such as genetic engineering and dissolution of welfare to result in a society that, in the authors’ views, would provide a place for every individual in society. Above all, Michael Lind, a senior editor at Harper’s, asserts that Herrnstein and Murray’s work has been received with some credibility only because the American government does not want to spend more money on the poor; *The bell curve* (1994) gives *scientific* grounds for the halting of social programs to the poor (Fraser, 1995, p. 176).

#### 4.14 Provisions in Curriculum and Instruction

The approach to curriculum and how to deliver an appropriate curriculum to students with intellectual disabilities was continuing to undergo changes. As individual differences were increasing and diversity was continuing to provide challenges, Saskatchewan Education developed documents to aid teachers in providing appropriate programs. One of these documents, *Instructional approaches: A framework for professional practice* (1991) was intended to develop understanding of instructional approaches and how varying approaches could be incorporated to help support Core Curriculum and the Common Essential Learnings. It was also aimed at helping professionals to recognize the importance of flexibility of instruction to providing the Adaptive Dimension of Core Curriculum. The document was not developed specifically for students with an intellectual disability, but to be used to incorporate individual differences among all students in the classroom. It emphasized the utility of different

instructional approaches to incorporate individual student differences and help each student learn based upon individual ability and learning style. The document was part of the increased effort since the 1980's to integrate individual differences into the regular classroom and teach the Core Curriculum to all students despite differences.

*The adaptive dimension in core curriculum* (1992) was developed to guide teachers in how to make necessary changes within curriculum to include individual differences. The document described the Adaptive Dimension as “the concept of making adjustments in approved educational programs to accommodate diversity in student learning needs. It includes those practices the teacher undertakes to make curriculum, instruction, and the learning environment meaningful and appropriate for each student” (Saskatchewan Education, 1992, p. 1). While adapting the curriculum to meet individual needs, the objectives of the Core Curriculum remain the same. The document supported the teachers' responsibility for making decisions about adaptations to the curriculum. The Adaptive Dimension was used to signal a shift in education which allows for more flexibility and autonomy at the school level, allowing for changes in theory and practice. The traditional approach of the teacher-centred classroom was now envisioned as a child-centred classroom.

The Adaptive Dimension was a response to knowledge gained about the learning process in children, how learning is developmental and occurs in stages. Practices now fostered include assessing individual needs and adapting the curriculum content and instructional practices to accommodate the developmental level and learning style of the individual student. Adapting the curriculum incorporated preplanning and the use of other sources, such as the student and other professionals, on how to incorporate individual needs. The document realizes new philosophies where student diversity is

regarded as the norm and is to be valued within educational programming. The Adaptive Dimension utilizes information gained on students' cognitive development to determine what types of learning tasks are appropriate for the cognitive development of the individual in order to make the necessary adjustments for learning. Information on multiple intelligences is employed, recognizing that the amount of intelligence an individual possesses may not be as important as how the individual uses intelligence to adapt to the environment. Determinations of strengths and weaknesses in intelligence based on the various types of intelligences are necessary so that this information can be used to adapt for the individual student.

Past practices of segregation of students for learning purposes were based upon assessing students for ability and achievement similarities and placing these students together. However, these practices may exacerbate learning difficulties. The Adaptive Dimension promotes alternative approaches such as heterogeneous groupings, peer tutoring, and varied groupings. The responsibility for adapting the curriculum is largely with the teacher, but it is acknowledged that support from other services (such as the Educational Psychologist and Speech Language Pathologist) may be necessary. Good assessment practices are realized to be necessary in order to arrive at good decisions about adaptation and appropriate programming. One good practice is assessing a performance baseline for each student so that progress can be measured against the baseline and not against other students' progress. The Adaptive Dimension provided a document that realized increasing student diversity and the need to provide for these differences at the school level. The goal was to accommodate all students under Saskatchewan Education's view of Core Curriculum.

To supplement the Adaptive Dimension, which was not meant as a means to change the Core Curriculum, *Policy and procedures for locally developed and modified courses of study, and alternative education programs* was developed in 1997. The document was intended to provide curriculum guidelines when the regular education program was seen as inappropriate, even with adaptations. In this event, the document outlined options in the form of alternative grade 10, 11, and 12 programs, which would provide qualitatively different curricula from the regular education program and would be locally developed to meet the special needs of students. As well, alternatives were provided for students with severe intellectual disabilities through a Functional Integrated Program, based on individual programs for each student. The education of students with needs beyond the regular program was to be met with the needs of each student and their communities used as considerations for programming. When provincially developed courses of study were not appropriate, a Locally Modified Course of Study may be used, in which the level of difficulty is reduced. The completion of courses within Alternative Programs does not count toward completion of the Regular Education Program.

Course requirements in Alternative Programs include courses in language arts and communication, work experience, and mathematics, plus a number of elective options. As well, the option of transferring from Alternative Programs to the Regular Education Program was outlined, and the parents and students must be consulted prior to enrolment in Alternative Programs. Programs for students in Alternative Programs were developed with the realization that the program must be flexible, in that many students may require more than one year to complete a one year program. Programming should be based upon the community-based instruction model. The document was developed to provide for curriculum guidelines for those students not capable of functioning within

regular education. While based upon an inclusion model, the necessity of segregated programs and curriculum was still seen as necessary to provide adequately for individual differences.

One area of import to the education and curriculum for students with intellectual disabilities, which has been alluded to previously, is transition planning for students. Transition planning for students is developed into IEP programs and centers around transitions within the school system, and especially transitioning from school to work and life in the community when the student has graduated. A great deal of research and work was done in the area of transitions by Andrew Halpern and his colleagues. Halpern developed a transition model based on community living for individuals with intellectual disabilities (Halpern & Berz, 2001). The model is presented by the authors as a systems-change model, and the focus is on the program for transition, not on the individual students. The model proposed was the Community Transition Team Model (CTTM), which was a model for the transition of students leaving secondary special education into community life. The CTTM model was developed and set up as a pilot program beginning in 1985. CTTM was based on a number of program standards that each school could examine and determine which standard areas they believed needed improvement within their school. The model focused on enhancing the capacity to provide programming for students with intellectual disabilities to aid in their transitions to the community.

The CTTM process involves team building to work collectively toward transition with relevant stakeholders. A major focus of the model is the necessity of school personnel to build partnerships with community members to produce changes and improvements in transition. One of the key components of the CTTM model is the fact

that it is based upon locally determined needs and individualized for each community. The CTTM program as it was practiced within the pilot stages ran for nine years and was then discontinued (Halpern & Berz, 2001). Halpern and Berz suggest that the type of systems-change proposed within the CTTM model met with barriers as it presented too much change to the status quo operating within the current system. The CTTM transition model required collaboration and support from the school, adult service system, and the private sector system (e.g., employers), as well as the interaction of all three of these systems. The failure of the CTTM model to continue suggests the necessity for the school system and other stakeholders to revisit their dedication to transition planning and work towards strengthening the areas that a transition plan needs in order to be successful. One of these areas may be a dedication to multidisciplinary action and the ability to work together towards a sustainable transition model within the schools and the community.

#### 4.15 Reconceptualizing Special Education in Saskatchewan

Special Education underwent a review in Saskatchewan, with a document detailing results and recommendations based upon the review published by Saskatchewan Education in January 2000. The review, entitled *Directions for diversity: Enhancing supports to children and youth with diverse needs*, detailed the need for comprehensive services to provide for appropriate services for students in special education. This review's emphasis on student diversity led the review board to see special education differently, detailing the need for a change in service delivery and the need to enhance the capacities of schools to meet the diverse needs of students. The review was inclusive of education for students identified with an intellectual disability,



as well as special education in general, including services for students at risk for developmental, learning, and behavioural problems due to environment or other factors.

As the 1990s saw a collaborative service delivery model become an important theme, special education took on a new and expanded role to aid regular education teachers, as well as other professionals. Inclusive settings are the preferred placement, but other arrangements are still seen as acceptable when there are “compelling reasons” (Saskatchewan Education, 2000, p. 28) for alternative placement. The parameters for compelling reasons were defined as consisting of a number of factors, such as preparedness/availability of sufficient and appropriate supports, as well as the nature and intensity of learning and behavioural needs of the student. *Directions for diversity* (2000) detailed how funding initiatives for special education had changed, in that high/low cost funding had been replaced. Instead, there exists a Designated Disabled Program for students with intellectual disabilities, as well as multiple disabilities and other categories. The Special Needs Program (SNP) is in place for students identified with a learning disability and mild/moderate forms of designated disabilities, such as mild intellectual disability. The SNP funding is in the form of a program grant, rather than an individual pupil grant. Funding initiatives have largely been based upon classification and labelling, although recent funding practices have moved toward considerations of the programs and personnel necessary to provide for student needs. Labelling considerations were largely abandoned because of inconsistencies in definitions and assessment criteria. The preferred approach to determining appropriate services was to focus on individual student need instead of student labels or deficits.

The review found that the *Adaptive dimension of core curriculum* (1992) needs to be actualized and steps should be made to embed it within the regular curriculum.

The definition of actualization and how Special Education should address this issue was viewed as also requiring further work. It was found that the Personal Program Plan (PPP) for students with intellectual disabilities needed to be refined. The review emphasized the need for effective practices and the need for policy development within this area. Effective practices could be used to provide an accountability mechanism within special education. While the review acknowledged that there is information available on effective practices, knowledge and interpretation of these practices needs to be improved. Some students do not receive the services they need. The review recommended that the funding structure within special education should be changed to ensure adequate resources for every student, as well as to ensure adequate individualization through the use of PPPs and transition plans.

The review committee highlighted the necessity to enhance supports within special education so that every student's needs and increasing student diversity could be incorporated within the school system. There is the need to enhance supports within the elementary and secondary divisions of the schools. In addition to actualizing the Adaptive Dimension, there is a need to expand vocational and work experience options, and to develop curricula for modified and alternative programs. A new and updated policy manual for special education was recommended, with policies related to students with exceptional needs. Within the new policy manual there would be the need to clarify terms currently in use, such as what constitutes an appropriate education and what is meant by compelling reasons to exclude students from regular education classrooms. Research on how people learn is required so that this information may be utilized to teach students more effectively.

One major recommendation of the review committee was the creation of a Children's Advisory Committee, which would be responsible for enhancing PPP and transition processes, address guidelines for effective practice, as well as other important areas for special education. Specific guidelines for effective practices are needed in order to address the issue of *authentic assessment* for students with disabilities. The use of the PPP, which is the mode for providing curricula to students with intellectual disabilities, must be reformed and suited to the complexity and intensity of student needs. When dealing with the *Adaptive dimension of core curriculum* (1992), the review states, "Greater depth and detail needs to be provided on classroom assessment and instructional strategies for diversity in the classroom" (Saskatchewan Education, 2000, p. 63). A framework for alternative education courses and modified courses at the secondary school level is required. Also, the review committee recommended the expansion of the Community School Program throughout Saskatchewan, in an effort to further enhance supports for special education. A program of early screening and identification of children to screen for factors known to place children at risk for learning and behavioural problems was also seen as necessary and recommended for implementation.

The review of special education supported reconceptualizing the use of the term least restrictive environment to *continuum of services and supports* to further enhance the philosophy of inclusive schools. This new emphasis would reinforce a program based upon individual student need. Overall, the special education review realized the need to further the inclusive model and deal with increasing responsibilities and pressures upon the education system realized as the result of increasing student diversity. The current model of special education needs redevelopment to effectively meet future,

as well as current, needs. The review committee envisioned a new approach to special education through the establishment of a Children's Advisory Committee and a continued and enhanced commitment to Community Schools. These new directions could incorporate the need for enhanced supports and school capacity to provide for appropriate services. Service delivery as it was functioning at the time of the review was not seen as sufficient. *Directions for diversity* (2000) provided a number of recommendations for how to actualize inclusion within current policy and practice.

Saskatchewan Education responded to the special education review and its recommendations in *Strengthening supports: Ministers response to the report of the special education review committee* (2000). Saskatchewan Education agreed to establish a Children's Services Advisory Committee, develop policy based on diversity, and renew the Education Act. It also supported the need to develop policy and guidelines for effective practices, and stated the expectation that every school board would update its Special Education Master Plan by the fall of 2002. While not detailing any commitments to the recommendation, Saskatchewan Education agreed to consider allocating funds for special education more directly based on student needs and move funding away from student designation. It agreed to develop guidelines for effective practices, which would include assessment, early intervention and prevention, and individualized instruction and curriculum. As well, it agreed to expand early intervention programming, including the Pre-Kindergarten Program, and also discussed implementation of an Early Childhood Development Strategy, which would include screening and intervention.

A document dealing directly with appropriate programming for students with intellectual disabilities and multiple disabilities was published by Saskatchewan

Education in 2001, entitled *Creating opportunities for students with intellectual or multiple disabilities*. This document fostered an inclusion philosophy and envisioned students as: belonging to a community, as treated equally, educated in age-appropriate regular classrooms in neighbourhood schools, as comprehensively assessed, and being taught basic life skills. Inclusion was established as more than a question of physical placement, to further incorporate the belief that all students are capable of learning and achieving. Focus should be placed upon ability, not deficit, areas of each individual student. An inclusive education philosophy was presented as integral due to the fact that it promotes the message to society that all persons are valued members of society.

The document was insightful in that it expressed the need for appropriate and productive education to be measured through outcomes, which was defined as: individual health, meaningful work, a comfortable and safe place to live and a personal fulfilling network of friends and family relationships (Saskatchewan Education, 2001). The document defined intellectual disability as failures of cognitive functioning which results in significant disabilities in receiving information and using this information to solve problems. Intellectual disability was defined as a life-long condition. The impact of intellectual disability on learning and performance in different areas was discussed, as well as how to alleviate some of these difficulties. Emphasis was placed on the importance of community involvement and extending the school as part of the community. Increasing development of the Personal Program Plan (PPP) was discussed, with the need for the PPP to be based upon authentic assessment highlighted, as well as the need for a functional component to each PPP.

The need for teacher preparedness was highlighted, as teachers must be ready to adapt to individual differences. As such, the teacher was seen to require information on

student functioning level, students specific syndromes, and instructional techniques and educational strategies that would be effective. Community-based instruction is important and must be context-specific and ensure generalization. The need to development independence as it relates to quality of life was also highlighted. Collaboration and team building was viewed as necessary, as it affects inclusion and provision of effective instruction for students. The term *Natural Supports* was used to indicate a student should be supported in their natural environments (i.e., home, community) and using skills of those with experience-based expertise, such as teachers and parents. This contributes to the *Only As Special As Necessary* approach, as it revolves around the idea that experience-based information should be utilized as opposed to an over-reliance on specialists.

An increased emphasis on the importance of the schools close relationship with the families of students was engendered in this document. Within this context, a strength-based approach was emphasized, promoting a decreased reliance on labels, using person-centred information, and generally involving parents in the education process. In regards to curriculum and the development of PPPs, it was noted Core Curriculum and the Common Essential Learnings still require consideration when programming. Adaptation should be provided within this context to reflect general learning characteristics. When developing the PPP a functional component is required to incorporate individual strengths and needs. The PPP should consider future and adult outcomes and result in a better quality of life, which was defined as independence, meaningful participation in community, develop and maintain social and personal relationships, healthy and safe lifestyle, degree of personal choice, and meaningful employment (Saskatchewan Education, 2001). Personal and social skills and values

were seen as necessary to include in the curriculum. Independent learning was emphasized.

The developmental approach to curriculum development as it had been used within education was seen as problematic. The developmental approach included assessment of the individual based upon a developmental scale. Based upon this information, missing skills were taught in the appropriate sequence. This approach was seen as problematic in that students with an intellectual disability are not progressing through a *typical* development and may be denied access to certain environments because they are seen as not ready. Instead, an ecological approach to curriculum development is espoused, which is based upon the relationship between the student and their present and future environments. Program emphasis changes as the student progresses. A *readiness* focus is abandoned and access is granted to all environments. The focus is now on how to support access and adaptations that are necessary. Skills taught in this approach should be relevant to the particular environment and what the student needs to be successful in that environment. The skills are also taught within the target environment. Assessment of students should identify individual functional needs and the amount of support required in each environment.

When programming for students, it is important to consider their needs within the regular education environment and what supports will be necessary. Student characteristics need to be assessed, as well as instructional methods that would be effective for teaching each student. Instruction for students was to be conducted within a natural context so skills taught would be retained. Provisions were to be made for language development and using language meaningfully, social and moral development in real-life contexts, and functional academic development. An emphasis on

community-based services is increasingly necessary as the student ages, and the final year of high school should see the student immersed in a full-time work placement program, where the curriculum and methods of instruction must be adapted to the individual student. Collaborative learning approaches are also seen as useful, including paired learning with nondisabled peers and peer modelling. Student progress within the program should be evaluated through curriculum-based assessment, where the tasks required to teach and what is necessary to achieve them are determined.

With the development of *Creating opportunities* (2001), a focus on school structures and successful practices was incorporated. The need to build collaborative school teams was highlighted. As well, it recognized, and provided guidance for, the increased range of expectations on teachers. The document continues to embrace the inclusive model for educational practice, and provides meaningful directions for how to further incorporate an inclusive model. Detailed information is provided on how to adapt and modify curriculum for students with intellectual disabilities, especially in regards to development of the PPP and the functional aspect of curriculum. New approaches for how to incorporate individual differences, including an explanation of the ecological approach to curriculum development, will provide useful information on how to provide for students with an intellectual disability.

#### 4.16 A Direction for the Schools of 2002

A well-received and timely document entitled *School<sup>Plus</sup>: A vision for children and youth* was also published by Saskatchewan Education in 2001. The School<sup>Plus</sup> document enforces the current realization that the role of the school is expanding and is under significant scrutiny. This document was developed as a response to the different



factors now affecting society, as well as education and schooling. The document goes into detail describing a number of different factors which have affected the roles schools must take. Only one of these factors is that of special needs of students. One of these special needs was signalled within the schools with the advent of deinstitutionalization and the later focus on inclusion. Other factors affecting the schools include aboriginal populations, rural depopulation, and changing family demographics, to name a few. When society adds responsibilities to the roles it expects the school to fulfill (e.g.: inclusion of students with learning problems), then it is incumbent upon society that schools have resources to fulfill these new roles (Saskatchewan Education, 2001). The task force that developed the School<sup>Plus</sup> report worked with the aim of evaluating the changing needs of children and youth and to determine from this point what the role of the school should be.

The report considers the fact that the philosophy of the Community School is envisioned only as it relates to funding within education. To be more influential and functional to the role of the school, this philosophy needs to broaden its conception for what Community Schools mean. The report recommended adopting the Community School philosophy for all public schools. The Community School philosophy encompasses an investment in parent involvement, children's opinion and culture, a developmental rather than a deficit approach, and seeing community as a resource and using it. As well, the report recommended that high schools also be eligible for Community School funding. The funding for Community Schools should be increased and the philosophy of Community Schools should be expanded beyond mere funding requirements. Another recommendation pertinent for students with intellectual disabilities is a more established effort towards interagency, including an *interagency*

*network* where agencies are rewarded and funded based on collaboration, with the goal of supporting services to children and youth (Saskatchewan Education, 2001). This proposed interagency, which the report suggests naming the Saskatchewan Education and Human Services Network (SEAHSN), must provide collaboration that is school-linked, and, in some cases, school-based.

The creation of SEAHSN requires the development of a new bureaucracy which is centred at the governmental level. In effect, it must not be realized as the domain of education alone, but must encompass all human services. This broad-reaching recommendation also suggests that funding for SEAHSN should go towards new services, not merely towards existing programs. The establishment of SEAHSN would be integral, in that the boundaries between education and human services would become coterminous, and school divisions would need deal only with one office or jurisdiction to negotiate services for children. Within this recommendation, the report wanted to make explicitly clear that this new School<sup>Plus</sup> environment is not to be incorporated as an add-on service for schools to provide. The report acknowledges the popular and long held belief that the school should foster the development of the whole child. However, the report discusses the problem with this philosophy, in that the school is not designed to service the whole child. While current society requires additional services for children and youth, the provision of these services requires a new organizational environment. With the proposed creation of the School<sup>Plus</sup> environment, it would allow the school to be responsible for delivering public education. The new School<sup>Plus</sup> environment would coordinate services so other services, such as human services, are delivered by other departments (e.g.: Social Services), but are school-linked and delivered within the School<sup>Plus</sup> environment. This new environment is proposed to help

the school and teachers concentrate on being responsible for educating students. The added pressure of other responsibilities, such as special needs students in the regular classroom without necessary resources, is making the current school environment ineffective.

The report emphasizes the need to actively include parents in the education of their children. The report provided direction in this area by suggesting enhanced coordination between the school and the community. The recommendation is also made for an increase in programs for early intervention and pre-kindergarten programs. As part of this recommendation, it is again emphasized that there is a need to coordinate services and to provide interagency support for children in these programs. Specifically, the report recommends that the needs of children from nine months to five years of age should be seen as the responsibility of SEAHSN. The report also recommended the promotion of new models for high schools that would recognize different career/work aspirations for individual students. Programs in high school need to recognize that not all youth will go on to university, and to develop programs that encompass all students' interests and aspirations. This recommendation may have implications for students with intellectual disabilities as schools could further incorporate programs for work and career experiences for students graduating from high school who do not have aspirations of further education and training.

The School<sup>Plus</sup> report is hailed as a document with far reaching implications for how schools are operated now and in the future. If taken seriously within all aspects of its recommendations, the report would have great influence on educational policies and practice, with how education is conceptualized and administered throughout Saskatchewan. Of special import to this thesis and the population of students with

intellectual disabilities is the recommendation of the establishment of SEAHSN and a school-linked or school-based approach to interagency collaboration. The implications of this recommendation could revitalize services for students with intellectual disabilities in the areas of curriculum to assessment, and refocusing the call for needs-based assessment and provision of supports for these students.

The government of Saskatchewan responded to the School<sup>Plus</sup> report in 2002 with *Securing Saskatchewan's future – ensuring the wellbeing and educational success of Saskatchewan's children and youth: Provincial response, role of the school final report*. The government stated that the role of schools is to educate children and youth, as well as to support service delivery for these students. The Role of the Schools report receives endorsement from the government, which articulates that the report solidifies a number of programs and directions the government has already implemented. The government realizes that with the vision of School<sup>Plus</sup>, there will be the ability to educate all children based upon the availability of services at the school level. In essence, they support teachers being able to focus on teaching. The government also proposes a reallocation of resources to allow for supports at the community level. In order to implement the vision of School<sup>Plus</sup>, the Saskatchewan Council on Children and Youth will be responsible for overseeing action towards implementation of the recommendations. It supports the adoption of the Community Schools philosophy and practices within all schools. The government also cites increased financial support in a number of areas, such as the launching of the Kids First Program, which focuses on early childhood development. Overall, the government supported the School<sup>Plus</sup> vision, but made little progress in acting upon the recommendations.

#### 4.17 A New Direction for Children's Services

Saskatchewan Learning, the newly adopted moniker for Saskatchewan Education, has developed a new policy framework for children's services which is currently available on the Saskatchewan Learning internet website. *Children's services policy framework (2002)* emphasizes diversity, and how "student diversity is a driving force for the development and implementation of relevant and personalized curriculum, instruction and supports" (Saskatchewan Learning, 2002). The document defines schools as inclusive environments, and the necessity of responding to individual differences and needs. Statistics Canada is cited within the report, which details an estimated 10–12% of the school-aged population requires special education, including those with an intellectual disability. The realization that student learning goes beyond the school, and that schools need to address this fact when educating students, was addressed. The policy framework continues emphasis on the development of the whole child within the school environment, which includes factors such as intellectual, personal, social, physical, and the cultural/spiritual.

Within the document the Community School philosophy and its four components are recognized for their importance to enhancing student diversity. These four components are the learning program, parent and community involvement, integrated services, and community development. School culture and climate is seen as important, including a philosophy of respect and caring within the school in order to promote and understand student diversity. Consequently, the document calls for increased professional development in order to understand and appreciate individual differences, leading to more inclusive practices. Attention is given to assessment strategies needing to be comprehensive and formal assessment as constituting only one factor in the

assessment process. Assessment needs to be based upon a variety of strategies and tools and influenced by what information is needed and how it will be used. The use of formal assessment is seen as one option and probable necessity for students with exceptional needs to aid in program planning and implementation. Guidelines for assessment state that individuals conducting an assessment should meet “with the school personnel and parents before, during and/or after the assessment” (Saskatchewan Learning, 2002).

The document seems to depart from other, former, documents produced by Saskatchewan Education, by stating that students with exceptional needs may not benefit from the Core Curriculum or the Adaptive Dimension of Core Curriculum. Individualized programs and support may be necessary, which require ongoing evaluation and planning from school-based teams. The use of the PPP is fostered as it relates to programming for adaptations and supports for the individual student. As well, there remains the need to incorporate transition planning into programs for students with exceptional needs. The process emphasizes the inclusion of key members who are or have been involved with the individual student in order to assess transition needs and planning. Each student needs opportunities to develop the necessary skills to be successful in new environments. The document also recognizes the need for students with disabilities and their families to be able to appeal a student’s designation, placement, and program.

The new framework again provides support for prevention and early intervention within the school to aid individual students considered at risk. The identification of needs and prevention and intervention through the school is necessary to ensure appropriate services. The document places the onus on individual schools and

communities to develop procedures for early identification of needs and the provision of appropriate programs and supports. The use of the Community School Pre-Kindergarten program is viewed as a useful resource to prevent and intervene on behalf of children in vulnerable positions, including programs for children with low incidence disabilities. Early childhood education for children with disabilities functions on a designation model, which necessitates the child meeting designation criteria as set out in the *Education regulations* (1986). This latest installation to policy dealing with services for students with exceptional needs is commendable for its increased scope in dealing with prevention and early intervention for students considered at-risk for a number of difficulties within school, including intellectual disabilities. As well, its attention to assessment procedures and how assessment should be conducted begins to detail the importance of this factor with providing services to students with diverse needs.

The following table indicates the different terms that were used between 1960-2002 to refer to individuals with an intellectual disability. The terms which were, and are, used during this period of time show how society and its institutions have continued to grapple with the nature-nurture issue and what ramifications this controversy has for individuals with intellectual disabilities (such as the term cultural-familial retardation). Society has also attempted to soften its view on individuals with intellectual disabilities and has come to realize that differences are inherent in the entirety of population, and do not indicate deviance. This further shift in the attitudes towards individuals with intellectual disabilities has been enacted in the public and educational policies of current day. Whether or not these changes have taken root in overall social attitudes is debateable, as this chapter has revealed there is still a continued need for improvement for the education of individuals with intellectual disabilities.

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Table 4.1

*Terms Used During the Period of 1960-2002 to Describe*

*Individuals with an Intellectual Disability*

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Cultural–familial retardation

Borderline retarded

Mental retardation

Intellectual Disability

At-Risk

Exceptional pupils

Mentally handicapped

Developmental disabilities

Socioculturally deprived

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The information provided in this chapter has documented great change within the last four decades. The attitudes towards individuals with intellectual disabilities have changed from one of segregation to the movements of integration, normalization, and inclusion, all with significant impact upon the education and curriculum for students with intellectual disabilities. While theories of intelligence and its measurement have shifted a great deal within the last four decades, works such as that by Herrnstein and Murray (1994) have indicated that the beliefs in inherited superiority and its repercussions for individuals with intellectual disabilities have not been entirely dispelled. The use of intelligence tests still persists today, and the chapter explored reasons why the way in which intelligence tests are currently used should be defunct. Policy and practice within Saskatchewan Learning has met with landmark changes and



concepts within even the last decade. The next chapter will detail some of what has happened so far with education for students with intellectual disabilities and suggest where education can, and should, venture from this point in time. Suggestions such as how to enact a new role for the school and what this new role should entail will conclude an historical analysis of what has been discovered so far.

## CHAPTER FIVE

### A LANDMARK FUTURE: WHAT EDUCATION HOLDS FOR STUDENTS WITH MILD INTELLECTUAL DISABILITIES

#### 5.1 Considerations for 2002

The work of professionals that included Henry H. Goddard and Arthur Jensen carried great weight during the times in which they worked and published their findings and theories. It warrants remembering that their ideas, while perceived as racist and prejudiced by today's standards, were hailed as scientific research and legitimate theories by many at the time. The fact that professionals in today's scientific domains are still grappling with definitions for heredity and intelligence, and about how best to educate students with intellectual disabilities, highlights the necessity for more work to be done in this area. The education of students with mild intellectual disabilities requires continual and dedicated research in order to best provided for students and for the education system as a whole. Because intelligence and IQ testing do not identify a person as a whole within the educational system IQ should be used only as a means to identify areas for improvement and to serve as a baseline to build upon. As policies and practice for students with mild intellectual disabilities were beginning to be conceptualized by Saskatchewan Education in the 1970s, programming for these students was addressed, but the ability to fully realize the needs of these students was lacking. Perhaps this was due to the fact that students with mild intellectual disabilities have posed a unique difficulty for professionals.

The population of mild intellectual disability was chosen for this thesis due to the difficulty with diagnosing this population of individuals. It is especially relevant today to examine the difficulties with identifying this population. For example, two individuals with the same IQ profile may receive very disparate diagnoses and placements based upon additional information, such as cultural environment. Mediating factors, when considered with IQ scores, can make an accurate diagnosis more complicated. Does their profile indicate a diagnosis of mild intellectual disability, or should they be classified as learning disabled? These decisions are often based upon such additional considerations as the resources available for the student and the location that would best benefit the student. While mild intellectual disabilities can have genetic bases, this does not adequately explain the over-representation of minorities referred and labelled as mildly intellectually disabled within the Saskatchewan education system. What of the cultural-familial retarded group mentioned earlier? Within these cases, the IQ score does not seem to be a pure measure of intellectual capacity, and placement within special education classes may not be warranted. These individuals may require help, but their needs may not be the same as those of an individual with a mild intellectual disability.

Discussed throughout this thesis is the contentious debate on the hereditarian versus environmental factors of intelligence. Is intelligence amendable to change based upon the environmental factors that may affect intelligence, or is the genetic component of intelligence paramount, relegating initiatives to mediate and increase IQ fruitless? This nature/nurture debate has serious ramifications for programming and remediation for individuals with intellectual disabilities. The fact cannot be ignored that programming for these individuals has met with many failures throughout history, and

continues to be riddled with shortcomings even within current practices. However, this is not to say that individuals with an intellectual disability cannot lead successful lives. These failures do not indicate that failure is inevitable. The issues discussed within the School<sup>Plus</sup> report reveal that there are many avenues that may result in future successes. This thesis should be viewed as a discussion of how the education for individuals with intellectual disabilities has originated, as well as a discussion for directions that are necessary to ensure that these individuals can succeed. The thesis reveals that the correct factors to help these students best learn has not yet been fully realized, and much progress remains to be made. This essential process is a work in progress, not a lost cause.

That progress in programming for students with mild intellectual disabilities has been made throughout modern history is evident in the fact that programming for mild intellectual disabilities was somewhat ignored before explicit policy was introduced in the 1970s. This neglect was especially noticeable in the way that the funding scheme was developed in early special education policies. Those students with mild intellectual disabilities did not qualify for high-cost funding and therefore did not qualify for the range of resources and services they required. As was mentioned earlier, prevention measures for children suspected of mild intellectual disabilities were difficult to provide, due to the fact that funding for prevention in the early years necessitated first classification, then high-cost funding. By the 1990s, when a better understanding of the positive effects of prevention and early intervention was beginning to be realized, the strict adherence to classification and funding was relaxed. New policies and procedures dictated by Saskatchewan Learning were moving away from the need to label and base services upon a medical model, and promoted support based on individual need.

Individuals with mild intellectual disabilities began to pose a difficulty in the education system with the passing of compulsory attendance laws, which were first instituted in Ontario in 1871. Attitudes towards these individuals underwent a great deal of change within a short period of time. The previous policy of segregation of these students and the attitude of a need to protect the public from their supposed inherent evil changed to policies promoting the ability of all students to learn and achieve within the school and social systems. When special classes were first introduced, formal classes began to appear in Saskatchewan in the late 1920s. The first of these in Saskatoon appeared in 1929 under Samuel Laycock's direction. They were used as a means to relieve the school system of those students who did not conform to the norm, who did not achieve and compete within the social guidelines that had been set up within the school system. As inclusion philosophies began to take hold and found their way into common practice, the need to protect the public against the intellectually disabled was diminishing. Whereas before these individuals were viewed as unfavourable and as a detriment to normal students, the interaction of intellectually disabled students with their nondisabled peers was encouraged as the 1980s and 1990s progressed. The inclusion movement saw a number of significant changes in the areas of assessment, curriculum, and the educational placement of students with intellectual disabilities.

The curriculum for and the placement of students with intellectual disabilities have seen a great deal of change since the mental hygiene era. During the mental hygiene era, the school system determined what was best for the development of the child, and dictated how the child should be educated and raised within his or her home environment. A great deal of emphasis was placed on determining an individual's mental capacity and mental health, in terms of personality adjustment, to determine

those students who required help to progress in the schools and become contributing citizens. Even within new policy frameworks developed by Saskatchewan Learning, such as *School<sup>Plus</sup>: A vision for children and youth* (2001), the responsibility for the schools to mould children so that they reflect the moral integrity of the community and society is regarded as an important aspect of schooling. Despite significant and drastic changes to how education for students with intellectual disabilities is conducted, schooling for all children still maintains an inherent interest in the mental health of the child. While the repercussions of an emphasis on mental health may, arguably, be different today than from modern history, the emphasis is still apparent. The development of a Core Curriculum in the 1980s and the Goals of Education have a vested interest in the teaching and fostering of personality. The concept of the whole child and teaching to develop areas beyond the intellectual, such as morality, self-esteem, and citizenship, are still inherent in current policy and teachings within the Saskatchewan education system. While the inclusion of provisions for developing children's characters was not fostered entirely within a negative mental hygiene framework, the continued inclusion of these concepts within current policy and philosophy is antiquated.

Ideas of what constitutes good citizenship and of how to foster good citizens within the education system have permeated history, and not solely in regards to individuals identified as intellectually disabled. However, the negative connotations of developing good citizens are especially salient for this population. While it may be debated that citizenship may be taught without negative results, the difficulty with determining the definition and factors involved in concepts of what good citizenship provides a unique problem for individuals with intellectual disabilities. Does the

definition of good citizenship involve living independently in the community with no supports? If so, many individuals identified with intellectual disabilities would not qualify as good citizens. The definition of citizenship poses a grey area within the context of intellectual disability. Based upon the negative history of citizenship ideals and the current problems inherent in defining the term, the language should be discontinued. The need for an emphasis on morality and personality and school guidance no longer requires inclusion in Saskatchewan Learning policy. The discontinuance of these sentiments is necessary given the negative history they have had for students with intellectual disabilities.

## 5.2 Funding Initiatives

Current trends within Saskatchewan Learning towards an increased reliance on needs-based funding are integral to more positive and effective programming for students with intellectual disabilities. Through this new system, there would be a decreased reliance on labelling students, eliminating both stigmatizing and the need to emphasize inclusion. The new philosophy that at present has garnered favour within the education system is that student diversity is to be regarded as the norm. This philosophy is seen to now permeate more recent and current approaches to student accommodation. Current research has promoted the idea that the school should identify problems students are experiencing early, without the labelling of students, and work to provide instruction so those students can learn the necessary skills rather than assuming that they cannot learn (Capper, Frattura, & Keyes, 2000). Capper, Frattura, and Keyes emphasize that accommodations should not be a substitute for skillful teaching. They stated that “If education spent half as much time focusing on high-quality instruction as they often do

referring, labelling, and accommodating students, schools and their students and staff might be far better off” (Capper et al., 2000, p. 107). Accommodation for students, according to the authors, usually involves changes to curriculum and instruction by lowering expectations for students to acquire skills. Education needs to move towards the practice of examining curriculum and instruction and of understanding how learning problems could have been prevented in the first place (Capper et al., 2000).

Funding based on current schemes and classification of students is not efficient (Capper et al., 2000). The authors support commingling funds to support services for the individual needs of all students. For example, funding dollars that are traditionally channelled toward a group of classified students could instead be used to lower class size and provide assistance for teachers in teaching reading to all students (Capper et al., 2000). The authors go on to say that often, funding sets up separate programs that would be most efficient if programming and intervention were handled together to provide services for all students in need. They propose a system whereby “all educators are responsible for all students. Educators [can] then develop instruction and services to meet student needs proactively and preventively rather than adapting the curriculum after a student fails” (Capper et al., 2000, p. 38). Saskatchewan Learning needs to initiate more action on funding schemes based on individual needs rather than on labels, classification, or diagnosis. Although over the years from the 1930s to present policy has increasingly individualized the curriculum, nonetheless special education remains riddled with accusations of inefficiency and ineffectiveness. What is required to make more progress is a more concerted effort towards needs-based services and assessment, and the providing of resources to support the improved programs.



### 5.3 Positive and Negative Effects of Labelling

The labelling of students has been examined as a politically driven force, in which labels and definitions of intellectual disability change as society and political influence shifts. For example, the hereditarian movement was based upon labelling individuals as morons and feebleminded, while the politically correct label for these individuals is now intellectually disabled. Even this label is under scrutiny for emphasizing disability while ignoring actual abilities these individuals do have. A needs-based approach to assessment may not remedy the problem of individuals in educational institutions who are labelled and diagnosed based on attitudes and values originating from politics and society. The needs-based approach is a beginning to ensure individuals are allotted resources based upon their individual strengths and necessary supports. The emphasis needs to be based upon empowering the individual who is to be labelled as intellectually disabled. If these individuals can understand their specific needs, they are better prepared to determine for themselves what is necessary to succeed, and can ensure that they receive the resources they require. Through this process, labelling does not necessitate negative connotations.

The institution of the school is the main contributing factor to the negative and harmful labelling process. As Saskatchewan Learning policy dictates, the assessment process is meant to be not merely a testing process in which IQ scores are compiled and the resultant numbers used as sole determination of placement and curricular needs. However, common practice within the school system does not necessarily follow these dictums. The breakdown from policy to practice is where the danger of the assessment process and resultant labelling begins. While it is out of the scope of this thesis to discuss the factors involved in this breakdown, the ramifications can be discussed. A

comprehensive assessment within the school system includes intelligence and IQ testing, as well as a wealth of other knowledge on the individual's functioning in other areas, including the home, behavioural, and emotional. This additional information may mediate an individual's IQ score, providing information on why an individual may score within the retarded range on an IQ test but not necessarily indicate a label of intellectual disability. However, the school system often concentrates solely on the IQ score to determine placement and curriculum for individual students. Instead, IQ scores should be used as baseline information on individual learning and cognitive functioning, not as the only information upon which to base placement decisions. The labelling process poses a problem within the school system because the school system erroneously employs IQ scores and cognitive functioning information to label students. A diagnostic label such as intellectual disability can be used positively, as it provides a wealth of research-based information on how the individual child may learn qualitatively differently from other students. To ignore this information that is gained through diagnosis, the opportunities to aid the student are also lost. The negative consequences of labelling are evident within the education system when a label of intellectual disability alone is used as an adequate indication of an individual's functioning.

The progression in labelling trends has been well documented within this thesis. However, the purpose of labelling in the beginning of the twentieth century was not instituted with malicious intent within the education system. As is the case today, labelling and programming for students identified as intellectually disabled was largely conducted with the intent of helping those individuals to find their places in society and to prosper to the best of their abilities. The fact that we refer to these individuals as intellectually disabled today, instead of feebleminded, does not change the fact that past

and present initiatives were both initiated to benefit these individuals. Nor does it negate the fact that today, just as in the past, these individuals are misdiagnosed, misplaced, and negatively stereotyped within the education system. While the elimination of the term feeble-minded is obviously welcome, the new label of intellectual disability does not negate the continued difficulties with educating these individuals. Continued research and increased resources for these students is necessary today.

Such continued progress needs to include family and environmental intervention, enabling individuals and their families to succeed and to receive the services they require. Increased research is necessary in the areas of learning mechanisms and early intervention. Through personal experience within the school system, the author of this thesis observed that often children with learning difficulties are not referred until they reach grades three or four. The reasons for this vary and include deferring referral in order to wait and determine if the student will progress as he or she matures and develops. However, by the time the child has reached the age of eight or nine, many opportunities for early intervention have been missed. Increased collaboration among professionals and increased dissemination of research material could do much to intervene earlier on the behalf of these children, so that they could receive the supports they required as soon as possible.

#### 5.4 Increasing Need for Parental Involvement

Trends within education and Saskatchewan Learning policy beginning in the 1990s saw a shift towards increased inclusion of parents into education decisions for their children with intellectual disabilities. However, while policy and procedure emphasize parental involvement, the practice within schools does not necessitate

collaboration between the parents and assessment professionals before assessment takes place. At another level, international policies concur with the importance of including parents and those individuals with disabilities when determining the design and implementation of programmes for special education (UNESCO, 1994). The same body also states that the community should become involved to compensate when there is a lack of family support (UNESCO, 1994). However, preference for intensive remediation should focus on involving parents and caregivers in the education of students with intellectual disabilities.

Saskatchewan Learning needs to promote an increased effort to actualizing commitment to the inclusion of parents in special education programming for their children. Whereas in the mental hygiene era parents were not seen as competent to aid in their child's education, parental involvement now is fostered and promoted within the schools. Communication with parents needs to occur before, during, and after the assessment process. While this has been stated in policy as needing to occur, it does not in actuality receive wide practice. Possibly the lapse between policy and practice occurs in this instance as a result of limited time resources and the lack of school-based supports. The education system needs to work with parents and release the *school-as-substitute-parent* role that has permeated education and can be seen to harken back to the era of mental hygiene efforts. While students spend a significant amount of time within the school system, the fact that these students are not the school's children needs to be reinforced. The students within our schools have parents. While these parents may require supports to aid them in raising their children, and while schools may intervene by providing these supports, it is the responsibility of parents to raise their children.

Saskatchewan Learning may benefit from considering the development of parent groups of children identified with an intellectual disability. These groups would be comprised of parents of those students identified with an intellectual disability, who could then network with each other based upon their similar circumstances. Through the parent groups, the school system could provide information and referrals to associations dealing with intellectual disabilities on the current education and resources available for individuals with intellectual disabilities. By providing parents with a means to contact and confer with other parents, families of children with intellectual disabilities would empower themselves to gain information, as well as to allow these parents to have a voice to advocate for themselves and their child. These parents could then discuss their concerns regarding their children's education and provide a unified group to address issues of resources and program shortfalls. These parents have intimate knowledge of their own child's strengths and needs, and by providing a forum for them to discuss issues pertinent to their situations, there is the possibility for positive change.

### 5.5 Curriculum Reform

Saskatchewan Learning has made great strides in determining appropriate education and curriculum for students with intellectual disabilities. However, curriculum reform needs more effort. While the establishment of a Core Curriculum and Common Essential Learnings developed a sense of inclusion for all students within the education system, an insistence that all students have programs based on these prescriptions may not be conducive to the most effective education for students with an intellectual disability. Equality of education and opportunity does not mean every student's education needs to be the same. Individual students' goals and aspirations

need to be considered and curriculum should be focused on helping them to achieve these goals. There is a need to continue to expand and develop curriculum for students with intellectual disabilities. It is especially important to address the need to incorporate curricula and instruction based on research and practices with proven merit. New information on learning principles is developing, and Saskatchewan Learning needs to ensure that this information is finding its way into educational practice.

New research into concepts that have already received support within Saskatchewan Learning needs to be visited. A practice coined as ClassWide Peer Tutoring (CWPT) has shown positive results when working with individuals with intellectual disabilities (Greenwood, Hou, Delquadri, Terry, & Arreaga-Mayer, 2001). CWPT was developed in order to increase academic performance of those with mild learning disabilities so they would not have to be placed in segregated learning disability or EMR classes. The model is based upon the teacher's providing a student with a scripted lesson from the curriculum to teach a peer within the same classroom. Each student plays both tutor and tutee roles in each session. The benefits of the practice include immediate error correction, rewards for progress, monitoring of progress (via public graphs), and increased social competence from the peer interactions (Greenwood et al., 2001). CWPT was seen to be effective, with traditional teacher-led strategies resulting in twice as many errors when post-tested. The authors state that a drawback of CWPT is that it requires a great deal of time to garner results. For instance, guidelines for CWPT were to conduct four 30-minute sessions a week per subject matter to provide effective results (Greenwood et al., 2001). While this particular model of peer tutoring and peer interaction may not be the most efficient, it clearly details how inclusion

principles in the form of peer interaction can have decided benefits for the education of all students.

## 5.6 Early Intervention and Prevention

When special education was reviewed in *Directions for diversity* (2000), the review committee envisioned a program of early screening and identification of children to screen for factors known to place children at risk for learning and behavioural problems. This vision would be useful for individuals at risk for intellectual disability, since often mild intellectual disabilities are not recognized until children enter school. Early identification centring on needs-based assessment of younger children may help to off set problems. The new *Children's services policy framework* (2002) saw the use of the Community School Pre-Kindergarten program as a useful resource to prevent and intervene with children in vulnerable positions, including programs for children with low-incidence disabilities, such as mild intellectual disabilities. The expansion of these programs is vital to curb and offset the incidence of mild intellectual disabilities. As well, the programs would serve to decrease costly and less effective programming which would occur later in life if prevention and intervention were not provided earlier. The traditional provision that children need to meet high-cost disability criteria results in children who need support, and for whom prevention and intervention may offset future disability, but these children miss out on supports when the diagnosis-prescription medical model of classification persists.

Here again, the need for school-based resources and professionals would be integral in order to alleviate difficulties with early identification and provision of preventative measures. The Educational Psychologist cannot provide early intervention

to a student who is not referred to her or him until severe difficulties persist into third grade. A professional who is school-based would be monitoring individual progress continuously, and could intervene at the first sign that extra assistance was necessary. Professionals who do not know a child exists cannot be expected to intervene on that child's behalf, to provide services that would be helpful or necessary to the child's success. Does the present school system fail students who require help early? There is no doubt that this is true. If school-based services could alleviate these shortfalls and could aid children when they first need it, why are these services not provided? The necessity of school-based services has been realized and documented; failure to incorporate such services is negligent.

#### 5.7 The Need for Action Toward School<sup>Plus</sup>

As has already been mentioned, the ramifications of School<sup>Plus</sup> for the future of education in Saskatchewan are far reaching. The development of SEAHSN and an interagency with school-based supports would have a large positive effect on assessment and on the delivery of prevention and intervention supports. An increased collaborative effort between all services for students is integral, so that education incorporates the full range of services that are required to allow students to be successful. The Community School philosophy needs to be adopted on a wider scale, with a more detailed understanding of how to increase interaction of the school with the community. An inclusion philosophy needs to be adopted that reacts to the changing attitudes of society and works towards changing policy and practices of government towards individuals with disabilities (Ministers, 1998). With a collaborative process it would be possible to utilize the expertise of staff who have access to information on instructional strategies



and materials that could benefit regular classrooms within an inclusive model (UNESCO, 1994). Recent years have seen a shift away from the identification of students with learning difficulties to the identification of barriers to learning for all children (UNESCO, 1999). There is the need for an increased emphasis on action, instead of focusing on identifying the need for the newest *paradigm shift*. The education system has seen enough of research into new movements in education and the ramifications for educating students with intellectual disabilities.

While the recommendations in the School<sup>Plus</sup> report include a significant contribution from the government in the way of funds to enact the report, the recommendations need action now. More time is not needed to react to the report and to discuss the ramifications of School<sup>Plus</sup>. Documents have already been produced discussing what should happen from here in regards to the School<sup>Plus</sup> report. As already mentioned, what we need now is action. As the report detailed, the roles of the school and of the society we all must live in today have changed and are continuing to change, placing increased responsibility on the schools to provide for students. Special education has undergone a number of challenges related to how society regards individuals with an intellectual disability, and now information intimating necessary changes to practice needs to be acted upon.

The positive ramifications of a School<sup>Plus</sup> environment cannot be ignored, but the actuality of these changes and improvements within the education system are not guaranteed. The possibility of these ideals coming to fruition within today's political climate is not determined. In examining the government's response to the School<sup>Plus</sup> report, it is evident that the Saskatchewan government is not prepared to invest the fiscal and political resources towards creating such an environment. The present thesis

supports the necessity of this collaborative and school-based environment, but based upon the government's lack of true action and willingness to commit, this may not happen. However, the thesis is written from an ideal perspective and strives to detail what needs to occur, although what is necessary is not always accomplished.

## 5.8 Assessment and the Need for Collaboration

Through the reading and analysis of Saskatchewan Learning policy over the past four decades, it was realized that the assessment of students with intellectual disabilities was addressed through an emphasis on how teachers can assess students and determine the appropriate instruction and curriculum for students. This emphasis on school responsibility and autonomy is positive to the end that schools and teachers are in the best position to know their students and determine their needs. Within this context it becomes apparent that the ramifications of School<sup>Plus</sup> and its recommendations will be integral to the schools and how they operate. As School<sup>Plus</sup> suggests, schools and teachers need to concentrate on the education of students. However, one major thrust of education that merits immediate attention is the fact that we need to include more than teachers in the education of students, including those students with intellectual disabilities. Other resources are necessary, and these resources need to be incorporated closer within the education fold. School<sup>Plus</sup> will have a positive legacy within current education if the recommendation that services for students need to be based on an interagency philosophy with services that are school-based is fully realized. The concept of SEAHSN is integral to the future of education in Saskatchewan.

Saskatchewan Learning has developed a research base, including information on how teachers can assess students to determine appropriate curriculum and program

goals. However, Saskatchewan Learning also needs to be more explicit and confirm effective practices necessary for assessment by other professionals. The time has come when policy needs to include the participation of other professionals (such as the Educational Psychologist and Speech Language Pathologist), and incorporate them more explicitly as a part of the school team. While assessment is conducted within the schools by teachers, assessment for students, especially those suspected of intellectual disability, is often required on a more individual basis by other professionals.

Saskatchewan Learning needs to come to terms with the issue of assessment. The education system needs to be explicit in terms of what authentic assessment means within the context of present-day schools and systems. Research on current practices in assessment suggest that it would be more effective to hold a preassessment meeting when a student is referred for assessment, in order to determine what data and information is already available and what additional data is needed to meet the student's needs (Capper et al., 2000). Through this process, assessment could then be based on what information is needed for the individual child, not based on an assessment model geared towards funding for a suspected disability. Capper et al. (2000) detail that once information has been gathered from the assessment, meetings can be held to determine specific goals for the student, using the information garnered from the assessment. This promotes a more ideal situation, in which "we provide student services based on identified needs rather than on segregated funding arrangements and programs" (Capper et al., 2000, p. 119).

The assessment practice of curriculum-based measurement is mentioned within this thesis, and given credence as an effective alternative assessment method. However, the fact that CBM is time consuming and that conducting it requires a great deal of

teacher resources is seen as a barrier to the use of the CBM method. One area that merits consideration is the use of school-based Educational Psychologists to conduct CBM, where the Educational Psychologist can then work closely on intervention and program planning with the teacher. A school-based Educational Psychologist, skilled in the area of assessment, would be able to use CBM to monitor student progress and adapt programming. Saskatchewan Learning has suggested CBM for use within the schools in its policy and procedure manuals, but widespread use has not occurred. It is also important to move away from emphasizing assessment as the singular responsibility of other professionals, such as the Educational Psychologist. Necessary adjustments should occur so that these individuals could become more involved in program and intervention planning. With their education and expertise in assessment and learning principles, the contribution of these individuals merits exploration. However, the key to utilizing these resources lie within the School<sup>Plus</sup> environment and its parameters of school-based interagency. Assessment should be conceptualized as school-based phenomena, and the CBM model can be included to work towards individual education goals. Saskatchewan Learning policy focuses on the school and teachers as the epicentre of school experience. Emphasis is placed on using professionals present within the school and involving the family, while using other support services only when necessary. Formal assessment as conducted by Educational Psychologists or Speech Language Pathologists needs to be involved in the everyday school lives of students. Through these school-based experiences with students, professionals will have an in depth understanding of what adaptations are necessary for the effective education of each individual student.

## 5.9 An Ideal School Environment

In a School<sup>Plus</sup> environment, if instituted and run within the parameters set out within the School<sup>Plus</sup> report, school-based professionals would know students before, during, and after the assessment process. These professionals would work together to benefit the child, and the assessment process would be more effective due to the intimate knowledge professionals have gained based upon an ongoing relationship with the referred child and his or her family. These professionals would be in a better position to help children learn and to improve programming for the students. The Educational Psychologist would be an integral and integrated professional within the school environment. The fact that this type of environment does not currently exist within the school system was the reason the author of this thesis has chosen not to pursue employment within the school system. There are a number of skills and expertise the author has gained through her education and practical experience that are not utilized within the school system to help students with their learning and programming difficulties. The abilities of Educational Psychologists are not effectively employed within the education system, and it is this factor, among others, that contributes to the continued inability of the school system to effectively educate and provide for individuals with an intellectual disability.

The education system needs to seriously consider the role of the Educational Psychologist. In order to engender real positive change, the role of the Educational Psychologist needs to be expanded to embrace a collaborative role. These professionals are trained to provide information on how children can learn and what would benefit this process, but their role is limited to that of a tester, producing IQ scores that are used to limit and label students within the system. As well, the Educational Psychologist is

currently largely ineffective due to the gross number of schools each individual professional is responsible for. All one needs to do is to look at the referral list for some of the inner city schools to determine that there are a number of schools that require an Educational Psychologist to work one-on-one with their students and staff. To under-utilize the Educational Psychologists' skills and at the same time to over-extend the Educational Psychologist-school ratio is to directly harm the chances for each individual student to succeed within his or her education career. Does Saskatchewan Learning want to benefit each child within the school system? I think it does. Is Saskatchewan Learning doing everything it can to make this goal a reality? Not at present. The following quote exemplifies what needs to occur now in order to engender positive change for the future:

[C]hange begins to occur when individuals with new attitudes reach a sufficiently critical mass that they begin changing the culture (i.e., the values, beliefs, norms, and practices) of their agency (Halpern & Berz, 2001, p. 220).

## REFERENCES

- Barton, L., & Tomlinson, S. (Eds.). (1984). *Special education and social interests*. New York: Nichols Publishing Company.
- Beirne-Smith, M, Ittenbach, R. F., & Patton, J. R. (1998). *Mental retardation* (5<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice-Hall.
- Berg, C. A., & Klaczynski, P. A. (2002). Contextual variability in the expression and meaning of intelligence. In R. J. Sternberg & E. L. Grigorenko (Eds.), *The general factor of intelligence: How general is it?* (pp. 381-412). Mahwah, NJ: Lawrence Erlbaum Associates.
- Bersoff, D. N. (1982). From courthouse to schoolhouse: using the legal system to secure the right to an appropriate education. *American Journal of Orthopsychiatry*, 52, 506-517.
- Biklen, D., Ferguson, D., & Ford, A. (1989). *Schooling and disability*. Chicago, IL: The University of Chicago Press.
- Binet, A., & Simon, T. (1973). *The development of intelligence in children*. New York: Arno Press.
- Block, N. J., & Dworkin, G. (Eds.). (1976). *The IQ controversy: Critical readings*. New York: Pantheon Books.
- Bond, L. A., & Compas, B. E. (Eds.). (1989). *Primary prevention and promotion in schools*. Newbury Park, CA: Sage Publications.
- Bronfenbrenner, U. (1999). "Is early intervention effective?": Some studies of early education in familial and extra-familial settings. In A. Montagu (Ed.), *Race and IQ expanded edition* (pp. 343-378). New York: Oxford University Press.

- Burt, C. (1955). The evidence for the concept of intelligence. *British Journal of Educational Psychology*, 25, 158-177.
- Burt, C. (1959). The examination at eleven plus. *British Journal of Educational Studies*, 7, 99-117.
- Canadian National Committee for Mental Hygiene. (1928). *Mental hygiene of childhood*. Toronto, Ontario, Canada: Author.
- Canadian National Committee for Mental Hygiene. (1932). *Report of a survey made of the organization in 1932 by the Canadian Medical Association*. Ottawa, Ontario, Canada: The Metropolitan Life Insurance Company.
- Canadian National Committee for Mental Hygiene. (1945). *A mental hygiene program for Saskatchewan*. Regina, Saskatchewan, Canada: King's Printer.
- Capper, C. A., Frattura, E., & Keyes, M. W. (2000). *Meeting the needs of students of ALL abilities: How leaders go beyond inclusion*. Thousand Oaks, CA: Corwin Press.
- Carr, R. A. (1979). Goal attainment scaling as a useful tool for evaluating progress in special education. *Exceptional Children*, 46, 88-95.
- Cherneskey, M. (1978). *A touch of Laycock: A study of S. R. Laycock educator and apostle of mental health*. Unpublished master's thesis. University of Saskatchewan, Saskatoon, Saskatchewan, Canada.
- Cleland, C. C. (1991). Developmental/mental retardation. In C. E. Walker (Ed.), *Clinical psychology: Historical and research foundations* (pp. 343-360). New York: Plenum Press.



- Cohen, S. (1983). The mental hygiene movement, the development of personality and the school: The medicalization of American education. *History of Education Quarterly*, 23, 123-149.
- Denzin, N. K., & Lincoln, Y. S. (Eds.) (2000). *Handbook of qualitative research*. Thousand Oaks, CA: Sage Publications.
- Dickinson, H. D. (1989). *The two psychiatries: The transformation of psychiatric work in Saskatchewan, 1905 – 1984*. University of Regina, Regina, Saskatchewan, Canada: Canadian Plains Research Center.
- Dickinson, H. D. (1993). Scientific parenthood: The mental hygiene movement and the reform of Canadian families, 1925-1950. *Journal of Comparative Family Studies*, 24, 387-402.
- Dunn, L. M. (1968). Special education for the mildly retarded – is much of it justifiable? *Exceptional Children*, 35, 5-22.
- Everett, B. (1994). Something is happening: The contemporary consumer and psychiatric survivor movement in historical context. *The Journal of Mind and Behavior*, 15, 55-70.
- Feuerstein, R., Rand, Y, & Rynders, J. E. (1988). *Don't accept me as I am: Helping "retarded" people to excel*. New York: Plenum Press.
- Flynn, M. P. (1991). *Protestant worldly asceticism: Its effect on theory in North American psychology, educational psychology and education; and its implications for Canadian research in special education, 1968 to 1989*. Unpublished doctoral dissertation. Dalhousie University, Halifax, Nova Scotia, Canada.

- Franklin, B. M. (1989). Progressivism and curriculum differentiation: Special classes in the Atlanta public schools, 1898-1923. *History of Education Quarterly*, 29, 571-593.
- Fraser, S. (Ed.). (1995). *The bell curve wars: Race, intelligence, and the future of America*. New York: Basic Books.
- Fuchs, L. S., & Fuchs, D. (2000). Analogue assessment of academic skills: Curriculum-based measurement and performance assessment. In E. S. Shapiro & T. R. Kratochwill (Eds.), *Behavioural assessment in schools: Theory, research, and clinical foundations* (2<sup>nd</sup> ed.) (pp. 168-201). New York: The Guilford Press.
- Gelb, S. A. (1989). "Not simply bad and incorrigible": Science, morality, and intellectual deficiency. *History of Education Quarterly*, 29, 359-379.
- Goddard, H. H. (1916). *Feeble-mindedness: Its causes and consequences*. New York: Macmillan Company.
- Gould, S. J. (1981). *The mismeasure of man*. New York: W. W. Norton & Company.
- Gould, S. J. (1996). *The mismeasure of man* (2<sup>nd</sup> ed.) New York: W. W. Norton & Company.
- Government of Saskatchewan. (2002). *Securing Saskatchewan's future – ensuring the wellbeing and educational success of Saskatchewan's children and youth: Provincial response, role of the school final report*. Regina, Saskatchewan, Canada: Author.
- Greenwood, C. R., Hou, L., Delquadri, J., Terry, B. J., & Arreaga-Mayer, C. (2001). ClassWide peer tutoring: A learning management system. In J. Woodward & L. Cuban (Eds.), *Technology, curriculum and professional development: Adapting*

- schools to meet the needs of students with disabilities* (pp. 61-86). Thousand Oaks, CA: Corwin Press.
- Griffin, J. D. M., Laycock, S. R., & Line, W. (1940). *Mental hygiene: A manual for teachers*. New York: American Book Company.
- Halpern, A. S., & Berz, M. R. (2001). The rise and fall of the community transition team model. In J. Woodward & L. Cuban (Eds.), *Technology, curriculum and professional development: Adapting schools to meet the needs of students with disabilities* (pp. 203-225). Thousand Oaks, CA: Corwin Press.
- Herrnstein, R. J., & Murray, C. (1994). *The bell curve: Intelligence and class structure in American life*. New York: Free Press Paperbacks.
- Hincks, C. M. (1945). *Mental hygiene survey of Saskatchewan*. See University of Saskatchewan Library, call number RC448.S246: Province of Saskatchewan.
- Jensen, A. (1972). *Genetics and education*. New York: Harper & Row.
- Jensen, A. (1982). The debunking of scientific fossils and straw persons. *Contemporary Education Review*, 1, 121-135. Retrieved on January 8, 2003, from <http://www.debunker.com/texts/jensen.html>
- Kliwer, C., & Fitzgerald, L. M. (2001). Disability, schooling, and the artifacts of colonialism. *Teachers College Record*, 103, 450-470.
- Lautrey, J. (2002). Is there a general factor of cognitive development? In R. J. Sternberg & E. L. Grigorenko (Eds.), *The general factor of intelligence: How general is it?* (pp. 117-148). Mahwah, NJ: Lawrence Erlbaum Associates.
- Laycock, S. R. (1962). *Fostering mental health in schools*. Reprinted from the Canadian Journal of Public Health.

- Laycock, S. R. (1963). *Special education in Canada*. Toronto, Ontario, Canada: W. J. Gage Limited.
- Laycock, S. R. (1972). *Laycock papers, miscellaneous collection: Vol. 1*. Saskatoon, Saskatchewan, Canada: University of Saskatchewan.
- Laycock, S. R. (1972). *Laycock papers, miscellaneous collection: Vol. 2*. Saskatoon, Saskatchewan, Canada: University of Saskatchewan.
- Lowitzer, A. C., Utley, C. A., & Baumeister, A. A. (1987). AAMD's 1983 classification in mental retardation as utilized by state mental retardation/developmental disabilities agencies, *Mental Retardation*, 25, 287-291.
- MacMillan, D. L., Semmel, M. I., & Gerber, M. M. (1994). The social context of Dunn: Then and now. *The Journal of Special Education*, 27, 466-480.
- Marius, R. (1999). *A short guide to writing about history* (3<sup>rd</sup> ed.). Don Mills, Ontario, Canada: Longman.
- McCulloch, G. & Richardson, W. (2000). *Historical research in educational settings*. Philadelphia, PA: Opening University Press.
- McLaren, A. (1990). *Our own master race: Eugenics in Canada, 1885-1945*. Toronto, Ontario, Canada: McClelland and Stewart.
- Mercer, J. R. (1989). Why haven't schools changed the focus from pathology to prevention?: Conceptual and legal obstacles. In L. A. Bond & B. E. Compas (Eds.), *Primary prevention and promotion in schools* (pp. 345-360). Newbury Park: Sage Publications.
- Ministers Responsible for Social Services. (1998). *In unison: A Canadian approach to disability issues*. Human Resources Development Canada. Retrieved on November 7, 2002, from <http://socialunion.gc.ca/pwd/unison>

- Mundie, G. S. (1919). The problem of the mentally defective in the province of Quebec. *Canadian Journal of Mental Hygiene, 1*, 123-129.
- Murray, D. J. (1988). *A history of western psychology*. Englewood Cliffs, NJ: Prentice Hall.
- The National Support Systems Project. (1980). *A common body of practice for teachers: The challenge of Public Law 94-142 to teacher education*. Washington, D. C.: The American Association of Colleges of Teacher Education.
- Powell, D. R. (2001). Early intervention and risk. In G. Bremner & A. Fogel (Eds.), *Blackwell handbook of infant development* (pp. 543-564). Malden, MA: Blackwell Publishers.
- Pugach, M. C., & Warger, C. L. (1996). *Curriculum trends, special education, and reform: Refocusing the conversation*. New York: Teachers College Press.
- Rieber, R. W. (1998). Americanization of psychology before William James. In R. W. Rieber & K. D. Salzinger, (Eds.), *Psychology: Theoretical-historical perspectives* (2<sup>nd</sup> ed.) (pp. 191-216). Washington, D. C.: American Psychological Association.
- Ross, K. L. (1998). *Foundationalism and hermeneutics*. Retrieved June 16, 2002, from [http://www.comnet.edu/apa/apa\\_index.htm](http://www.comnet.edu/apa/apa_index.htm)
- Ryan, T. J. (1976). Promoting child development through a program of home visiting. *Canadian Journal of Behavioral Science, 8*, 102-105.
- Sanche, R. P. (1974). *Specialized services and institutions*. See University of Saskatchewan, call number LA411.8.0.68 no. 5: The Council of Ministers of Education.

- Sanche, R. P. (Ed.). (1976). *Comprehensive community based services: Public policy and legislative requirements*. Regina, Saskatchewan, Canada: The Saskatchewan Association for the Mentally Retarded.
- Sandiford, P. (1913). *The mental and physical life of school children*. New York: Longmans, Green, and Co.
- Sandiford, P. (1921). Critical survey of intelligence testing. *Canadian Journal of Mental Hygiene*, 3, 37-47.
- Sandiford, P. (1938). *Foundations of educational psychology: Nature's gifts to man*. New York: Longmans, Green and Co.
- Sarason, S. B. & Doris, J. (1979). *Educational handicap, public policy, and social history: A broadened perspective on mental retardation*. New York: The Free Press.
- Saskatchewan Education. (1978). *Teacher guide for division III educable mentally handicapped students*. Regina, Saskatchewan, Canada: Author.
- Saskatchewan Education. (1982). *Special education: A manual of legislation, regulations, policies and guidelines*. Regina, Saskatchewan, Canada: Author.
- Saskatchewan Education. (1989). *Special education policy manual*. Regina, Saskatchewan, Canada: Author.
- Saskatchewan Education. (1989). *Meeting challenging needs – a handbook for teachers of students having intensive educational needs*. Regina, Saskatchewan, Canada: Author.
- Saskatchewan Education. (1991). *Update bulletin on core curriculum: Special education branch*. Regina, Saskatchewan, Canada: Author.

- Saskatchewan Education. (1991). *Instructional approaches: A framework for professional practice*. Regina, Saskatchewan, Canada: Author. Retrieved October 29, 2002, from <http://www.sasked.gov.sk.ca/evergreen/policy/approach>
- Saskatchewan Education. (1992). *The adaptive dimension in core curriculum*. Regina, Saskatchewan, Canada: Author. Retrieved on October 25, 2002, from <http://www.sasked.gov.sk.ca/docs/policy/adapt>
- Saskatchewan Education. (1997). *Policy and procedures for locally developed and modified course of study, and alternative education programs*. Regina, Saskatchewan, Canada: Author. Retrieved October 29, 2002, from <http://www.sasked.gov.sk.ca/evergreen/policy/Idcaep>
- Saskatchewan Education. (2000). *Directions for diversity: Enhancing supports to children and youth with diverse needs*. Regina, Saskatchewan, Canada: Author.
- Saskatchewan Education. (2000). *Strengthening supports: Ministers response to the report of the special education review committee*. Regina, Saskatchewan, Canada: Author.
- Saskatchewan Education. (2001). *Creating opportunities for students with intellectual or multiple disabilities*. Regina, Saskatchewan, Canada: Author.
- Saskatchewan Education. (2001). *School<sup>Plus</sup>: A vision for children and youth*. Regina, Saskatchewan, Canada: Author.
- Saskatchewan Learning. (2002). *Children's services policy framework*. Unpublished draft.
- Schalock, R. L., Stark, J. A., Snell, M. E., Coulter, D. L., Polloway, E. A., Luckasson, et al. (1994). The changing conception of mental retardation: Implications for the field. *Mental Retardation*, 32, 181-193.

- Scheerenberger, R. C. (1987). *A history of mental retardation*. Baltimore, MD: Paul H. Brookes Publishing.
- Smith, D. D., Luckasson, R., & Crealock, C. (1995). *Introduction to special education in Canada: Teaching in an age of challenge*. Scarborough, Ontario, Canada: Allyn and Bacon Canada.
- Smith, J. D. (1995). For whom the bell curves: Old texts, mental retardation and the persistent argument. *Mental Retardation*, 33, 199-202.
- Smith, T. E. & Hilton, A. (1994). Program design for students with mental retardation. *Education and Training in Mental Retardation and Developmental Disabilities*, 29, 3-8.
- Spring, J. H. (1972). Psychologists and the war: The meaning of intelligence in the alpha and beta tests. *History of Education Quarterly*, 12, 3-15.
- Stack, R. (2001). *Progress and uncertainty: The educational rights of special needs children in British Columbia*. Retrieved on January 6, 2003, from <http://appeal.law.uvic.ca/vol7/pdf/stack.pdf>
- Stainback, W., & Stainback, S. (1984). A rationale for the merger of special and regular education. *Exceptional Children*, 51, 102-111.
- Taylor, L. J., & Skanes, G. R. (1977). A cross-cultural examination and some of Jensen's hypotheses. *Canadian Journal of Behavioral Science*, 9, 315-322.
- Terman, L. M. (1914). *The hygiene of the school child*. Boston: Houghton Mifflin Company.
- Terman, L. M. (1919). *The intelligence of school children*. Boston: Houghton Mifflin Company.



- Terman, L. M. (1923). *Intelligence tests and school reorganization*. New York: World Book.
- Thompson, J. W. (1994). Trends in the development of psychiatric services, 1844-1944. *Hospital and Community Psychiatry, 45*, 987-992.
- Thorndike, E. L. (1940). *Human nature and the social order*. Cambridge, MA: M.I.T. Press.
- Tomkins, G. S. (1986). *A common countenance: Stability and change in the Canadian curriculum*. Scarborough, Ontario, Canada: Prentice-Hall Canada.
- Tosh, J. (1991). *The pursuit of history: Aims, methods & new directions in the study of modern history* (2<sup>nd</sup> ed.). London: Longman.
- Tropea, J. L. (1987). Bureaucratic order and special children: Urban schools, 1890s-1940s. *History of Education Quarterly, 27*, 29-53.
- Tropea, J. L. (1987). Bureaucratic order and special children: Urban schools, 1950s-1960s. *History of Education Quarterly, 27*, 339-361.
- UNESCO. (1994). *The Salamanca statement and framework for action on special needs education*. Salamanca, Spain: Author. Retrieved on November 7, 2002, from <http://unesdoc.unesco.org/images/000984/098427eo.pdf>
- UNESCO. (1999). *Salamanca five years on: A review of UNESCO activities in the light of the Salamanca statement and framework for action*. France: Author. Retrieved on November 7, 2002, from <http://unesdoc.unesco.org/images/0011/001181/118118eo.pdf>
- Valencia, R. R., & Suzuki, L. A. (2001). *Intelligence testing and minority students: Foundations, performance factors, and assessment issues*. Thousand Oaks, CA: Sage Publications.

- Vitello, S. J., & Soskin, R. M. (1985). *Mental retardation: Its social and legal context*. Englewood Cliffs, NJ: Prentice-Hall.
- Weber, K. J. (1994). *Special education in Canadian schools*. Thornhill, Ontario, Canada: Highland Press.
- White, W. A. (1920). Childhood: The golden period for mental hygiene. *Canadian Journal of Mental Hygiene*, 2, 144-150.
- Will, M. C. (1986). Educating children with learning problems: A shared responsibility. *Exceptional Children*, 52, 411-415.
- Wills, T. H. (1919). Account of work for the feebleminded in Hamilton, Ontario. *Canadian Journal of Mental Hygiene*, 1, 237- 241.
- Wilson, W. M. (1992). The Stanford-Binet: Fourth edition and form L-M in assessment of young children with mental retardation. *Mental Retardation*, 30, 81-84.
- Winzer, M. (1996). *Children with exceptionalities in Canadian classrooms* (4<sup>th</sup> ed.). Scarborough, Ontario, Canada: Allyn and Bacon Canada.
- Wolfensberger, W. (1983). *Normalization-based guidance, education and supports for families of handicapped people*. Ontario, Canada: National Institute on Mental Retardation.
- Wolfensberger, W. (1999). A contribution to the history of normalization, with primary emphasis on the establishment of normalization in North America between 1967-1975. In R. Flynn & R. A. Lemay (Eds.), *A quarter century of normalization and social role valorization: Evolution and impact* (pp. 51-116). Ottawa, Ontario, Canada: University of Ottawa.
- Ysseldyke, J. E., & Algozzine, B. (1982). *Critical issues in special and remedial education*. Boston: Houghton Mifflin Company.

Zahr, L. (1994). An integrative research review of intervention studies with premature infants from disadvantaged backgrounds. *Maternal Child Nursing Journal*, 22, 90-101.

Zigler, E., Balla, D., & Hodapp, R. (1984). On the definition and classification of mental retardation. *American Journal of Mental Deficiency*, 89, 215-230.