REMOVE FROM OUR MIDS THEE UNFORTUNATES: A Historical Inquiry Into the Influence of Eugenics, Educational Efficiency as well as Mental Hygiene Upon the Vancouver School System and Its Special Classes, 1910-1969.

by

GERALD E. THOMSON

B.A., Simon Fraser University, 1979
Teacher's Certificate, Simon Fraser University, 1979
M.A., Simon Fraser University, 1992

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY in THE FACULTY OF GRADUATE STUDIES (Department of Educational Studies)

We accept this thesis as conforming to the required standard:

THE UNIVERSITY OF BRITISH COLUMBIA
March 1999
© Gerald E. Thomson, 1999
In presenting this thesis in partial fulfilment of the requirements for an advanced degree at the University of British Columbia, I agree that the Library shall make it freely available for reference and study. I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by the head of my department or by his or her representatives. It is understood that copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Department of Educational Studies
The University of British Columbia
Vancouver, Canada

Date March 23, 1999.
This is a history of special education in the Vancouver school system from 1911 to 1969. Special education is taken in the broadest sense to mean all forms of school instruction specifically created to depart from the preparation of a pupil for matriculation or academic graduation. The historical course of school reform in Vancouver was driven by the need to accommodate children who traditionally left school for work when they became too old for their grade placement. However, in a general sense, this history documents the evolution of the Vancouver school system itself from the early to mid-twentieth century and the forces which lay behind various aspects of school reform. The special classes for subnormal students was the first reform effort to deal with non-traditional pupils or feeble-minded school children as found by the second school doctor after 1910. This, in turn, led to the hiring of an American psychologist from Seattle, Washington, to find a new type of feeble-minded child, the higher-grade moron, in order to expand the special classes even further. The psychologist introduced mental testing into Vancouver's schools and helped to create a climate of acceptance for such scientific innovations in education.

This study reveals the important role a group of principals played in promoting education reform within Vancouver's schools. They began to take courses at the University of Washington during the early 1920s and helped to popularize many facets of American educational efficiency. Platooning, mental testing, differential high school curriculum organized into vocational/academic tracks, and the expansion of the special classes for subnormal children acted to organize, as well as categorize, large numbers of students in order to achieve educational efficiency. The creation of the Bureau of Measurements in 1927 and the opening of Kitsilano Junior High in 1928 represented the culmination of this effort to bring scientific efficiency to the schools of Vancouver. The influence of the 1925 Putman/Weir Survey of the School System must
be re-evaluated in light of the evidence this study presents regarding the transmission of ideas from the Seattle school system and the University of Washington to Vancouver.

The study also elucidates two other intellectual forces that propelled school reform in Vancouver. American educational efficiency has already been mentioned. Eugenics and the promotion of its principles by the first special education teacher, the first woman to chair the School Board, and the Local Council of Women had long-term consequences. The eugenic rationale for the segregation of subnormal school children became entrenched in educational policies of the school system itself. The forced institutionalization of the feebleminded, as well as their sterilization, were legalized under provincial statutes. Mental hygiene was officially introduced to Vancouver's schools in 1939 and was dispensed by the first clinical psychiatrist who remained in his position of authority until retiring in 1969. As head of the Mental Hygiene Division of the Metropolitan Health Services during the post-Second World War period the psychiatrist began training counsellors to deal with mentally-troubled youths. Archival data shows that most of these troubled youths were from the working-class east side of the city as opposed to the wealthier west side. What emerges is a historical pattern emerges of discrimination against various types of exceptional students who had to be removed from the midst of the regular classroom.

This study encompasses the scope of school reorganization in Vancouver during the period 1911 to 1969 through various special education reforms. It traces the erosion of traditional education but also attempts to reveal the conservative nature of the enacted school reforms. The differentiation, segregation and labelling of students in order to educate them according to their natural intellectual ability was on the surface educationally progressive. In the end this study will show these practices to be more bureaucratic solutions than reformist measures.
TABLE OF CONTENTS

Abstract pp. ii-iii
Table of Contents pp.iv-v
List of Tables pp.vi
List of Figures pp.vii-ix
Acknowledgement p.x

PART I: Education as Social and Scientific Management pp.1-3

CHAPTER ONE pp.4-35
"To Single Out Little Tots": Eugenics and the Creation of Special Classes for Subnormal Children within the Public Education Systems of North America.

CHAPTER TWO pp.36-74
"Sorting the Students": Differentiating the American School Population During the Early Twentieth Century.

CHAPTER THREE pp.75-122
Mental Hygiene in Canada: Medical Doctors and Educational Psychologists Differentiate the Canadian School Population.

PART II: pp.123-125
The Impact of Eugenics and Mental Hygiene Upon the Vancouver School System as Seen Through the Medical Doctors, Teachers, Psychologists and Psychiatrists Who Managed the Pupil Population.

CHAPTER FOUR pp.126-149
Evaluating the Physical and Mental Condition of the Race: The Medical Influence of Dr. F. W. Brydone-Jack and Miss Elizabeth Breeze, R.N., upon the Vancouver School System.

CHAPTER FIVE pp.150-208
Special Classes With a "Special Teacher": Miss Josephine Dauphinee and Her Supervision of the Special Classes System from 1911 to 1941.

CHAPTER SIX pp.209-252
The Psychological Clinic and the Psychometricians: Miss Martha Lindley, Miss Ruby Kerr and Dr. Peter Sandiford.
LIST OF TABLES

TABLE 1  American Army Tests: Years of schooling for officers and draftees, 1918.  p.56a

TABLE 2  IQ ranges and IQ comparisons of Vancouver students by parental occupation, 1925.  p.109a

TABLE 3  IQ ranges and values of Negro and White students in Kent County, Ontario, 1939.  p.113a

TABLE 4  Distribution of Intelligence Quotients (Terman Group Test-Form A) of Grade 8 pupils, June 1927.  p.186a

TABLE 5  IQ comparisons of Vancouver High School, Normal School and University students by parental occupation, 1925.  p.238a

TABLE 6  IQs of Vancouver Japanese and Chinese pupils, 1926.  p.241a

TABLE 7  Distribution of Intelligence Quotients (Terman Group Test-Form A) of Grade 8 pupils, June 1927.  p.281a

TABLE 8  Age-Grade Table, Vancouver Schools, September 1st, 1927.  p.282a
LIST OF FIGURES

FIGURE 1  Cincinnati's Problem, 1915.  p.17a

FIGURE 2  Courtis Pupil Records, 1913.  p.49a

FIGURE 3  The Evolution of the American Public School, 1919.  p.52a

FIGURE 4  Manual Training Classroom, Vineland Training School.  p.60a

FIGURE 5  H. H. Goddard's Kallikak genealogy, 1912.  p.61a

FIGURE 6  Steps in Mental Development, 1914.  p.86a

FIGURE 7  Public Hospital for the Insane, New Westminster, 1920.  p.95a

FIGURE 8  Peter Sandiford's ray diagram of mental development, 1913.  p.104a

FIGURE 9  The interrelationship of various types of schools, 1918.  p.106a

FIGURE 10  The physical examination of pupils in a Vancouver classroom, 1911.  p.135a

FIGURE 11  Vancouver School Medical Staff, 1912.  p.137a

FIGURE 12  Vancouver Special Class photographs, 1919.  p.163a

FIGURE 13  Special Class exhibition, 1919.  p.174a

FIGURE 14  Works of Special Class pupils at the Pacific National Exhibition, 1922.  p.177a

FIGURE 15  Special Class Time Table, 1921.  p.180a

FIGURE 16  Central School photograph, 1890.  p.189a

FIGURE 17  Photograph of Miss A. Josephine Dauphinee, 1928.  p.199a
FIGURE 18 Group portrait of the Vancouver Board of School Trustees, 1918-1919.

FIGURE 19 Observation Class and Special Class photographs, 1920.


FIGURE 21 Advertisement - University of Washington Summer Quarter, 1923.

FIGURE 22 Photographs of Robert Straight and Herbert Baxter King.

FIGURE 23 Thorndike-McCall Reading Test, January 1929, Grades 3B-9 inclusive, Vancouver, B.C.

FIGURE 24 Cartoon of Robert Straight, 1933.

FIGURE 25 Metropolitan Health Committee organizational plan, 1937.

FIGURE 26 Photograph of Dr. Charles Hegler Gundry, 1939.

FIGURE 27 Map of the Vancouver School System as of 1936.

FIGURE 28 Vancouver School Board: Special Invitation to Principals and Teachers, April 28, 1954.
I would like to acknowledge all those who made the completion of this dissertation possible. The support of Dr. J. Donald Wilson, my principal advisor, was crucial to helping me focus and complete this project in a timely fashion. I would also like to thank the other members of my committee, Dr. William Bruneau and Dr. Stephen Petrina for their efforts. Additional thanks to Dr. Charles Ungerleider and Dr. Neil Sutherland for their comments while actively involved in this project. Aside from my academic advisors I would like to thank Mrs. Eileen Thomson for her dedication in typing this dissertation and Miss Corinne Douglas for constructing the Appendices from my raw data. May the research contained in this project benefit and inform all those who read these pages.
PART I:
Education as Social and Scientific Management:

The first part of this dissertation is a theoretical outline of the ideological forces at work within the field of North American education during the early twentieth century. In the course of investigating the history of the special education classes which developed in the Vancouver school system from 1910 to the 1960s, it became increasingly apparent that little true understanding could be gained unless a certain amount of background was provided. A variety of social forces propelled the actions of the individuals who built the special class system, the psychological clinic, the educational measurement bureau and the mental hygiene or psychiatric division within the Vancouver school system. Under present-day circumstances their actions might seem rather eccentric or extreme. However, all of the social forces that influenced these individuals can be firmly located within the broader ideological environment of progressive social reform prevalent during the early twentieth century.

One of the main thrusts of the American progressive movement was an attempt to manage social problems out of existence. This effort found expression in a mechanistic type of public education that invoked the Deweyan vision of educating the individual for a democratic society. A rational and scientific system of public education emerged which sorted school children into different streams or curriculum tracks based upon their supposed innate mental ability. Intelligence testing was refined through the classification of soldiers in the American Army during World War One and in turn became a practical device to manage large urban school systems in the 1920s. A differentiated curriculum was devised in the high schools of North America composed of an academic stream for children of high ability, a vocational stream for the average to dull children, and a segregated program of special classes for slow learners.
or mentally challenged children who were referred to at the time as the "feebleminded". It was a school system based upon the scientifically discerned intellectual worth of human beings. It also claimed to support the child-centred vision of public education as found in John and Evelyn Dewey's *Schools of To-Morrow* (1915).

The first chapter in this part of the dissertation provides evidence of a link between eugenics and special education policy in North America during the early twentieth century. The selection of subnormal children on a scientific basis for the special classes and the institutional segregation of the feebleminded were primarily based in eugenics, a social rationale embraced by many social radicals of the day from across the political spectrum. The second chapter describes two movements in early twentieth century North American education that had definite links to the eugenic movement: educational efficiency and intelligence testing. Taking the premise of endless factory production from efficiency measures outlined by Frederick W. Taylor in his famous business studies, the new academic leaders of educational administration at several universities envisioned the school principal as an "educational engineer". The wise engineer/principal ran his factory/school by dividing the workforce/students into differentiated curriculum streams according to their intellectual ability or social worth using the new intelligence tests. Maximum utilization of each student's mental potential was the goal of these efficiency measures; however, those judged inferior received decidedly less consideration. Teachers had little individual control over such a highly regimented educational system with formalized teaching practices. The final chapter in this first part of the dissertation addresses the creation of the special class system in Canada's schools which was largely the product of the emerging "mental hygiene" movement in education. Canada's impetus for the creation of these special classes came largely from medical doctors directly involved in the system of health inspections conducted
by each local school district.

The second part of this dissertation will address the individuals who actively promoted the restructuring of the Vancouver school system in accordance with the theoretical arguments of medical classification, eugenics, educational efficiency and mental hygiene. The reader must have some degree of familiarity with these arguments in order to grasp the willingness of the Vancouver School Board to create a special class system for subnormal children in 1910 without the benefit of provincial funding. These special classes continued to expand over the next half century. The School Board's sense of social conviction about the necessity of such mental hygiene measures in public education must have been extremely strong.
CHAPTER ONE

"To Single Out Little Tots": Eugenics and the Creation of Special Classes for Subnormal Children within the Public Education Systems of North America.

i. Introduction:

In 1929 as the Great Depression was about to begin the Mayor of New York City, Fiorello La Guardia, spoke to a conference of educators who taught "subnormal" children. Not known to express his views in a polite and indirect manner, the populist La Guardia was blunt in his criticism. He stated: "There is nothing more repulsive to me and nothing more unwarranted than to single out little tots, under 12, put them in a separate room and label them...". 1 His remarks reveal that a very profound change had occurred in North American education during the early twentieth century, namely the infiltration of the scientific view of the child as a biological organism which could be classified by mental ability. This subject, the historical influence of psychology upon the conduct of public education, is an area of scholarship that has received uneven attention in both Canada and the United States. The literature is divided between works which focus upon "mental hygiene", or the broad application of psychology principles to educational concerns of childhood such as health education and "eugenics", or the active promotion of specific measures to segregate the mentally unfit while encouraging the mentally superior to dominate society.

In the United States Sol Cohen has studied the propagation of mental hygiene as a social, educational and public health policy in public institutions such as schools from the 1920s to the 1940s. He emphasizes that these educational initiatives were funded through the financial support of the Rockefeller Foundation. 2 Theresa Richardson has attempted to construct a comprehensive history of mental hygiene as a distinct social policy in North America that was promoted by both the Canadian and American National Committees for Mental Hygiene. 3 Angus McLaren chose eugenics as the focus for his study of how the science of
the well-born directly affected Canadian government policies on public health, immigration, the medical treatment of the mentally subnormal and educational matters such as sex hygiene. 4 Eugenics has been cited by numerous American writers as a specific factor influencing social policy in such areas as public health measures, immigration and education. Donald Pickens examined American eugenics as being an appendage of the American progressive movement which directly affected such academic fields as educational psychology and, in particular, the works of Edward L. Thorndike. 5 In a more comprehensive study of American eugenics, Daniel J. Kevles sought to show how the movement was a decidedly nativistic product of the professional middle classes who used its scientific mandate of race betterment to shape public policy during the decades between the two World Wars. 6 Mark H. Haller used hereditarianism as the basis for his volume on the link between the American eugenic/genetics movement of the interwar period and the social Darwinism of the late nineteenth century. 7 Hamilton Cravens makes the valid point that many eugenic social initiatives in the United States were an extension of hereditarian ideas originally fostered by Social Darwinism.

Cravens also explored the eugenic biases which existed during the creation of the first dubious scientific measures of intelligence in America and the dominance of hereditarian theory over environmental causation. 8 The now classic volume on American eugenics, intelligence testing and, indirectly, mental hygiene is Stephen Jay Gould’s expose of the fraudulent scientific claims of early genetic theories of intelligence and the social wrongs committed under its auspices. 9 Diane B. Paul believes this tantalizing preoccupation with controlling human heredity is what first created and continues to empower science’s concern with America’s genetic destiny. 10 In a work that does not focus upon the United States, Mark B. Adams convincingly shows how the eugenic preoccupations were a truly international phenomenon during the twentieth
century. However, there are few links made in any of the works on North American eugenics and mental hygiene to the practice of public education. A notable exception is Steve Selden’s work on how eugenic ideas became a part of the high school biology curriculum in the United States from 1919 to 1949. Also Cohen and Richardson demonstrate how mental hygiene, through the financial backing of the Rockefeller Foundation, was implemented in the public school system. Yet the eugenic, and later, mental hygiene preoccupations of such educational projects as special classes for subnormal students appear to be generally overlooked despite being a widespread reality from 1900 onward in North American public school systems.

In a recent article by Mona Gleason about the post-Second World War educational paradigm created by the influence of psychology on schooling practices in Canada, exactly the same point is posited. Psychology is described by Gleason as "a force largely unexplored in Canadian educational history". This is a very accurate appraisal of the situation with the exception of some recent volumes by Margaret Winzer, James Trent, Jr., Barry Franklin and Leila Zenderland. Winzer provides a very comprehensive history of special education; Trent focuses on the creation of the menace of the feebleminded; Franklin critiques the medical model from which the modern field of learning disabilities arose and Zenderland examines the role of Henry Herbert Goddard in popularizing intelligence testing. All of the volumes focus on the United States with the exception of Winzer’s. Winzer and Trent, Jr. do give credence to the eugenics movement and its effect on special education.

However, in this dissertation both eugenics and mental hygiene will be placed in a central position in order to understand how these social/scientific philosophies affected the daily practices of many fields of public activity and, in particular, education. Sheila Martineau has called this flirtation between the eugenics movement and
the educational state a "dangerous liaison" of "puritanical proportions" which inflicted "a tyranny of social controls" over the "lives of disadvantaged children". In many ways this encapsulates what my dissertation is about; first, the infiltration of eugenic and mental hygiene ideas on a broad scale within academic/medical theory and second, the use of those same ideas on a purely local scale as regards the Vancouver school system. This first chapter concerns the scientific underpinnings of special education and the singling out of "little tots" as a new sub-species of human being, the subnormal child.

ii. Francis Galton and the Eugenic Impulse to Categorize:

Eugenics began as a practical proposal to transfer the genetic manipulation techniques used on domestic animals and plants, as in stock breeding or plant hybridization, to the genetic improvement of the human species. A cousin of Charles Darwin, Francis Galton, first proposed that nature could be manipulated in the case of human beings to breed for better characteristics (positive eugenics), and alternatively by restricting reproduction to phase out undesirable genetic characteristics (negative eugenics). Galton used the Greek word "eugenes", meaning "good in stock" and coined the term eugenics to describe what he envisioned as the science of the well-born. Galton's first volume on the subject, Hereditary Genius (1869) made the pronouncement that mental abilities were stable and transmitted over time as mental traits. This supposed fact was later stressed in his Inquiries into Human Faculty and Its Development (1883) and Natural Inheritance (1889). Angus McLaren states that Galton "was the first to assert that 'intelligence' was a scientifically meaningful concept and that it was inheritable". Galton's work gave scientific credence to the commonly held notions of the populace that some people or families were simply "born bad" and that certain races had a propensity for intellectual capacity, while others were suited to physical labour requiring little mental effort. In fact Galton states bluntly in his Inquiries volume that
eugenics would "give to the more suitable races or strains of blood a better chance of prevailing speedily over the less suitable" races of man. Eugenics was more than just a descriptive term for "judicious mating" and provided "a neater word" for capturing a planned program of social "viriculture". Galton prided himself on the almost God-given ability he possessed to judge individuals of either sex by their desirable traits. He loved to create tallies of the various types of people he saw as he walked the streets or observed groups of people in public places. McLaren relates how Galton described this process in his own words:

Whenever I have occasion to classify the persons I meet into three classes, "good, medium and bad", I use a needle mounted as a pricker, wherewith to prick holes, unseen, in a piece of paper, torn rudely into a cross with a long leg. I use the upper end for "good", the cross arm for "medium", the lower end for "bad". The prick holes keep distinct, and are readily read off at leisure. 17

After 1906 the mantle of eugenics would be passed by Galton to Karl Pearson who he personally approved as the first head of the Biometric Laboratory at University College, London. The Biometric Laboratory had been established through generous funding from Galton and his wealthy followers. Pearson gave statistics a prominent place in the eugenic study of human populations and their mental abilities. He eventually became Director of the Galton Laboratory for National Eugenics but also held the directorship of the Department of Applied Statistics. Pearson’s main contribution to posterity was to describe the normal distribution curve. Using data from school teachers about the mental ability of their students from several descriptive categories as "very dull", "slow", "quick", "intelligent" and the like, Pearson found that most populations of school children would form a characteristic curve of mental capacity. There were small pupil populations at the low and high ends of the curve where it rose and descended, with the bulk of students lying in a broad range of normal ability forming the curve’s central rise. This data was not obtained with the new Binet-Simon mental tests
as Kevles has pointed out but rather from the subjective opinions of British school teachers. 18

Pearson shared with Galton a driving passion to remake the social order on the basis of heredity. In 1898 when he received word of Pearson's statistical discovery, Galton declared that: "We shall make something of heredity at last". 19 Pearson, along with Galton, seemed to have regarded school children as the raw material for eugenic discoveries and the nation's race destiny. They were a captive population for experimentation and classification which served Pearson's research purposes in discerning the normal curve of mental abilities in any sample population. Children were, depending upon their social and mental backgrounds, also representatives of the nation's intellectual assets or future security. Galton advised that the "worth of children" could only be achieved by eugenic selection when he declared:

The brains of the nation lie in the higher of our classes. If such people as would be classed W or X could be distinguishable as children and procurable by money in order to be reared as Englishmen, it would be a cheap bargain for the nation to buy them at the rate of many hundred or some thousands of pounds per head. 20

While Galton believed in giving minimal training in good habits and character to all children, the eugenic project seemed to demand the devotion of educational resources primarily to a group of selected children. It was a social strategy the principal aim of which was to find ways of "reducing the undesirables" while "increasing those who would become the lights of the nation". 21 Galton's eugenics introduced the concept of social selection for educational purposes and Pearson followed this with a statistical theory concerning the distribution of mental ability within any given population. This finding would later be replicated through the widespread usage of the Binet-Simon mental tests to rank school children. The eugenic project contained an educational component from its very inception under Galton.

iii. The Continuity of the Germ Plasm:
Galton’s eugenic ideas remained speculative at best until they were "taken up and made scientifically respectable by Karl Pearson", writes Angus McLaren. Pearson’s initial scientific investigations into such physical characteristics as differing statures, eye colours, fertility and longevity eventually led him into the varying mental capacities of human beings. Pearson proved in mathematic terms the theory of correlation that Galton had only suggested could gauge human intelligence. It was now possible to create idealized achievement rankings or centiles of mental ability within designated ranges of normality. After 1884 the "r" coefficient and other statistical innovations provided the "tools" with which "psychologists could express their findings". Galton, as McLaren points out, resented genetics as it allowed for random biological variation. What Galton and Pearson were seeking through the science of biometrics was to detect the inheritance of fixed characteristics among human beings, including mental ability. The biological/genetic theory that Galton and Pearson required to support their biometric paradigm appeared in 1892. It immediately provided eugenics with a supposedly solid underpinning of scientific validity.

In 1892 a German cytologist or cell biologist named August Weismann (1834-1914) published The Germ Plasm: A Theory of Heredity and the English translation appeared only one year later in 1893. The theory held that all characteristics of an organism are inherited through the germinal cells which environmental influences could not alter from generation to generation. Weismann opposed the "pangenesis" of Darwin which held that all cells of the body contribute to an organism’s reproductive traits. Instead he believed that like plants and animals human beings reproduced through "blasto-genesis" or from a fixed set of characteristics carried from one generation to another. Weismann believed "the offspring owes its origin to a peculiar substance of extremely complicated structure...the germ plasm.". The germ plasm "can
never be formed anew; it can only grow, multiply, and be transmitted from one generation to another". Essentially it was the first theory to recognize the nature of modern genetics, although the genetic code of DNA would not be discovered until the 1960s by Crick, Wilkins and Watson. Contemporary genetics is only now identifying the gene abnormalities that lead to specific disorders such as cystic fibrosis, as well as making inquiries into the possible transmission of gene defects which could result in the development of mental diseases such as schizophrenia. However imprecise Weismann's theory was, in the light of present day genetics it did fundamentally alter how evolution and human reproduction were regarded. In fact Haller (1963) believes that Weismann's theory of "hereditary determiners" being "lodged in the chromosomes of the germ cells" imbued eugenics with a scientific finality which seriously challenged environmentalism. This directly opposed the conception of the child as an organism which learns from experience and thus seriously challenges a fundamental premise of education, the providing of enriching activities to each child.

The emphasis on a natural education full of rich and varied experiences had been central to such early theorists of education as Johann Heinrich Pestalozzi (1746-1827), Friedrich Froebel (1782-1852) and Johann Friedrich Herbart (1776-1841). Educators could guide the growth of a child's mind by fostering the dynamic interplay of the child with the world around him, a cherished ideal since Jean Jacques Rosseau's *Emile* (1762). The growth of kindergartens as promoted by Froebel and the value placed on play as natural education became central innovations in the field of education during the late nineteenth century. The child-centered movement of Granville Stanley Hall which dominated American education in the early twentieth century was based upon naturalism. It depended upon the child passing from a stage of presavagery to civilization through the "normal stimulus" of such influences as formal education. Hall's student, John Dewey, took the preparatory function of
education further and made the school into an "embryonic community" for the larger society. The overall goal was to encourage individual achievement and thus social improvement which made Dewey's ideas extremely attractive to activists within the progressive education movement. The biological view of the child as an organism with specific inherited traits and a predetermined intellectual potential was perversely wedded to educational theories such as Dewey's which stressed natural development. 27 Meritocratic practices in public education were thus scientifically supported and social class determinism naturalized.

Weismann's description of human offspring as biological products discouraged the view that education could significantly alter an individual's destiny. He wrote:

The type of child is determined by the parental and maternal ids contained in the corresponding germ-cells meeting together in the process of fertilisation, and the blending of parental and ancestral characteristics is thus predetermined, and cannot become easily modified by subsequent influences. The facts relating to identical twins and to plant-hybrids prove that this is so. 28

Weismann himself did not seek to link his theory of the continuity of the germ plasm to eugenics. However, eugenists such as Karl Pearson were quick to make a connection, for upon reading the volume in 1892 Pearson wrote that Weismann's theory proved that "the bad stock can never be converted into good stock -- then we see how grave a responsibility is cast at the present day upon every citizen, who directly or indirectly has to consider problems relating to the state endowment of education". 29 The eugenic outlook did not necessarily alter how the educational potential of children was regarded but rather gave new scientific credence to traditional practices of social inequality. Some children would need minimal training, while others should have their intellect cultivated through education. Pearson, like his eugenic colleagues in America such as Charles Davenport and Harry Laughlin, was preoccupied with "national fitness" as well as "race progress". To avoid "educational chaos" there should be "a specialized education suited to
develop the intelligence of each caste and class”. The "great bulk of the population" would require only a vocational education in "craft schools". 30 Pearson's concept of education was that of a scientific instrument by which class formation could be eugenically guided in order to increase the industrial efficiency of society. It was a biologically determined view of education which acted to reinforce traditional class structures in the name of national fitness.

The theory of the continuity of the germ plasm acted to change the outlook of those directly involved in the education of the most vulnerable of subnormal children, the mentally challenged. Early psychologists and special education professionals involved in the training of intellectually impaired children often made disparaging remarks about their subjects by invoking Weismann's theory. Subnormal children were simply bad germ plasm. The Scottish psychologist, A.F. Tredgold, feared race decline in Great Britain as at least four per cent of every 1,000 children could be classified as subnormal in intellect. To Tredgold this "condition of germinal impairment" would affect the "aggregate efficiency and capacity of the nation" if not given specific attention through training schemes. 31 The director of the Vineland Training School for subnormal children in New Jersey, Edward R. Johnstone, wrote in 1909 that the inmates of his, as well as other such institutions, "are the representatives of degenerate families". Unless this "stream of degeneracy" is "checked" then society will be overwhelmed with "illegitimate, feeble-minded children". Johnstone declared: "We are struck by the immense number coming into the world all the time". 32 John Franklin Bobbitt, the prominent instructor of educational administration at the University of Chicago, wrote that if a child "springs from worm-eaten stock" then they are "marred in the original making" and thus not "responsive" to education. 33 Lewis Terman, the Stanford University Professor of Educational Psychology, wrote in 1917 that "Feeble-minded children in the regular classroom" are "a source of
moral contagion" who "drag down the standards of achievement for normal children". Psychologist Edward L. Thorndike of Columbia University's Teachers College was most adamant in 1913 that "long before a child begins his schooling" and "long indeed before they are born -- their superiority or inferiority to others...is determined by the constitution of the germs and ova whence they spring". The germ plasm theory allowed eugenics to alter a basic conception of education. Under the biological paradigm of germ plasm a child was trained according to a predetermined level of genetic capability. Children either spring from good or bad human stock and by implication from good or bad germ plasm. Thus eugenics provided a biological rationale for many older forms of social prejudice in education.

iv. The Menace of the Feebleminded:

In the early part of the twentieth century a campaign was launched that was originally based upon a highly dubious public health argument concerning the mandatory institutionalization, placement in restricted educational settings and eventual forced sterilization of children who were deemed subnormal. The "menace of the feebleminded" campaign lasted from 1890 to the mid-1920s and primarily focused upon the threat to the racial stock posed by the procreation of inferior genetic material. It has only recently been recognized as a social, political and intellectual movement which developed in several distinct stages. James W. Trent, Jr. believes it slowly solidified from 1890 to 1910 and from 1910 to 1920 reached a "hysterical pitch". Before the formulation of Weismann's germ plasm theory in 1892 the education of mentally challenged individuals, or "idiots" as they were commonly called, had been largely confined to physical and task training. This training focus never really disappeared from the field of special education but mentally challenged people were never regarded in the same positive manner after eugenics classified them as bad germ plasm.

Edward Seguin was a French educator who began his teaching
career in 1840 as an instructor for a class of idiot children. Seguin was not an ordinary teacher as he had studied under Jean-Marc Itard, the famous teacher of the Wild Boy of Aveyron. Seguin, who believed all mentally impaired children could be trained, gained fame as a teacher of idiots at Salpetriere by following the methods of Pestalozzi on "object training". In 1843 he published Hygiene et Education and in 1850 came to the United States after he clashed with French medical authorities. In America his idiot training was praised by Horace Mann and Seguin finally obtained a medical degree. Seguin believed idiocy was divided into two categories, the superficial and the profound or congenital. In the case of superficial idiocy, "basic mental faculties could be stimulated and exercised just like muscles". Education "could overcome atrophy of the nervous system" if there was no permanent malformation. After impressive results, Seguin, slowly began to adopt the prevailing medical view that institutionalization provided the most feasible solution to the problem and clearly stated this position in Idiocy (1866). The germ plasm theory discouraged the development of stimulatory education for mentally challenged children as the idiot was now recast as an untrainable, feeble-minded burden on society. The infection of society by bad germ plasm only became a real concern when, due to compulsory school attendance laws, the "crippled, the blind, the deaf, the sick, the slow-witted and the needy arrived in growing numbers" at the doors of public schools. 39

The "menace of the feebleminded" movement was a eugenic response by medical and educational professionals to the biological fact of Weismann's germ plasm theory. Total segregation for the worst cases or bad racial stock in institutions was adopted as the first remedy to the feebleminded problem. In a 1909 speech by J.M. Murdoch, Superintendent of the Western Pennsylvania Institution for the Feebleminded, to the National Conference on Charities and Correction it was stated emphatically society needed to "Quarantine Mental Defectives".
Margaret Winzer believes the movement emanated from "a handful of influential leaders who elaborated the principles of...eugenics as they sponsored public legislation...directed toward the eradication from society of the delinquent, the defective, and the diseased". Those subnormal children who could be educated might be contained in the new segregated special classes appearing in many North American public school systems. New York created its first special class for "misfit" children at Public School No. 1 in 1899 on Manhattan's Lower East Side. However, the educational innovation which propelled this process was the development of reliable instruments for detecting feeble-minded or backward children in the schools, namely the new Binet-Simon mental tests.

Psychologist Henry Herbert Goddard's chance encounter in 1908 with Belgian educator Ovid Decroly precipitated his bringing back to America the 1904 intelligence test developed by Frenchmen Alfred Binet and Theodore Simon for the Parisian school system. While Goddard was at the Vineland Training School for the feebleminded in New Jersey he adapted the test for American children and initiated the moron/imbecile mental categories. In California Lewis Terman, a Stanford educational psychologist, began to renorm the Binet test on California school children in 1913, eventually creating a full revision in 1916. This topic will be addressed in greater detail in the next chapter, but the campaign against the menace of the feebleminded could not have been conducted in the school system without these intelligence tests. Even before the Binet-Simon mental tests had been developed, and during the same year the germ plasm theory was published in English, 1893, a Stanford researcher named Will S. Monroe sent surveys to hundreds of California public school teachers. The survey was published in 1894 and covered 10,842 students, many of whom were found to be either physically or mentally defective. Monroe estimated nine per cent of the sample were mentally dull, two per cent feeble-minded and only six students were
imbeciles or idiots. Monroe advised segregated special classes for the defective children as they could not "remain a hinderance to the 90 or more per cent of normal children". Even before the campaign against the "menace of the feebleminded" began, the desire to isolate such exceptional children already existed.

The hysteria over the feebleminded was a strange mixture of a genuine desire to help these unfortunates but also put them conveniently out of sight in institutions or special classes. It also reinforced a fear that bad germ plasm was the real cause of social problems like poverty, crime, prostitution, delinquency and drunkenness rather than poor living conditions. Goddard called the feebleminded the "cancerous growth of bad protoplasm". Edward R. Johnstone, the Director of the Vineland School, believed the seemingly growing population of mentally handicapped was a problem which "must be checked". Johnstone advised the "complete operation" or full sterilization to be the only "entirely satisfactory" solution because partial unsexing, such as male vasectomies, "leaves all of the passions and desires". University of Chicago school administration professor, John Franklin Bobbitt, believed schools were going too far "out of their way to preserve the weak and incapable". Goddard, in particular, took the menace of the feebleminded to its eugenic extremities in his 1912 book entitled The Kallikak Family, A Study in the Heredity of Feeble-Mindedness. The book constructed a pseudo-scientific history of a family with complimentary sane and feebleminded branches. The family was discovered through a female patient, Deborah, who was admitted to Vineland in 1897 and died there in 1978. While researching the Kallikak hoax during the winter of 1983-1984, J. David Smith found a newspaper article concerning the great, great, great-granddaughter of Martin Kallikak, Jr. from the feeble-minded side of the family. She was a distinguished college graduate, despite a heredity of "bad seed" or germ plasm. The "menace of the feebleminded" can be viewed as a deliberate
THE FEEBLE-MINDED

OR THE

HUB TO OUR WHEEL OF VICE, CRIME
AND PAUPERISM

Cincinnati's Problem

A pamphlet distributed by the Juvenile Protective Association of Cincinnati, Ohio in 1915 entitled "Cincinnati's Problem". The message concerning the genetic threat of the feebleminded to the common good of society is dramatically evident.

attempt at fearmongering by professionals who had vested interests in the institutions and educational systems created to care for these afflicted people. It was the superintendents of various state institutions or asylums who created the American Association for the Study of the Feebleminded. The National Conference of Charities and Corrections became a forum to spread the eugenic version of germ plasm theory that crime, poverty and social problems were essentially genetic in nature. In Canada and the United States the Rockefeller Foundation funded each country’s respective National Committees on Mental Hygiene which in turn published reports by medical and psychological experts on the genetic threat of the feebleminded. Goddard and Johnstone were amply supported by laundry soap magnate, Samuel Fels, through the American Association for the Study of the Feebleminded. Goddard and his female assistant, a former school teacher named Miss Kite, used their revised Binet-Simon mental tests to assess Ellis Island immigrants. In 1917 they published their results revealing a rate of 40 to 50 per cent feeblemindedness among immigrants, which served as alarming scientific evidence of a crisis only solved by the restrictive Johnson-Lodge Immigration Act of 1924. The fact that the Governor of New Jersey, Woodrow Wilson, signed a bill in 1911 to authorize both sterilizations and special classes attested to the power of the eugenic argument. Between 1915 and 1918 Alexander Johnson of the Committee on Provision for the Feebleminded lectured in 350 cities across North America about the feebleminded threat, complete with "stereoscopic illustrations", to everyone from the Kiwanis to Sunday School Bible classes. The fear of bad germ plasm remained a social preoccupation among many social leaders in North America until the mid-1920s.

The "menace of the feebleminded" campaign and its call for social action certainly affected British Columbia. Winzer states that "the eugenic philosophy transcended the Atlantic to impinge the consciousness of Progressives and social reformers in the ... Canadian
Influential disciples sponsored and advanced legislation...in an effort to eradicate from society the ...delinquent, the defective" as a public service to society. McLaren identifies Miss Josephine Dauphinee, the supervisor of Vancouver's special classes for subnormal children, as a vocal proponent of the social segregation and sterilization of the feebleminded during the early 1920s. In fact, during the early 1920s, a Committee on Feeble-Mindedness was created by the British Columbia Teachers Federation (B.C.T.F). The 1928 report of the committee stated there were "some two thousand children of school age in the Province" who "were able to derive only slight, if any, benefit from the regular school curriculum". Feeble-minded children should be immediately removed to special classes in order that "the work of the teacher...be lightened and the tone of the classroom improved". The data gathered by the committee was compiled from questionnaires sent to schools in the Okanagan Valley, Nanaimo and North Vancouver. Replies from 25 schools with a total enrolment of 5,000 revealed "that almost two per cent (2%) of the school children in these schools are feeble-minded."

In 1927 John M. Ewing, principal of Queen Mary School in North Vancouver, had warned B.C.T.F members about "The Moron in Our Midst". "Feeblemindedness", wrote Ewing, "is a characteristic which is inherited in strict accordance to Mendel's Law: the source is to be found in the feebleminded themselves". Only such measures as educational training programs, institutionalization and custodial care would begin to address the pressing problem of the feebleminded in the province. Ewing ended his article by posing the question: "Is there any reason why the B.C.T.F. should not place a campaign for the proper care of the feebleminded in the forefront of their program for 1927-28?"

Teachers in British Columbia were directly involved in the campaign against the "menace of the feebleminded".

The biological paradigm of Weismann's germ plasm theory and the sudden influx of pupils who had never previously been in school due
to the enforcement of compulsory attendance laws produced the menace of the feeble-minded school child. Explanations of circumstantial causes for such social problems as crime, poverty and lack of educational achievement were discarded. It was now alleged that bad living conditions did not produce wayward children but rather bad germ plasm. A prime example of this was the 1877 report of pioneer criminologist Richard L. Dugdale on a clan of multigenerational New York State career criminals, The Jukes: A Study in Crime, Pauperism, Disease, and Heredity. Dugdale's solution to their criminal tendencies was to improve the clan's living conditions as the "environment tends to produce habits which may become hereditary". However, when eugenicist Arthur H. Estabrook published his study of The Jukes in 1915 (1916) it served as a textbook example of the problem of genetic criminality. Estabrook advised forced sterilization as the only solution to end this longstanding problem of familial inheritance. The intellectual tide in North America had shifted dramatically from improving the living conditions of the less fortunate to isolating the products of an inferior gene pool. Children, and adults alike, were now graded as so much genetic material, either good or bad.

v. Eugenic Selection: The Special Class System in North America:

The social logic of eugenics and educational reform became overtly intertwined in an effort to isolate specific children from regular classrooms through intelligence test screenings. Such children were then confined in "special classes" which could supposedly meet their unique learning needs. E. Anne Bennison writes that the "policy of segregation was founded upon a eugenic belief that these unfortunates were the results of defective genes and that they would become burdens upon society". Bennison's remark underlies the very basis of special education, the singling out of particular students as less socially competent than their "normal" peers. The harshness of the terminology used in the early twentieth century reflects the eugenic classification
of such children as social menaces to the larger population. "Being simple" was a broad term with a rather benign connotation. It was replaced by "feebleminded" and sub-classes such as "moron" (Mental age 10 to 12), "high-grade imbecile" (8 to 10), "medium imbecile" (6 to 8), "low-grade imbecile" (4 to 5), and "idiot" (0 to 3). All children so classified were thought to be the genetic products of bad germ plasm and their social as well as educational segregation was born out of a misplaced fear of contagion to the wider population as much as the professed motivation of simple human kindness.

The first special classes were created in the Prussian state school system in the late 1800s and by 1900 Germany had over 6,000 children enrolled in such classes. London, England, had 42 centers for subnormal children by 1900 with 85 classes containing 1,200 students. The first American special classes opened in Cleveland's public schools in 1875. The "imbecile class" was disbanded as an unsuccessful experiment, while similar classes for the deaf, blind, speech stammerers and the like gained wide acceptance. It was only after school populations increased due to the enforcement of mandatory attendance laws and as the feebleminded were seen as social deviants that special classes finally achieved broad acceptance.

As the enrolment rose in the American public school system from 12.7 million in 1890 to 19.7 million in 1915 the average daily attendance rose by 84 per cent. The school year increased in length from 134.7 days to 159.4 days and expenditures rose by 329 per cent from $141 million to $605 million. More students were coming to school with more problems. When Leonard Ayres published his popular study, *Laggards in Our Schools* (1909), the public became aware of these problem children retarding the progress of normal children. If backward children were not segregated, it was concluded, the entire public education system could collapse. When Henry Herbert Goddard and Lewis Terman advanced mental measurement as a scientific means to detect the feebleminded, special classes began to gain wide
acceptance among educators as, in Bennison's words, types of "clearing houses". Eugenics provided the scientific evidence of genetic inferiority and intelligence tests the definitive means to isolate selected children in special classes.

Martin W. Barr, head of the Pennsylvania Training School for Feeble-Minded Children, looked forward in his 1897 address to the Association of Medical Officers of American Institutions for Idiotic and Feeble-Minded Persons to what the next decade would yield. Barr stated: "The recognition as defectives of those backward and feebly-gifted children who have hitherto so embarrassed the work of the teacher has already led to new and better grading of the schools on the continent and in London, while with us, Providence, Rhode Island is taking the lead in a movement which must soon become general". Barr perceived that special class teachers and an efficient method of scientific mental diagnosis would develop in the public school system as the need for segregating feeble-minded children grew. By 1917 the Stanford psychologist, Lewis Terman, wrote in his summary analysis of state-wide survey data that these children cost the State of California more than $5 million a year. About 1 to 4 per cent of all school children were, according to Terman, feeble-minded and they acted to "drag down the standards of achievement for normal children". He believed the feebleminded constituted a "source of moral contagion". In 1916 he wrote that such school children were "ineducable beyond the merest rudiments of training". "Their dullness", he continued, was "inherent in the family stocks from which they came". In the final analysis only one solution to the problem of the feeble-minded child was feasible to Terman. He advised:

Children of this group should be segregated in special classes and be given instruction which is concrete and practical. They cannot master abstractions, but they can often be made efficient workers, able to look out for themselves. 61

Terman stated quite openly that "from a eugenic point of view" the sheer number of these children "constitute a grave problem" due to their
"prolific breeding". By 1911 over 373 of 898 urban school systems surveyed in the United States had such special classes. Public school officials willingly allocated additional funds to these special classes despite the fact their smaller class size made them more expensive. The motivation of counteracting the menace of the feebleminded proved very powerful.

The first system of "ungraded" special classes began in 1899 in New York City at Public School No. 1 on Hudson Street in Manhattan's Lower East Side. A reform-minded teacher in the school named Elizabeth Farrell created, with the help of her principal, a classroom of children classified as mentally defective for the purpose of social uplift. There was no official direction or sanction to conduct this educational experiment at P.S. No. 1. Farrell called the class a "human laboratory" of "atypical" children; in fact it was an entirely male class "made up of the odds and ends of a large school". The principal called it the "misfit" class. It was an assortment of children who one would suspect were the "troublemakers" or "slow" children of the school. The principal must have supported Farrell's experiment for self-serving reasons; it reduced the complaints of teachers about these students lowering classroom achievement. Superintendent of Schools, William Henry Maxwell, took note of Farrell's success with the misfit children and in 1899 he recommended wider provisions for "the special teaching of these unfortunate children". Maxwell knew of the special school system that existed in London, England, and decided the first step was to gauge the size of the population of mentally defective children within the New York City school system. The city's principals reported back that about 8,000 children or two per cent of the current pupils enrolled in New York's schools were defective. Maxwell knew of the Binet-Simon mental tests and the genetic nature of subnormality. He believed that abnormal children had to be clearly divided into those who were the "idiotic or permanently defective", "dull children" who were slow learners, and pupils who were
merely "incorrigible" or "truant". 64 The public schools could only place dull children in special classes (IQ 67 to 83: borderline range) as the permanently defective had to be institutionalized and discipline measures applied to the truant. In 1903 Maxwell appointed Farrell as the new inspector of ungraded classes and she tried to link the classes to the wider agenda of progressive social reform in New York City. The curriculum for the classes was not academic in nature as copy books and blackboard questions would constitute "reminders of past failures". Farrell believed such classroom activities as toy making, game playing, gardening and gymnastics would appeal to the children's "instincts". 65 The ideas were taken directly from Edward Seguin who remained highly influential on the education of feeble-minded children. Farrell and Maxwell framed their ungraded classes under the reformist logic of the social obligation of the public schools to save children. So proud were they of the ungraded classes that an information display on the "Education of Defectives" was created for the 1904 Louisiana Purchase Exhibition at St. Louis. 66 It was only a small part of a larger exhibit by the New York City school system on services to handicapped children such as the blind, deaf and dumb.

Intelligence testing and educational psychology altered the entire system of ungraded classes by the 1920s. At the height of the menace of the feebleminded campaign in World War One, Farrell adopted the new Stanford revision of the Binet test. Between October, 1916, and March, 1917, a "mental survey" of the special classes was undertaken to weed out chronic "feeblemindedness". Farrell embraced the new scientific means of mental measurement as she believed it would stop principals from referring mere behavioural problems. In 1920 Farrell helped to organize the first mass screenings of all pupils in two New York public schools. In 1920 she selected the Haggerty Intelligence Test, Delta II, because it was a group test and thus easier to administer. 67 Farrell was also aware of the shortcomings of mental measurement as a report by Anne Moore
in 1921 on her own survey of June, 1911, revealed the majority of ungraded class pupils came from homes with foreign-born parents. In 1921 it was estimated that although 88 per cent of pupils in the ungraded classes were born in the United States, over 75 per cent of them had foreign-born parents. Farrell even seemed to recognize this ghettoizing effect of the ungraded classes themselves when she wrote in 1912 that the "differences are already too apparent" between ordinary pupils and those in the special classes. School officials and teachers had to make general pupils understand that such children were in the special classes because these students' "mental power is like theirs only of less degree". Segregation had to employ a eugenic rationale of innate human differences which implied such pupils were less than mentally competent or subnormal. Bennison notes in one of her footnotes the comments of Elizabeth Judson who researched the special classes in the school system of Grand Rapids, Michigan. Judson asked a small boy where the Auxiliary School building was and he replied he did know, but "that is where the children are not as well educated as they are in other buildings". Even a small child could grasp the problem of the special classes, that these children were selected for an inferior education. Farrell's acceptance of intelligence testing diminished the original humanitarian basis for the special classes. Her original motivation for social uplift became subverted by classification and segregation.

Historian Joseph L. Tropea sees this process as almost a predictable consequence of several factors. Focusing on the history of the Detroit special class system in the early twentieth century, Tropea draws several conclusions. With increased school hours and pupil attendance more children came to public schools on a regular basis. Legal changes made it more difficult for administrators to "rely on attrition" to weed out student populations naturally. There was a "poorly rationalized segregation of pupils" which required organizational changes to scientifically operationalize "the management and control of
pupils. The creation of psychological clinics to test and place students in special classes was a vast improvement over the previous experiments with "unruly" classes for largely truant students. Thus Tropea believed these "efforts provided a better rationale for differentiating among students and their treatment by emphasizing a 'scientific' basis." Scientific mechanisms created "bureaucratic order" in a very disorganized school system rife with conflicts.

The addition in the 1920s of vocational programs at the high school level for retarded children also solved many problems. To Tropea the special classes were a product of the quest for "urban school order". Attendance laws had brought into the school a disorganized mob of students which classroom teachers could simply not deal with. Some had to be excluded for pupil management reasons. Thus the "conflict between compliance with the law and satisfaction of teachers' concerns for order was resolved through the special classroom". However, there is no mention of the eugenic and biological arguments being used to support this process. Tropea merely suggests a natural evolution from chaos to order, ideological considerations are never considered.

Historian Barry Franklin describes a similar set of circumstances in connection with the establishment of special classes in Atlanta, Georgia. School populations rose steadily in Atlanta from 13,254 pupils in 1898 to 21,190 in 1915 and with that growth "an increasing number of troublesome children". One teacher complained to the School Board in 1914 of a student who "disturbs the class by doing many unusual and unexpected things". Another teacher had a student who threw "epileptic fits" and this was "liable to cause distraction in the exercise of the school". Both children were removed from school as the problem of accommodating such exceptional children was becoming alarming.

Eventually in 1917 several special classes were created under the leadership of a new School Board chairman, Robert J. Guinn. Franklin states these special classes "provided a mechanism by which
administrators tried to keep the city's schools accessible in the face of a changing school population." 74 As with Tropea, Franklin regarded the special classes as solutions to both teachers' problems and administrative dilemmas. In 1912 a presentation to the Atlanta School Board called for the creation of special classes because their like could be found in the "leading cities of the United States". It was a progressive measure that would bring Atlanta into line with such large urban school systems as New York City and St. Louis. 75 However, in later writings Franklin recognizes that the creation of special classes for subnormal children was done for contradictory purposes. The classes would create cost savings through the segregation of troublesome students but they would also help a group of unfortunate children who required specialized attention. Franklin quotes Milwaukee Superintendent of Schools, C.G. Pearse, who in 1907 stated the special classes would "save these children from themselves" and at the same time "save the state from the harm". 76 The "harm" that Pearse refers to could be something other than financial hardship. Franklin does not appear to connect the growing influence of eugenics, the germ plasm theory, the "menace of the feebleminded" campaign and the creation across North America around the time of the First World War of special class systems in public schools. The mainstream explanations of Tropea and Franklin are essentially true when they account for the special classes as the products of school overcrowding and complaints by teachers of unmanageable children. Yet the comments of Lewis Terman that feeble-minded children in regular classes were in fact the "source of moral contagion" and the fear spread through the menace of the feebleminded campaign that mental disabilities could spread like a disease were also important factors which contributed to the growth of these special classes.

Canadian social welfare reformers and teachers left little doubt as to their opinions on the development of special classes for subnormal pupils. Writing in the Public Health Journal of December,
1915, social welfare reformer Mrs. M.H. Kerr stated in her article on "Defective Children" that a "serious problem" was confronting the people of Ontario "and we as teachers must be prepared to do our part in the solution of it". Kerr continued that it was a scientific fact that about "two or three in every thousand (children) are defective". Teachers should "instead of saying 'Why doesn't somebody do something?' do something ourselves". Children might be "better classified" and cases could be readily referred to trained physicians as well as psychologists. The ultimate solution for Mrs. Kerr lay in the segregation of feeble-minded children in auxiliary classes where they could work peacefully with their hands and away from normal children. 77 In the same issue of the Public Health Journal, Miss Blackwell, a teacher who helped to organize the summer institute for auxiliary class teachers in 1915 at the University of Toronto, wrote about the future of the "Auxiliary Classes in the Public Schools". Miss Blackwell saw that the "hope of the backward child lies in the teacher". Such a child had "something lacking in his brain substance". Subnormal people are not found in savage societies because like weaker fowl who are pecked to death, the savages eliminate these individuals at birth. The Greeks left deformed children in the wilderness to die, while frequent wars in the Middle Ages acted to rid society of such people. Miss Blackwell believed that modern humanitarians had a duty to care for these individuals but could not extend to them the freedom of action reserved for "responsible beings". 78 Blackwell queried that "since the defective child cannot be cured of his defect" and "it is dangerous to neglect him, what shall be done with him?". The answer she gives is to definitely "have separated the subnormal child from his normal class-mates" and thus only in this manner "the solution of the problem has been found". Quoting a great deal from Henry Herbert Goddard, Blackwell ends by declaring: "We have touched the edge of this wave of reform". 79 The reforms that Blackwell spoke of were not merely a solution to teacher complaints and school overcrowding,
but a new eugenic view of children as either fit or unfit genetic material. Children were now regarded as biological material in an educational equation of social utility, or the future economic value of a child to society. Philip M. Ferguson believes it was a matter of "productivity" as opposed to mere "chronicity" or a state of total dependence. The new "emphasis on individual productivity" in early twentieth century American capitalism created a category of social chronicity for those individuals judged by science as not being able to fit into the larger society. The asylum and special classes were, to Ferguson, a form of "official abandonment". As the special class systems grew in the 1920s some educators resented so much attention being lavished on these special children. May Ayres, a prominent educator and member of the social hygiene movement, composed a poem called "The Wail of the Well" which was published in the American School Board Journal of 1913. In one section it states:

Marie has epileptic fits,
Tom's eyes are on the bum,
Sadie stutters when she talks,
Mabel has T.B.
Morris is a splendid case of imbecility.
Billy Brown's a truant,
and Harold is a thief;
Teddy's parents give him dope,
And so he came to grief.

Gwendolin's a millionaire,
Jerald is a fool;
So everyone of these darned kids
Goes to a special school.  

Ayres ended the poem with the line: "I haven't any specialities ---I'm just a normal child". The extraordinary educational measures taken to control backward or feeble-minded children clearly irritated this teacher of so-called "normal" children. Her poem describes a school system in which pupil categorization and segregation into special classes had clearly reached, in her opinion, absurd proportions. Ayres was not a professional educator but an ordinary teacher, thus her opinion may be indicative of how other classroom teachers regarded the changes occurring
vi. Conclusion:

The use of eugenics and the biological theory of germ plasm to justify the segregation of school children was at the very heart of the beginnings of special education in North America. Some, like Tropea, have seen this "singling out" process as not ideologically driven but a logistical solution to the diverse school population created by compulsory attendance laws. However, to discount the influence of eugenics and germ plasm theory as an ideological justification for reinforcing pre-existing practices of social division within the newly inclusive school population would be to overlook a significant change. The genetic rhetoric of germ plasm was widely accepted by professionals in such fields as medicine, psychology and education. One of British Columbia's most prominent educational administrators in the 1920s and later in the 1930s, Chief Inspector of Schools, Herbert Baxter King, wrote about the dominance of the germ plasm theory in his Master's thesis of 1923. King will be discussed later in this study; however, his opinions are highly indicative of the intellectual climate of the time. He writes:

However, Weismann in his "Continuity of the Germ Plasm" has argued against the transmission of acquired characteristics. His view is the accepted view of biologists today, though I am imperfectly convinced. But if one is to follow biological orthodoxy he must frame his views of the origin under the handicap of Weismann's doctrine. 83

King was merely bowing to the orthodoxy of the germ plasm theory and in effect the eugenic view of an individual's unalterable genetic inheritance. Even he, in reference to the origins of human instinct, saw Weismann's theory as problematic due to its deterministic logic. Singling out the children who populated the special classes for the subnormal as innately inferior was indeed a very real social handicap for those so designated.
Notes:


15. Angus McLaren (1990), op. cit., p. 14


17. Angus McLaren (1990), op. cit., p. 15


19. Ibid., p. 31


21. Ibid., p. 24

22. Angus McLaren (1990), op. cit., p. 16

23. Margaret Winzer (1994), op. cit., p. 264

24. Angus McLaren (1990), op. cit., p. 17


28. August Weismann (1893), op. cit., p. 458. "Ids" refers to the thread-like structures found in the nuclei of all cells. They were known to contain the hereditary material upon which the new organism would be based.

29. Lyndsay Andrew Farrall (1985), op. cit., p. 42


31. A.F. Tredgold, "Educability and Inheritance", in Eugenics in Race and


34. Marvin Lazerson in Chambers and Hartman (1983), op. cit., p. 26


37. Ibid., p. 50


40. Ibid., p. 142

41. Margaret Winzer (1994), op. cit., p. 281

42. Ibid., pp. 146-147

43. Ibid., p. 162

44. Edward R. Johnstone (1909), op. cit., p. 448

45. John Franklin Bobbitt (1909), op. cit., p. 385, p. 393


48. Ibid., p. 173

49. Ibid., p. 176


51. Angus McLaren (1990), op. cit., pp. 94-95


53. John M. Ewing, "The Moron in Our Midst", The B.C. Teacher, Vol. 6, No. 7 (March 1927), pp. 43-47. Ewing's reference to "Mendel's Law" was in error as Mendel, the founder of modern genetics, formulated the Law of Independent Assortment which held that the paired genetic material of
the parents' separates during meiosis and the gamete carries only one genetic unit of the pair. Mendel did not believe in complete genetic replication.


57. E. Anne Bennison (1988), op. cit., p. 20


59. E. Anne Bennison (1988), op. cit., p. 27


62. Ibid. p. 191; Marvin Lazerson in Chambers and Hartman (1983), op. cit., pp. 25-26

63. E. Anne Bennison (1988), op. cit., p. 22


65. Ibid., p. 401

66. Ibid., p. 396


68. Ibid., p. 413

69. Ibid., p. 414


72. Ibid., p. 52

74. Ibid., p. 584

75. Ibid., p. 581


77. Mrs. M.H. Kerr, "Defective Children", The Public Health Journal (Official Organ of the Canadian Public Health Association), Vol. 6 (December 1915), p. 621


79. Ibid., p. 624


82. Ibid., p. 148

CHAPTER TWO

"Sorting the Students": Differentiating the American School Population During the Early Twentieth Century.

i. Introduction:

Canada is inextricably linked to the United States of America. Even before Canada gained Dominion status from Great Britain in 1867 several reciprocity treaties concerning the exchange of goods had already established a north/south economic trading pattern. Imperial trade within the British Empire still remained an important source of economic revenue for Canada but the forces of continentalism were particularly strong after the First World War as branch plants of American industry flourished in the border regions. As with economics, the traffic in intellectual ideas gradually evolved along a north/south axis as well. In Canadian classrooms imperial symbols and British educational material remained dominant but by the early 1920s American pedagogical practices were increasingly being adopted in Canada's public schools. This tension between British and American educational methods extends back to Egerton Ryerson's decision in the mid-nineteenth century to create New England-style common schools in Upper Canada while at the same time adopting the British Irish National Readers as the prescribed textbooks.

This chapter deals with intelligence testing, curriculum differentiation and educational efficiency in American public schools during the early twentieth century. Such a focus has been adopted because the educational innovations pioneered in the large urban school systems of the United States increasingly caught the attention of Canada's educators. There was still a heavy British influence in Canadian educational content, as well as leadership, but this is rather deceptive. The case of Dr. Peter Sandiford, Canada's leading educational psychologist in the 1920s, is a prime example. Born in England, he was educated at Manchester University but before accepting a post at the University of Toronto in 1913 he took his doctorate at Columbia
University's Teachers College in New York City under the famous Edward L. Thorndike. The growing dominance of American educational ideas was spread through individuals like Sandiford and such faddish movements as educational efficiency. Thus Canada's education system was coming under the sway of American pedagogical ideas well before the advent of World War One.

In 1924 a University of Chicago educational psychologist, Frank N. Freeman, published a very influential article in The Educational Review entitled "Sorting the Students". It was not so much a piece of academic research as a philosophical treatise on how to manage typical school populations in North America. Testing was the key mechanism of assigning students to different ability tracks based upon supposedly neutral, scientific measurements of natural intelligence. Freeman wrote that the past focus of education upon individual development was a "bugbear" which modern schooling could do without. Classifying by mental ability in no way "limits" the "development of either the bright or the dull child", he asserted. Ability grouping merely implied a variation of the "conditions of training" which would assure each student had "an equality in the right to opportunity". Life was not an equal experience for every individual and in Freeman's mind it "is the business of the school to help the child to acquire such an attitude toward the inequalities of life...with the least possible friction". Each person had different mental powers, Freeman ardently believed, and it was unwise for the school system to "fail to recognize the facts of human nature and of society". Schools had always exercised a social sorting function but the arguments used were based in the maintenance of the social order. Sorting students scientifically according to their natural mental abilities and providing them with an appropriate education to suit those supposed abilities was an educational rationale with eugenic undertones which bestowed upon the school system a clear mandate for social engineering.
Clarence Karier (1975) analyzed Freeman's position on the social function of education and stated that he "clearly saw the function of public education as helping the child adjust to the real world of 'inequalities of life'". The entire sorting process was a purely managerial solution to fitting the new diverse and larger pupil population into the industrial economy. It was essentially an arrangement supposedly designed to further economic efficiency but was in fact a matter of educational expediency. The use of intelligence testing to sort students and provide a differential education actually began with the training of subnormal or feeble-minded children in special classes. However, the extension of this logic to all students resulted in a bureaucratic system of public education that assigned pupils to various levels of instruction. Some attended trades classes, some commercial or business classes and others were groomed for social leadership roles in the academic stream. Canadian schools merely emulated their American neighbours. It is impossible to understand the changes made in the Vancouver school system after the First World War unless this background information about the American public school system is clearly understood.

ii. Urban America and Its Troubled Public School Systems:

When faced with overwhelming problems the solutions devised are often not the most well-crafted but rather those most immediately successful. The public school system in the United States during the late nineteenth and early twentieth centuries was expanding rapidly under difficult circumstances. From 1860 to 1900 the urban schools of America were forced to expand as the cities and industries grew. In 1860 approximately one sixth of America's population lived in towns of 8,000 or more, but by 1900 this had increased to one third. For example, Chicago had 100,000 people in 1860 but by 1900 the city contained more than one million residents. From 1860 to 1900 a total of fourteen million immigrants, many of them with young families, came to the United
States to seek a better way of life. 3 School investment grew exponentially from $7 million in 1850 to $147 million in 1890. The funds spent on public schools increased from 47 per cent of all educational expenditures to 79 per cent by 1890. This commitment to public schooling caused a "gradual increase in attendance and decline in illiteracy". However, despite the passage of compulsory attendance laws in many states, the measures were virtually unenforceable. In 1900 the average number of years of school attendance per child was estimated at five by the Commissioner of Education, William T. Harris. 4 About 600,000 boys and girls between ages ten to fourteen were gainfully employed in the United States in 1890; of these over 387,000 were labouring on farms in the rural south. 5 David B. Tyack (1976) stated that: "Public attitudes towards compulsory schooling appeared to become more positive in the years after 1890". 6 The public's attitude about schools seemed to have altered from seeing school as a repressive mechanism keeping their children out of the workforce to a productive activity helping to prepare youngsters for adult life. Parents began to regard schooling as a means of upward social mobility for their children.

The situation facing the urban school systems of the United States at the turn of the century was, in the analysis of Jeannie Oakes (1982); "horrendous". As school populations increased a new and diverse group of pupils placed pressure on the existing educational system. In 1909 over 58 per cent of the students in 37 of the nation's largest urban school systems were foreign-born. There were many students who continually failed and were overage for their grade level, or "retarded". In order to cope with such conditions many school boards opted for the most expedient solution, the comprehensive high school with a differentiated curriculum organized along educational "tracks" of ability grouping. 7 An academic track would lead to a professional career, while various levels of the vocational track led to immediate employment after high school. Wood and metal workshop skills were of lower status in the
vocational track than business preparation such as accounting. The main instrument employed to sort out students upon their entry into high school were the new intelligence tests. They increasingly gained favour and the "results of IQ tests could be used to justify tracking by race, ethnic origin, and class background". 8 An active relationship emerged between the educational psychologists as well as psychometricians of America's large teacher-training colleges and the school districts which surrounded them. Edward L. Thorndike of Columbia University's Teachers College, along with the Superintendent of Schools, William H. Maxwell, studied the school children of New York City. Lewis Terman of Leland Stanford Junior College used selected students in the State of California to conduct trials of the Stanford revision of the Binet-Simon mental tests in order to create norm tables. The development of several tests before the First World War for handwriting, mathematics, spelling, reading and other academic skills were "normed" on a variety of school children to determine average baselines of task performance. The 1917-1918 American Army tests, devised by Robert Yerkes of Harvard University and several leading psychologists of the day, established a final baseline for what supposedly constituted normal intelligence or an average IQ (intelligence quotient). During the 1920s the "advocates of IQ-based tracking systems had promoted intelligence tests as a quick, accurate, and fair way to determine a child's learning potential". 9 The fact that intelligence was regarded erroneously as a fixed quantity and hereditarily determined by young adulthood confirmed in the minds of school officials that placement in a specific educational track was in the child's best interests.

The troubles of the American public school system were forcefully pointed out at the turn of the century by a muckraking academic whose book about the subject became a best seller. Leonard Ayres was a colleague of Thorndike at Columbia but he became famous not for his scholarship but rather a book he published in 1909, entitled
Laggards in Our Schools. Ayres compared 63 American urban school systems and surveyed the ages of pupils along with their grade levels. Children who were older than the expected grade level for their age were said to be "retarded" due to failure. An inefficient school system had a high rate of retardation, or students repeating grades, while an efficient one had a low rate. 10 Ayres' book claimed "that the schools were filled with retarded children and that most students dropped out of school before finishing the eighth grade". However, his data was flawed in that it reflected extreme racism and cultural/economic deprivation.

Medford, Massachusetts, a white Caucasian city with few foreign-born, had a rate of only 7 per cent retardation, while Memphis, Tennessee, with its high black population had an overall retardation rate of 33 per cent. Ayres' solution to the retardation problem was actually quite practical as he demanded that public schools alter their curriculum to include the slow and average child rather than catering to only the bright ones. 11 Rather than using this data to show the dilemma facing America's urban schools of educating a diverse pupil population, he merely decried the fact "We are spending money in teaching large numbers of children the same things over again". 12 Ayres wanted America's public school systems to operate on a more cost effective basis, graduating its pupils at the proper rate and on schedule.

Ayres' data also made a very significant point, that immigrant children had a higher rate of school attendance than American-born children. Out of all the school districts surveyed in 1909, there were 44 illiterate children of American parents per 1,000 as compared to a rate of 9 per 1,000 among children of immigrant parents. About 72 per cent of second-generation children of various racial groups and 69 per cent of foreign-born children ages five to fourteen attended public school regularly, while only 65 per cent of American-born children did so. To historian David Tyack (1976) this revealed two facts: levels of public education were extremely low for all children in the southern
states while in northern cities "the attendance of immigrants' children equalled or excelled that of the native born".\textsuperscript{13} It was not necessary to convince immigrant parents that their children needed to be educated and learn English. It is probably the ultimate irony that the social groups who most needed change in the delivery of public education and its curriculum were only offered persecution by intelligence tests, followed by placement in inferior educational tracks. Ironically, remedial education for the learning disabled (laggards) and English language education for new citizens (immigrants) are contemporary educational developments which are still decried as too costly. Intelligence tests and educational tracks created an efficient meritocracy which sought to preserve the social status quo under the guise of progressivism. Leonard Covello (Leonardo Coviello) remembered how the New York City Public School he attended anglicized his name when he was a child. When he returned in the 1920s as a teacher at DeWitt Clinton High School on New York's East Side, he recalled that his attempts to use the Italian language with parents and students was defeated by the "intelligence-test insanity". Covello remembers how students of Italian descent were "downgraded" because of their lack of English vocabulary, which was not considered "under the pressure of the test-giver with his stop watch and whistle".\textsuperscript{14} The presence of so many laggards and needy immigrant children in the urban school systems of America demanded an inexpensive and expedient solution. Intelligence testing and differentiated educational tracks provided the most practical as well as accessible solution.

\textbf{iii. Efficient Pupil Management: Educational Rationalization and the Industrial Order:}

The rationalization of education that occurred in America during the early twentieth century was an overt attempt to reshape the public school system as an appendage of the emerging industrial order. The efficiency of production and promise of the industrial system to provide unlimited material wealth was regarded by progressive-minded
thinkers as the logical answer to all of society's pressing problems. In education the efficiency of instruction was a "plum" that was "dangled before the taxpaying public", according to historian Lawrence Cremin (1961). The application of scientific methods to education and its rationalization along the lines of the industrial order was portrayed by educational experts not only as a means to reform the public education system but also relieve the overburdened taxpayers of America's large cities. Sorting students through mental tests and then educating them according to their natural abilities in tracks or streams was the most efficient means for providing a workforce for the growing industrial economy. Marxist political economists such as Samuel Bowles and Herbert Gintis made this point quite forcefully in *Schooling in Capitalist America* (1976). However, the business influence on public education in the early twentieth century was first described by Raymond Callahan in *Education and the Cult of Efficiency* (1961) which did not employ a Marxist paradigm of critique. The roots of American educational efficiency, according to Cremin, predated the "heightening sense" after 1908 that educational measurement as well as the improved allocation of educational time could transform the nation's schools.

The school boards of most American cities had been transformed during the early twentieth century by progressive reformers who centralized administrative control and eliminated popular representation by "wards" in favour of city-wide elections. Most of these "reformers" were people from the business community, professionals, and progressive social activists, such as women who did settlement-house work. Scott Nearing's survey published in 1917 of "Who's Who on Our Boards of Education" showed that in the urban school boards he studied there was overwhelming domination by businessmen as well as professionals, with working people being all but excluded. In 1895 local Philadelphia newspaperman, William Taggart, wrote:

> Where does this bawling and whining about the degradation and inefficiency of our schools come
These cranks eventually were reborn as "experts" who persuaded the American public they had to make the education system efficient. Callahan notes that school boards came to resemble the board of directors for a private company as this "change in composition over to businessmen who were to run the schools along business lines" made the school structure itself function as a corporate enterprise. Thus, it was not surprising after the publication of Frederick Winslow Taylor's *The Scientific Principles of Management* in 1911 that school officials began to call for a reconceptualization of the school as an manufactory geared to turning out various grades of final products or workers for the economy. Although influential educators like John Dewey did not want the schools to be servants of the industrial system, it was difficult to make this case before school boards composed of businessmen.

Taylorism did launch the social efficiency mania but in a very indirect manner. Taylor's study of the Republic Steel plant using the example of the industrious "little Pennsylvania Dutchman", Schmidt, perfected a system of detailed task analysis we have come to know as the "time-motion study". Taylor claimed his methods could make any task more efficient as he demonstrated in his book when Schmidt's work output rose by 280 per cent. The quest for efficiency moved from industry to society as Taylorism promised the scientific key to unlock the productive potential of all human beings. It was Simon Patten, an economist, who began the attack on schools in a provocative article for the March, 1911, issue of *The Educational Review*, entitled "Some Defects in Our Public School System". Patten attacked "an antiquated school system" that continued to "grind out its useless product". He wanted a system that dropped its sentimental emphasis on "character building" and instead created mechanisms to achieve results that could be "readily seen and measured". At the February, 1912, meeting of the National Education Association or NEA held in St. Louis, a stinging speech to school
administrators made by George H. Chatfield of the New York Census Board brought home the message that the schools had to be made efficient to function in a modern industrial society. Chatfield rhetorically asked if the educator could justify himself "when the businessman complains of his product". The popular press in the form of the *Ladies Home Journal* and *Saturday Evening Post* produced a series of articles calling the public school system "antiquated", "medieval" and "an utter failure". The professional climate was rife with dissension among educators who clamoured for a solution that would deliver to the public what the press told them was needed, efficient schools and modern curriculum. The pathway had been cleared for the arrival of two groups of people the public gradually regarded as "experts". The new breed of progressive school administrators who wanted to run the educational system like a factory, efficiently producing products or graduates at the fastest rate and lowest possible cost. Associated with them were the new educational psychologists. They offered to efficiently sort the students through the new science of mental and educational ability testing. These experts promised to restore the American public's faith in their public school systems by rationalizing the educational process itself.

iv. The Industrial and Social Biological Impulses of American School Administrators:

In the search for expedient solutions to the problems found within America's growing urban school systems during the early twentieth century two factors stand out as holding particular appeal, eugenics and the factory system. Eugenics, or the science of the well-born, had a clearly defined reputation by 1900 as a scientific method to improve and manage human populations. The factory system had become the underpinning of the industrial order and the basis for the unlimited material wealth which it offered to the larger society. Callahan has commented that eugenics and the educational efficiency movement actually "constitute a pattern". In examining the career of John Franklin Bobbitt, one of the leaders of administrative reform and a Professor of Educational
Administration at the University of Chicago, Callahan found an enthusiastic response to both movements. Each "seemed to offer rather clear cut, definite solutions to complex and difficult problems, and both were mechanistic in nature". 24 The desire to efficiently organize school children according to the tenets of their intellectual abilities seemed to complement the eugenic drive to organize society so that it could improve itself with each new generation.

If any two figures can be identified as leaders in the educational efficiency movement they are the previously-mentioned John Franklin Bobbitt and Ellwood Patterson Cubberley who was Dean of the Educational Faculty at Stanford University. The popular textbooks and articles that these academics wrote about school administration, as well as reorganization, helped to shape the American public school system. Both individuals also expressed eugenic attitudes and Bobbitt even wrote an extended piece on the social value of eugenics. The type of hierarchical and mechanistically rational school system advocated in their writings about school organization was in effect an effort to slot students into different educational tracks for the good of society. It was the logic of eugenics that allowed them to assess, grade and assign school children to educational levels with little regard as to the humanity of the entire exercise. High schools were divided into alphabetical tracks as A, B, C, D and so on, while the elementary schools had special classes for those of low mentality. The perceived mental ability of a student thus influenced the type of education he would receive. It also governed who would be institutionalized and ultimately who would be sterilized to save the race.

When Bobbitt graduated from Indiana University in 1901 with a Bachelor of Education degree, he was offered the position of instructor at the Manila Normal School. The Philippines had become an American possession after the Spanish American War of 1898 and, following a period of military rule, a policy to re-establish civilian government was made
in 1901 under the first governor of the territory, William Howard Taft. Once in the Philippines, Bobbitt began to gather research material on local school children which he would later use as the basis for his Ph.D. at Clark University under the direction of Granville Stanley Hall, the leading theorist of the child study movement. Hall believed children mature through predetermined stages from savagery to civilization under the "general psychonomic law". The child as it matures "recapitulates phylogeny...the evolution of the race" and education played a vital part of this process. Bobbitt later summarized his dissertation for Hall's journal of child study, The Pedagogical Seminary. It reveals a deeply-felt eugenic viewpoint about the superiority of the Caucasian race and the concept of racial superiority as well as inferiority. The approach he used was to collect "accurate" information using various scientific instruments to measure such facts as height, span of arms, sitting height, weight, vital capacity (breath strength) and right/left hand grip strength. The purpose of the study was to "make a comparison of Philippine children with those of Europe or America in size and efficiency". The conclusions reached by Bobbitt were eugenically characteristic as Philippine boys experienced a "relative arrest" in their physical development while American boys displayed a robust growth rate. Thus Caucasians were a more efficient race than the Filipinos, a convenient justification for the domination of one over the other.

In July, 1909, Bobbitt gave a speech to a child welfare conference at Clark University on "Practical Eugenics". He had finished his Ph.D. upon returning from the Philippines and was about to launch his career as one of America's leading authorities of educational administration. Bobbitt told the audience that in the past, society had been "well-weeded" of its genetically inferior offspring as they simply perished in the struggle to survive. In modern society this weeding process had ceased and the inferior were in fact being protected by such social institutions as charities, schools and churches. "Ability is
dying out" as the intelligent of society were producing fewer children. Bobbitt warned: "There is a growing proletarianization of our high race, simply because the proletariat furnishes the major portion of the parentage". Educators had to be particularly aware of this process as there will be "a poorer raw material on which to work and an increase of the educational difficulties which are at present sufficiently bewildering". 28 This declaration revealed Bobbitt's deeply-held eugenic view of society and affinity for factory analogies when discussing social processes. In 1910 Bobbitt was appointed as full Professor of Educational Administration at the University of Chicago where he would remain his entire academic life. In 1912 he began to affiliate himself with the educational efficiency movement by writing an article in the February issue of Elementary School Review which praised the Gary Plan as "The Elimination of Waste in Education". The Gary Plan, or platooning, was a system of student rotation between teachers who taught repeated lessons the entire day. Fewer teachers could teach more children without additional class space. The school principal became an "educational engineer" and the "thoroughly modern school plant" ran at "100 per cent efficiency". 29

In 1913 Bobbitt wrote his definitive statement on educational efficiency for the National Society for the Study of Education Twelfth Yearbook, entitled "The Supervision of City Schools". Schools were educational "plants" which turned out pupil "products" according to "definite standards". The schools had to begin to serve the industrial economy by grading, sorting and appropriately training children for their future roles in the economic structure. Bobbitt wrote:

"Education is a shaping process as much as the manufacture of steel rails: the personality is to be shaped and fashioned into desirable forms. It is a shaping of more delicate matters, more immaterial things, certainly; yet a shaping process never-the-less. 30"

Bobbitt demonstrated how educational testing and tracking played a critical role in this process. Using the system devised by psychologist
Stuart A. Courtis, Bobbitt outlined how an entire urban school system could track and program students from their entry into school to graduation. Inter-school comparisons and individual student abilities could be ascertained with ease. Inefficient teachers with low student achievement could be detected and removed. The school system would operate like a smoothly running machine, efficiently sorting and training students based upon their supposed natural ability as well as future social roles. In Bobbitt’s words, education would proceed "according to vocational and social destiny". He claimed it was based upon "letting students find their place" in a natural manner. 31

Bobbitt followed his pivotal work on managing urban school systems with actual school surveys. In 1915-1916 he conducted a survey of the Denver, Colorado, school system and found it to be efficient, providing good value to its taxpayer "stockholders". 32 In 1918 he published The Curriculum, a textbook for administrators on modern school administration and curriculum innovation. The school was called an "educational machine" which "prepares for life" each student through "specific activities". Separating those students suited to a vocational education and training them early in life for their economic roles was, to Bobbitt, a practical social measure. 33 In 1924 he wrote How to Make a Curriculum in which the school principal was told to be an "educational engineer". Efficient schools took into account how "individuals differ in their natural capacities" as "some are large capacity, others medium, others small". Bobbitt declared that "No amount of education labour will develop large ability on the part of those possessing low natural capacity". 34 It was clear to Bobbitt that a differentiated education suited the differing natural abilities of students entering the American public school system. A "leadership group" had to emerge, while pupils of lesser mental powers would only progress as far "as their limited abilities will permit". 35 Bobbitt’s thinking on how schools could shape social development was typical of a highly conservative American
Franklin Bobbitt's examples of how schools could track students using the Courtis Standardized Tests. In Bobbitt's mechanistic vision of the school system the educational products, or students, are regularly tested for quality control purposes. *Source: Franklin Bobbitt, "The Supervision of City Schools", The Twelfth Yearbook of the National Society for the Study of Education, Bloomington, 1913. p.24 (Test Chart); p.25 (Pupil Records)*
progressivism which educational historians Bowles and Gintis (1976) believed centered upon the "rationalization of the process of reproducing the social classes of modern industrial life". It was an approach to public education that sought to make the schools not just social sorters but indirect eugenic agents to improve society in the industrial age.

If Bobbitt was a pioneer in the educational efficiency movement, then Ellwood Patterson Cubberley became its acknowledged leader. Cubberley was educated at Indiana University and was converted to a life of educational scholarship after hearing an 1886 speech by Stanford University president, David Starr Jordan who later became his lifelong academic colleague and friend. Cubberley began his educational career by teaching elementary school in rural Indiana but soon joined the teaching staff of Vincennes University after completing his undergraduate studies in 1891. He was persuaded to move to California by Jordan and became superintendent of the San Diego public school system. In 1892 Jordan helped Cubberley to gain an appointment as Assistant Professor of Education at Stanford. In 1901 Cubberley went to Columbia to study under Edward L. Thorndike of Teachers College and in 1902 received his Masters of School Administration. Then in the same year he returned to Teachers College to do his Ph.D. and completed his dissertation in 1905 on school finance. Thorndike wrote that Cubberley was "a good man but not a good scholar". In 1905 Cubberley became a full professor and Dean of the Faculty of Education at Stanford University, a position he held for the rest of his life.

Cubberley was always deeply affected by the views of his mentor and friend, David Starr Jordan. They had first bonded in 1891 when Jordan had selected Cubberley as his assistant "on his frequent lecture tours by operating the lantern slides". Callahan (1961) states that as a "result the two men travelled together a great deal and became well acquainted". It was Jordan who guided Cubberley into the study of education and eventually to Stanford.
fame was his evolutionary philosophy of "bionomics" which also attracted Cubberley. 39 However, Jordan’s bionomic philosophy would lead him by the early 1900s into the eugenics movement. In fact his vocal support of the eugenics movement in California as a leading member of the Human Betterment Foundation was an outgrowth of his bionomic philosophy and a irrational concern over maintaining race purity as a proper evolutionary path for human ecology. 40 It is clear from Cubberley’s works on school administration that Jordan’s bionomic and eugenic visions of the social structure were a deep influence on his work. In his first great volume, *Changing Conceptions of Education* (1916) Cubberley cast the public school system in a "central role" in creating the new democratic industrial civilization of America. However, he saw the current immigrants as a problem for the school system as they were "illiterate, docile, lacking in self-reliance and initiative, and not possessing the Anglo-Teutonic conception of law, order and government, their coming has served to dilute tremendously our national stock, and to corrupt our civic life". The public schools clearly had to "assimilate and amalgamate these people as part of our American race". The school system had to "implant" in these children a sense of "law and order". 41 Cubberley invoked the factory analogy as a measure to reshape the schools according to the principles of educational efficiency. "Our schools are", he wrote, "factories in which the raw products (children) are to be shaped and fashioned into products to meet the various demands of life". However, in reference to the products who didn’t fit into this system, Cubberley advised administrators to "gradually eliminate those which do not give good results". 42 Schools were clearing houses to sort the fit from the unfit, at least in terms of their educational worth.

Cubberley placed his faith in the new science of educational measurement to organize the student population rather than the old method of each teacher’s "personal opinion". The new tests allowed for the "differentiation in training for the different types of children with
which teachers now have to deal". In his first edition of *Public Education in the United States* (1919), Cubberley outlined how American education had been moving since the Batavia Plan of 1909 and the New Cambridge Plan of 1910 towards a differentiated system of education designed to accommodate children "whom average courses do not fit". The three-tiered Differentiated-Course Plan that was the final result sorted students into three groups: A (Superior), B (Average) and C (Minimum level). It specifically prepared the mentally fit for their future social roles while not compromising that process by segregating the less fit into vocational classes and the unfit into special classes. Consequently, classifying children for training purposes became one of the new roles American school administrators assumed during the early twentieth century. Cubberley and Bobbitt helped to popularize this notion of educational efficiency but in the process also imparted an eugenic mind-set that human beings varied in their quality or mental and social capacities. Schools had to manage and sort pupils, as Frank N. Freeman succinctly outlined in 1924, and intelligence tests now allowed them to do this on an efficient scientific basis. This new ability "to grade and classify intelligence" in order to determine "lines of progress" thus allowed for "special types of schools for delinquents and defectives" as well as various "differentiated courses of study" in "over-age classes, non-English-speaking classes, supplemental coach classes, industrial classes, home schools, disciplinary classes, parental schools, state industrial schools" as well as other specialized educational settings. The educational machinery of American public schools was now geared up to turn out the best products possible given the variable grades of the incoming genetic material. It was a system of education which purported to efficiently utilize the natural learning ability of its students.

v. Intelligence Testing in the American Army: Proving the Worth of Scientific Sorting:

The Army testing program was conducted between 1917 and 1918
The evolution of public education in the United States of America according to Ellwood P. Cubberley. Notice the unified classes of the Common School have been replaced by parallel and differentiated courses of study. The Junior High is divided into A, B, and C levels. The Elementary School has classes for "average pupils" and "special classes for others" such as the deaf, blind, cripples and those of "low mentality".

while the United States Army was engaged in the First World War. The
tests would have a profound impact on public education in North America
during the 1920s. The first mental tests came about because of the
dissatisfaction of French psychologist Alfred Binet with the science of
craniology. Widely accepted in the nineteenth century, craniology
measured head size and skull shape to determine intelligence, but Binet’s
work with school children showed that head size had very little to do
with intellectual ability. Binet and his student, Theodore Simon,
decided to use the success rate of children on "short tasks" as a means
to accurately predict their level of mental ability. Binet and Simon
were heavily influenced by Galton’s work on reaction-time testing as an
accurate scientific gauge of human ability. By 1908 Binet had devised
a series of set tasks from which it was asserted that the mental age of
a person could be determined by subtracting their score from their actual
age. Binet wanted his tasks to be quite distinct "from the trammels of
the school" work children did as a matter of routine. Binet distrusted
school officials who would use the low scores as "an excellent
opportunity for getting rid of all the children who trouble them". 46
Binet also developed methods of remedial education or mental training for
low-achieving students. He believed they did have "the capacity to learn
and to assimilate instruction". 47 The Binet tests were unknown in
America and would have remained so if not for a chance meeting between
Henry Herbert Goddard of the Vineland Training School for subnormal
children and a Belgian educator, Ovide Decroly.

Goddard met Decroly during a European speaking tour in the
spring of 1908. Binet and Simon had just published their first mental
tests. Goddard knew how the tests were being used in the public schools
of France, as well as in the French Army to reject certain recruits, and
he obtained copies from Decroly. In 1914 Goddard wrote that it was only
thanks to the Binet "method for the solution of this part of the problem"
that feeblemindedness could be definitively identified in children.
Thus, it was "only proper here to pay tribute to the mind that gave us this key to the situation". Goddard would later divide feeblemindedness into three categories: the "totally arrested" who have the mental scores of a two year old or less; "imbeciles" with a mental age of three to seven; and the "morons" who have a mental rating of seven to twelve years of age. The removal of the feeble-minded children to special classes within the public school system and the confinement of the more severe cases to institutions occurred between 1908 and the First World War in America. However, America's entry into World War One offered an opportunity to psychologists of defining intellectual norms beyond samples of school children.

The testing of the United States Armed Forces was a hastily prepared experiment in educational psychology that yielded alarming data. The fact that 47.3 per cent of the American-born Caucasian draft tested as feeble-minded was seen as evidence of race degeneration. In fact it could have been proof of a very inferior and uneven public education system. The study was conducted by Major Robert M. Yerkes, a Harvard Professor of Psychology. Yerkes headed a special division of army officers called the Sanitary Corps composed of the leading American psychologists of their day. He was assisted by Lieutenant Arthur Otis, formerly of Columbia University's Teachers College and an expert statistician. Over sixteen psychologists were commissioned as officers for the Sanitary Corps who would be stationed at Fort Oglethorpe, Georgia, in order to train examiners, prepare the tests and eventually fan out across the nation to various army bases to conduct the actual testing. In May, 1918, twenty-four camps began to send men through what Daniel Kevles (1968) calls "the mental testing mill". The entire program shifted gears into full production as the monthly testing rate increased from an average of 12,000 to 200,000 men. Major Yerkes was finally realizing his goal of conducting the first mass intelligence screening on American adults.
Yerkes, the psychologist, had been convinced throughout his academic career that mental testing was socially and scientifically valid. There was overt hostility to the early mental tests and in 1916 Justice John W. Goff of the New York Supreme Court refused to allow test data as proof of feeblemindedness. Yerkes, as President of the American Psychological Association, saw America's entry into the war as a chance to validate mental testing. The army provided a captive population of American males from different social classes upon which to calculate levels of test performance or norms. Two tests were devised for the project during the summer of 1917 at the Vineland Training School. The Alpha, or later A Test, was for those of normal to superior intellectual ability, or the "supranormal" who might be considered officer material. A Beta, or B Test, was for illiterates (non-English speakers such as immigrants), Negroes and "those who exhibit irregularities suggestive of psychopathic condition". All of the B group candidates were considered "subnormal" and graded or ranked by their performance from "A" to "E". A test run of 4,000 assessments was conducted on army recruits and the data showed the Beta test had to be broadened to include puzzle mazes, picture completion and other visual mental exercises. In early 1918 the Beta test was given its official approval and the project could begin.

The testing itself has been described by Stephen Jay Gould (1981) as far from Yerkes' strict protocol. The examiners had to conduct the tests in cramped barracks and soldiers sat on the floor. The bad results among the regular black and white draft could be due to this or a myriad of other difficulties. One chief tester complained that "part of the inaccuracy" was due to the cramped conditions of the room in which the exam was held. Even yelling out the instructions was not sufficient for everyone to understand how to write the tests. Officers obstructed the testing and expressed their disapproval. The Beta test with its group diagrams proved more difficult as the subjects could not always see
what they had to analyze. The process was rather chaotic as on the Beta test over half the black recruits scored D- and one-fifth were recalled for follow-up testing. Gould points out the data provided by Yerkes in the summary report highlighted several major social problems that centered upon education. Among whites and blacks, for both IQ tests, results were significantly lowered by hookworm infestations. Years of schooling was a predictor of achievement on the tests and the large number of recruits with little or no education was a glaring social problem that Yerkes explained away as a process of low native intelligence leading to early school leaving. Blacks in the south had lower scores than those from the north. Yerkes refused to acknowledge that much of the disappointing data was due to poor schooling and the racial variability of education rates.

The tables showing the distribution of schooling for the 102,350 officers and recruits (draftees) tested are reproduced on the next page to show the dubious nature of Yerkes' conclusions. Out of the 60,250 native-born White draftees tested, 25.4 per cent had made it to grade 8 and 4.1 percent graduated from grade 12. The 9,498 White foreign-born draftees did not achieve this educational rate, with only 14.2 per cent reaching grade 8 and 1.5 per cent grade 12. The 4,254 Northern Negro draftees tested had a similar grade 8 completion rate to the foreign White, 13.8 per cent. More Northern Negroes finished high school, 2.4 per cent, than White foreign-born. The testing program found that the 4,938 Southern Negro draftees had the lowest grade 8 completion, 3.8 per cent, as well as high school graduation, 0.6 per cent. All 12,396 officers who were assessed had at least three years of college. Specialized draftees such as medical staff, artillery officers, engineers and veterinary staff had high rates of college training from their civilian education. The public school system had provided a minimal education to most draftees, White or Negro. Yerkes' racial as well as eugenic conclusions were actually the product of his failure to
### Table 302.—Per cent distribution of schooling. Officers and recruits.

(See figures 24 to 27.)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>College:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>0.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>0.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>0.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>0.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>2.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>4.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>4.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>31.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>12.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>10.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>5.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>10.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>3.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>2.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>2.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grades:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>3.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>7.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>14.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>(0.0)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>10.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>(0.3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>7.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(0.1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>(0.0)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of cases.</td>
<td>12,396</td>
<td>40,250</td>
<td>9,498</td>
<td>4,254</td>
<td>4,038</td>
<td>2,599</td>
<td>2,154</td>
<td>1,255</td>
<td>448</td>
<td>638</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The numbers here indicate the year completed, i.e., 6 means sixth grade just completed; 6.5 means halfway through the seventh grade; 6 means almost ready to enter the eighth grade.

### Table 303.—Median years schooling.

<table>
<thead>
<tr>
<th>Group.</th>
<th>Median schooling.¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Officers:</td>
<td></td>
</tr>
<tr>
<td>White draft, native born.</td>
<td>14.7 (almost through third year college).</td>
</tr>
<tr>
<td>White draft, foreign.</td>
<td>6.9 (almost through grade 7).</td>
</tr>
<tr>
<td>Negro draft, northern.</td>
<td>4.7 (almost through grade 5).</td>
</tr>
<tr>
<td>Negro draft, southern.</td>
<td>2.6 (halfway through grade 3).</td>
</tr>
<tr>
<td>Medical Corps.</td>
<td>15.8 (almost through fourth year college).</td>
</tr>
<tr>
<td>Artillery.</td>
<td>14.8 (almost through third year college).</td>
</tr>
<tr>
<td>Engineer.</td>
<td>14.3 (part way through fourth year college).</td>
</tr>
<tr>
<td>Quartermaster Corps.</td>
<td>14.9 (almost through third year college).</td>
</tr>
<tr>
<td>Dental.</td>
<td>14.7 (almost through third year college).</td>
</tr>
</tbody>
</table>

¹ The numbers here indicate the year completed, i.e., 6 means sixth grade just completed; 6.5 means halfway through the seventh grade; 6 means almost ready to enter the eighth grade.

Table 302 shows the per cent of schooling for this total army testing sample of 102,350 officers and draftees. The statistics are those referred to on page 28. Table 303 gives the median years of schooling for both officers and draftees. Notice the educational disparity between officers/professionals and draftees both white as well as Negro.

acknowledge the chronic deficiencies of the American public education system. Yerkes' psychologists even tested prostitutes who lived around the military camps. It was found that 50.7 - 53.2 per cent of the prostitutes had a mental age of ten or less thus ranking in the high-grade moron category. These tests revealed that psychologists who conducted the army testing project believed that mental disease was spread along with physical diseases, particularly syphilis. This was a theory put forward by scientists who advocated such eugenic measures as forced sterilization. 60

The fact that 47.3 per cent of the White draft were deemed feeble-minded caused many academics to proclaim the decline of the American White race. Henry Herbert Goddard gave an inflammatory speech for the 1919 Louis Clark Vanuxem Lecture at Princeton University concerning the threat to national efficiency of this pool of feeble-minded citizens. 61 More influential was Carl C. Brigham's A Study of American Intelligence (1922) which also put forward an unusual interpretation of the army test results. As Yerkes notes in the book's forward, Brigham was a psychologist in the Military Hospitals Commission of the Canadian Army and his advice helped to frame the testing protocol. In October, 1917, Brigham joined the Sanitary Corps and became a liaison officer to the Surgeon General in Washington, D.C. In his "spin" of the army tests Brigham provided the most colourful of eugenic analyses. He writes:

We should have to assume that the Nordic, no matter where he may be, in the Canadian Northwest, in the Highlands of Scotland, or on the shores of the Baltic, is always ready for an intelligence test. Perhaps it would be easier to say that the Nordic is intelligent. 62

The real explanation for the low test scores of non-Nordic White and Negro draftees was Brigham's deep-seated racial prejudices. To him it was a matter of genetic racial origins, not schooling, that created the disappointing results. Brigham reasoned that the "real drop in the curve of intelligence" began about 1900 with the type of immigrants America
received. However, even Brigham had to admit race alone did not explain
the low intelligence rating of the army. In reference to schooling, Brigham stated the educational institutions of America were "part of our own race heritage". The "average Negro child can not advance through an educational curriculum adapted to the Anglo-Saxon child". Equal education would result in the selection of "superior negroes or inferior whites". Eugenic as well as race considerations seemed to negate any arguments for improved general education and instead advocated strict educational differentiation.

The biases of the army tests would be carried into the public domain of the schools during the 1920s through mental testing. Intelligence tests became a device for the selection and segregation of low achievers. While conversely the testing or grading of mental ability led directly to the gifted education movement and proponents like psychologist Lewis Terman of Stanford who advocated the nurturing of hereditary genius. Kevles believes the army project "made the practice respectable". In 1921 the Psychological Corporation, a division of Harcourt Brace Publishing, brought out its National Intelligence Test as based upon the army's Alpha test. The target market for the new test was the public school system. In 1926 Frank N. Freeman, a Professor of Educational Psychology at the University of Chicago, wrote in his volume *Mental Tests* that the "possibility of measuring an individual's intelligence by a short and simple test has captured the imagination of school people and of the general public". The Rockefeller Foundation gave a grant to the National Research Council to develop group examinations in the schools. By the mid-1920s educational surveys using grade-wide achievement tests were being utilized throughout the public schools of North America. American colleges developed entrance exams with Brigham's help and mental measurement even attracted private investors. The validity of intelligence testing and race/social class origins remain a matter of visceral debate in American psychometrics.
In the United States of America the driving force behind the development of mental testing and intellectual classification was university academics. The Canadian situation was somewhat different from the American as it involved a strong connection between the medical profession and the active promotion of a eugenically-based form of mental hygiene. In the United States the leading advocates of mental testing in the public school system were professors from the new Faculties of Education at the nation's universities. Edward L. Thorndike was a Professor of Psychology at Columbia University's Teachers College, Lewis Terman was a leading Professor of Educational Psychology based at Leland Stanford Junior University's Faculty of Education, psychological researcher Henry Herbert Goddard eventually became situated at the University of Ohio after leaving the Vineland Training School, while J.E. Wallace Wallin was Professor of Clinical Psychology and Special Education at Miami University. From their academic pulpits they actively promoted the creation of mental tests so that they could be used to make society more efficient and rational. Actually all had a vested interest in promoting the tests as their widespread usage made them not only academically prominent but financially wealthier. Thorndike's former academic mentor, James McKeen Cattell, and one of his Columbia graduate students, Robert Woodward, formed the Psychological Corporation on April 28th, 1921, to publish mental tests. The Psychological Corporation continues to produce and profit from mental tests today. Only one of the advocates of mental testing, J.E. Wallace Wallin, actually denounced the genetic determinism of the movement. The mental testing movement became engrained in the American public school system and in Canada its influence was impossible to avoid.

Henry Herbert Goddard studied under G. Stanley Hall at Clark University where he received his Ph.D. in 1899. He taught psychology at the Pennsylvania Normal School at Westchester but it was in 1901 that his
professional life changed dramatically when he met Edward R. Johnstone at a child-study meeting in Newark, New Jersey. Johnstone was an expatriate Canadian who had moved to Cincinnati, Ohio, from Galt, Ontario, as a boy. He had worked with mentally handicapped children at the Indiana State School for the Feebleminded and in 1898 was made vice-principal of the Vineland Training School for the Education and Care of Feeble-Minded Children. When Goddard met Johnstone in 1901 he had just been appointed the school's principal. Johnstone had created the Feebleminded Club through the sponsorship of Fels-Naphtha soap manufacturer, Samuel S. Fels, to bring together those interested professionals who were involved in the movement to train feeble-minded children. In 1903 Johnstone brought Goddard to Vineland to help teach the first six week summer course for public school teachers involved in the education of feeble-minded students and in 1906 he was made head of the new Research Department. After adapting a copy of the Binet-Simon mental test in 1908, Goddard "shortly after the start of the new school year...began to use his own translation of the test on inmates at Vineland". Goddard wrote an article in Vineland's Training School Bulletin about the value of the Binet-Simon tests and aroused the interest of fellow Clark graduates, Lewis Terman, now at Stanford, and J.E. Wallace Wallin. Goddard's claim as the pioneer of mental testing in America was secured.

Goddard was extremely crude in his terminology when he wrote and lectured about the feebleminded. He divided the feebleminded into three categories: 1. The "totally arrested" with a mental age of two or less; 2. The "Imbecile" with a mental age of three to seven; 3. The "Moron" with a mental age of seven to twelve. Goddard coined the term moron which means "fool" in Greek. Johnstone recalls rather admiringly how Goddard explained the concept of mental endowment to teachers during the summer school at Vineland. He compared a fast car to a bright child, a car moving at the regular speed to a normal child
A photograph showing a boys' woodworking class at The Training School, Vineland, New Jersey. Although the picture is taken from Joseph P. Beyer's 1934 history of Vineland, the light fixtures date this photograph from before the First World War. The project of the middle front boy, a cross-legged table, appears quite sophisticated for a feeble-minded child to construct.

and a slow car that moves so slowly you could walk alongside it to the retarded child. The teacher thus became a mental mechanic studying the child's engine or brain for signs of defective functioning. Goddard made his reputation on stating exaggerations and his grandiose pronouncements led to his eventual downfall. In 1912 he published his most complete work on the intergenerational transmission of feeblemindedness, *The Kallikak Family: A Study in the Heredity of Feeble Mindedness*. The family name was Goddard's own creation as he joined the Greek word for beautiful (Kalos) to the word for bad (Kakos). The book purported to document how a single family had two genetic lines, one normal and one feeble-minded. Both lines had remained intact over many generations proving the genetic nature of feeblemindedness. It had all begun when Deborah, a girl of eight, came to Vineland from upstate New Jersey and by fifteen appeared to be functioning as a normal child. Goddard was convinced it was feeblemindedness obscured by training so he dispatched his assistant, Miss Kite, to seek the truth from the family genealogy. Miss Kite, a former school teacher, was typical of the female field researchers used by eugenic experts such as Harry Laughlin of the Eugenics Record Office at Cold Springs Harbour, New York. Laughlin believed females were simply more trusted by their subjects than men. Miss Kite returned with a tale of two clans in the same family, an illicit one spawned by the "Old Horror", a feeble-minded tavern girl in the Revolutionary War which led to Deborah, and a legitimate one of normal mentality. The two clans lived in close proximity in what Goddard called "a natural experiment in heredity". It was genetic proof of good complementing bad germ plasm. Gould's 1981 study of intelligence testing revealed the photographs of the Kakos clan members had been crudely altered to give them a more depraved look. Goddard's work on the Kallikaks was widely embraced and often quoted as an authoritative work on the subject of feeblemindedness.

Mental testing, to Goddard, had but one purpose: to sort
Henry Herbert Goddard's questionable history of the two genetic lines of the Kallikak clan from upstate New Jersey. The dedicated Miss Kite, a former school teacher, conducted the interviews upon which Goddard based his story of the feeble-minded clan of Kallikaks which began in a tavern during a moment of moral weakness between Martin Kallikak, Sr. and a feeble-minded bar wench.

children and rationalize their education according to what was best for them. In 1914 he wrote: "When children enter school their mental levels should be determined. Several groups will be found". In the interest of social efficiency each child's education had to recognize his "mental limitations". However, Goddard's reputation began to deteriorate as his Binet scale was found to be faulty by Lewis Terman who noticed it ranked as morons over fifty per cent of adults rated as normal on the Stanford Binet. Goddard's work on criminals as feeble-minded and immigrants as a potential feeble-minded criminal class began to reveal that his eugenic determinism was based upon little hard evidence. In 1928 he had to publicly recant his eugenic views but as David Smith (1985) points out, it was merely a bowing to academic pressure. Goddard saw mental testing as the magic bullet which would dispatch the inferior to custodial care or training, while better educating the various grades of normal children.

Lewis Madison Terman did his Ph.D. work at Clark University along with J.E. Wallace Wallin. Both Terman and Wallin heard Goddard's lectures in 1908 on the value of mental testing. Terman's 1906 dissertation used crudely devised tests of his own making to compare seven "bright" and seven "stupid" boys. He concluded from the evidence that there is a "greater importance of endowment over training". It was ill health that forced Terman to seek a high school principalship in San Bernardino, California, in 1906 and then in 1907 he became a Professor of Child Study at the Los Angeles Normal School. According to Paul Davis Chapman (1988) Terman called these the "fallow" years before he became a full professor at Leland Stanford Junior University in 1909. In 1912 Terman launched the Stanford revision of the Binet-Simon tests with an initial experiment on the school children of San Luis Obispo, California, where his college friend, Charles R. Small, was Superintendent of Schools. Predictably Terman found that there was a large number of feeble-minded children present and they were a "clog" in
the "educational machinery". The revision of the Binet-Simon scales was started in earnest in 1913 and concluded in 1916. To create the norming tables or scales of achievement range on the tests, either high or low, Terman used only Caucasian, middle-class students of Western European stock. Terman describes the over 1,000 children tested in the Stanford area as:

Such as almost anyone would classify as middle-class. Few children attending them (schools) were either from very wealthy or poor homes...care was taken to avoid racial differences due to lack of familiarity with the language. None of the children were foreign-born and only a few were of other than Western European descent.

The scales that Terman presented in 1916 were totally biased and unrepresentative of a cross section sample of California school children. Terman's college friend, Wallace Wallin, worried that educational fakers and medical quacks "would misuse the tests". Terman began to be influenced by eugenicists such as Stanford University President, David Starr Jordan, who was a public advocate of such eugenic measures as the forced sterilization of the feebleminded. Terman declared in 1917 that if California had to be preserved for "a class of people worthy to possess it, we must prevent...the propagation of mental degenerates". Chapman (1988) has called Terman's career a "quest for an ordered society". It could equally be interpreted as an attempt to use mental testing for social engineering purposes.

Terman's biases about the social rationing of educational opportunities is revealed in his 1916 volume The Measurement of Intelligence. He writes that: "Among laboring men and servant girls there are thousands like them...the tests have told the truth". Terman continues: "No amount of school instruction will ever make them intelligent voters or capable citizens". The only solution Terman envisioned was that "this group should be segregated in special classes and be given instruction which is practical and concrete". In 1919 he wrote in The Intelligence of School Children that industry and the
increase in repetitive tasks "is making possible a larger and larger utilization of inferior mentality". 88 However, Terman's genetic certainty about the predetermined nature of human potential and the ability of mental tests to gauge that level troubled journalist Walter Lippmann, who attacked him in *The New Republic* from 1922 to 1923. Lippmann called these tests nothing more than an "excellent administrative device for grading children". 89 Mental tests were not analytical tools but rather ordering devices, a quick means to sift through school children. Terman's dogmatic views about how mental tests could rate a fixed level of human intelligence failed to stand the test of time. In World War Two ordinary soldiers given the World War One tests scored the equivalent of the 83rd percentile. The fact was the soldiers were simply better educated than twenty-five years previously. 90 In 1951 Terman was asked about the fixed nature of intelligence and he replied: "I am less sure now" and in 1955 he said "I'm still less sure". 91 In 1956 Terman might have been even less sure but unfortunately he died.

Edward L. Thorndike was an unlikely psychologist in 1893 when he began his literature major at Wesleyan University. After reading William James' two volumes of *Principles of Psychology* (1890), Thorndike changed his major to psychology. He went on to study under James at Harvard and in 1898 defended his dissertation on the Stimulus-Response, or S-R mechanism. Thorndike created "problem boxes" where the animal was prompted to press a particular lever using a food stimulus. 92 He also taught with James McKeen Cattell at Western Reserve University conducting primate experiments. In 1899 Thorndike was appointed as a Professor of Educational Psychology at the new Teachers College of Columbia University in New York. Cremin (1961) muses that it was assumed any "student who had made a study of monkeys was worth trying out on humans". 93 His first work was not on children but *Animal Intelligence* (1911) and he showed how "curves of progress" were dependent on new learned behaviours.
As early as 1903 he was exploring "Hereditary, Correlation and Sex Differences in School Abilities" and was becoming convinced that heredity affects a person's educational experiences. Also in 1903 Thorndike published his first text for teachers, *Educational Psychology*. In 1905 he began to study twins and came to the conclusion that hereditary factors were dominant in shaping their make up. Thorndike even attempted to write the definitive text on the new statistical methods of conducting social sampling as well as constructing mental tests in *An Introduction to the Theory of Mental and Social Measurements* (1904). As the First World War approached, Thorndike became well established as America's pre-eminent educational psychologist and expert on mental tests. In 1913-1914 he published his magnum opus, the expanded three volume edition of *Educational Psychology*. Thorndike began to associate himself with eugenics in 1912 when he co-authored a *Trait Book* with Charles Davenport of the Eugenics Records Office. In 1913 Thorndike openly adopted eugenics when he wrote an article for the *Popular Science Monthly* that proclaims: "Long before a child begins his schooling...long indeed before they are born - their superiority or inferiority to others...is determined by the constitution of the germs and ova (from) whence they spring". Thorndike was not just an advocate of mental testing but, like Terman, envisioned a form of social engineering through education.

In 1920 Thorndike wrote in *Harper's Monthly Magazine* that a natural class of intelligent people ran the affairs of society simply because such persons "are the more clean, decent, just and kind". The reverse would be that the less intelligent are less clean, decent, just and kind. In fact Clarence Karier (1967) has pointed out Thorndike linked cleanliness to mental ability; dirt was a sign of diminished capacity. Education tended to attract the best human beings, Thorndike believed, as those adults attending night classes "are probably much brighter than those who do not". Even the immigrants who attended...
evening classes to master English "are probably much above the average of...the race in question". The social biases of Thorndike appeared quite early in his writings, that good people were intelligent, clean and by their very genetic nature simply more decent people. In his later career Thorndike made his racial biases better known. In Your City (1939) Thorndike surveyed over 310 American cities and rated them by a "goodness scale". Low ratings were caused by such factors as a "high percentage of Negro families". In Human Nature and the Social Order (1940) Thorndike continued his quest to promote goodness by advocating the prolific breeding of the better social classes who could be defined by their education, home ownership, possession of an automobile, were steadily employed, belonged to community groups such as the YMCA and subscribed to magazines like Good Housekeeping. Mark Haller (1963) has described Thorndike as having "a cold analytical mind". Donald K. Pickens identifies him as an ardent believer in eugenics. Thorndike "rejected modern social reform and philanthropy because of its misguided humanitarianism encouraging the increase of the unfit and inferior". He can be portrayed as a social biologist who wanted to use mental testing and public education as a means to improve the character of society. Like the chickens he first used in his shaping experiments for the S-R theory of learning, children could be scientifically selected through mental tests and even the clearly inferior be trained for useful social roles. Thorndike, like Terman, Freeman and Goddard, was preoccupied by furthering the dominance of a Caucasian, middle-class social order.

J.E. Wallace Wallin was an exception to those educational psychologists who believed in the power of mental tests to create a more ordered society based upon genetic cognitive ability. Wallin began his career at Clark University with fellow graduate student, Lewis Terman. When he left Clark in 1909 he was convinced that the new mental tests were the scientific method to detect inferior genetic mental traits which
resulted in social deviancy. He administered the Goddard revision of the Binet-Simon tests on young offenders and concluded their criminal behaviour was due to the bad germ plasm often found in "prolific and degenerate progeny". However, by 1916 Wallin began to question the validity of the Goddard-modified Binet test he administered to a group of successful Iowa farmers and businessmen. The test rated all those examined as feebleminded in the moron to high-grade imbecile range. Even a housewife whom he tested and believed to be of average mental ability was rated as a moron. In the early 1920s Wallin was appointed Professor of Psychology and Special Education at Miami University. In 1924 Wallin began to discredit the notion of genetic feeblemindedness as he believed "human heredity has not yet been reduced to an accurate, demonstrable science". The idea of bad germ plasm "lost in antiquity" began to seem ridiculous to him. He openly questioned the commonly-accepted ideas that the feebleminded were more sexually active and also naturally-born delinquents. In his writings Wallin advocated a type of "euthenic" care for mentally-handicapped children which included "proper corrective and developmental training" that "should be given in the public schools". Wallin was an early advocate for special education and the only purpose he saw for well-constructed mental tests was to define a population of needy students.

ii. Conclusion:

In 1922 Lewis Terman stated that education was "a matter of native endowment" and all pupils had an "equal opportunity" to advance on this basis. In the same tract he wrote America had to guard the "quality of its germ plasma" against inferior newcomers such as the Mediterranean races. Mental testing had a surface appearance of scientific validity and educational rationality but underneath it helped to maintain the social status quo while segregating all those deemed subnormal into inferior educational tracks. By the late 1920s genetic factors and their supremacy were being challenged by environmental
theories of child rearing. The 1928 study of 401 foster children by a
group of University of Chicago academics showed adopted children had IQs
similar to their adoptive parents as opposed to their genetic ones.
Terman attacked the study because its results in his view were tainted
in that it had employed black children. 108

This history of pupil sorting for educational efficiency,
intelligence testing and differential schooling based upon supposed
natural mental ability has been outlined for a reason. It was not just
for the purpose of providing background information on the educational
reforms made in the Vancouver school system which will be dealt with
later in this study, but to show the unsavoury social biases of what were
thought of as progressive educational measures. Many educators and
academics became attracted to the principles of social efficiency and
eugenics. Callahan believed these two notions were distinctly
complementary. In the course of examining the professionals who became
involved in the Vancouver school system from 1911 onwards, Callahan’s
observation merits close attention.

Notes:

1. Frank N. Freeman, "Sorting the Students", Educational Review, Vol. 68
   (November 1924), pp. 169-174

2. Clarence J. Karier (ed.), Shaping the American Educational State 1900

3. H. Warren Button and Eugene F. Provenzo, Jr., History of Education and
p. 192

   Schooling" in Donald R. Warren (ed.), History, Education and Public


7. Jeannie Oakes, Keeping Track: How Schools Structure Inequality, (New
   Haven, Conn.: Yale University Press, 1985), pp. 20-21

8. Samuel Bowles and Herbert Gintis, Schooling in Capitalist America:


12. Ibid., p. 17


14. Ibid., p. 239


22. Ibid., p. 49

23. Ibid., pp. 49-50. See William Hughes Mearns, "Our Medieval High Schools - Shall We Educate Children for the Twelfth or Twentieth Century?", Saturday Evening Post, (March 2, 1912), pp. 18-19; Maude Radford Warren, Saturday Evening Post, (March 12, 1912), pp. 11-13 and 34-35; Editorial - "The Case of Seventeen Million Children - Is Our Public School System Proving an Utter Failure?", Ladies Home Journal, (August 1912), p. 3; Ella Frances Lynch, "Is the Public School a Failure? It is: The Most Momentous Failure in Our American Life Today", Ladies Home Journal, (August 1912), pp. 4-5; Frederick Burke, "Are We Living in B.C. or A.D.?", Ladies Home Journal, (September 1912)

24. Raymond E. Callahan (1962), op. cit., p. 79 Footnote No. 20


31. Ibid., pp. 26-27


34. Franklin Bobbitt, How to Make a Curriculum, (Cambridge, Mass.: Riverside Press, 1924), p. 41


36. Samuel Bowles and Herbert Gintis (1977), op. cit., p. 199


38. Raymond E. Callahan (1962), op. cit., p. 183

39. Lawrence A. Cremin (1965), op. cit., p. 3


42. Raymond E. Callahan (1962), op. cit., p. 97; p. 99. See for original text, Ellwood P. Cubberley, Public School Administration (1916), pp. 337-338; p. 336


45. Ibid., pp. 453-454


47. Ibid., p. 154


53. Ibid., pp. 565-566. Yerkes had studied at Harvard under Hugo Munsterberg who believed that people in industrial societies were genetically suited through their mental ability to specific forms of work. Yerkes had used mental tests in clinical experiments at Boston Psychopathic Hospital and was convinced of their scientific value.


55. Ibid., p. 568, pp. 571-572


57. Ibid., p. 203

58. Ibid., pp. 217-220

59. Robert M. Yerkes (1921), op. cit., Table 302, p. 758; Table 303, p. 761


63. Ibid., p. 181

64. Ibid., p. 194


66. Frank N. Freeman - Reading No. 317 "Brief History of the Mental Test Movement" in Ellwood P. Cubberley (ed.) (1934), op. cit., p. 499


68. See Angus McLaren (1990), op. cit.

69. Geraldine Joncich (1968), op. cit., p. 385


75. Ibid.


83. Ibid. pp. 28-29

84. Ibid., p. 29. See J.E. Wallace Wallin, Experimental Studies of Mental Defectives, (Baltimore: Warwick & York Press, 1912), pp. 1-2


86. Paul Davis Chapman (1988), op. cit., p. 32


93. Lawrence A. Cremin (1964), op. cit., pp. 112-113


98. Ibid., p. 154
99. Ellwood P. Cubberley (ed.) (1934), op. cit., Reading No. 287
"Implications from a Study of Adult Learning", p. 449, from Edward L.
Thorndike, Adult Learning, (New York: Macmillan Press, 1928)

100. Clarence J. Karier (ed.) (1975), op. cit., p. 234; Karier (1968),
"Elite Views on American Education", op. cit., p. 154

101. Donald K. Pickens, Eugenics and the Progressives, (Nashville:
Vanderbilt University Press, 1968), p. 139

102. Hamilton Cravens, The Triumph of Evolution: American Scientists and
The Heredity/Environment Controversy, 1900-1941, (Baltimore, Md.: John

103. J.E. Wallace Wallin, "Who is Feeble-Minded?", Ungraded, Vol. 1
(1916), pp. 105-113

104. J.E. Wallace Wallin, The Education of Handicapped Children,
(Cambridge, Mass.: Riverside Press, 1924), pp. 283-284

105. Ibid., pp. 286-287; p. 273

106. Ibid., p. 307

Lewis M. Terman, "Were We Born That Way? Or Can We Help It? Is Heredity
or Environment the Power that Moulds Us? What Science Now Knows About
Intellectual Differences and Their Significance", World War, Vol. 4
(1922), pp. 655-600

op. cit., pp. 113-115
CHAPTER THREE

Mental Hygiene in Canada: Medical Doctors and Educational Psychologists Differentiate the Canadian School Population.

i. Introduction:

The first medical inspections of public school children occurred during the early twentieth century in Europe as well as North America. From the beginning these seemingly progressive public health measures went beyond their stated goal of lowering child mortality rates. It was Galton in *Hereditary Genius* (1869) who first advanced the concept of "viriculture", or the scientific improvement of the race as a societal goal. R.A. Lowe (1979) points out that Galton’s Anthropometric Laboratory was devised as a public display for the 1884 London Health Exhibition about the gathering of survey data. The exhibit developed into a detailed study of the spectators themselves and helped him to "refine those statistical techniques necessary for more precise diagnoses of the eugenic problem". Galton’s later life was marked by a growing preoccupation with the problem of the feebleminded and the "civic worth" of individuals, according to Lowe.

In 1908 the first large-scale health inspections began in the state-operated schools of Great Britain in order to gather statistics on the health of children in an "anthropometric survey" of the country’s future "national physique". So alarmed was Galton with the statistical findings of the school medical inspections that he wrote a letter to *The Times* of June 18th, 1909. Galton stated the "result of inquiries into teeth, hearing, eyesight, and malformations of children in Board Schools" reveals a decline in the national physique. It was not just a physical decline as the "apparently continuous increase of insanity and feeblemindedness" led Galton to conclude it was becoming a matter of race degeneration. G.R. Searle (1976) highlights the fact that Galton’s conclusions were supported by official statistics as the "certified insane" had increased from 2.2 per thousand in 1872 to 3.2 per thousand
in 1909. Eugenic fears about the growth of feeblemindedness seemed to
gain credence as a result of school medical inspections. Such concerns
resulted in many doctor-led initiatives to manage the entire problem of
race fitness within the new mental hygiene movement. Lowe notes that The
Lancet, the leading British medical journal, of September 3rd, 1910,
published a letter by a contributor who only identified himself as
"Medicus". It argued forcefully that:

> The medical inspection of school children is but
one part of a larger eugenic survey of the nation
whose other components, the sociological and
anthropological inspections, must soon engage the
attentions of legislators. Eugenists are in the
main convinced that by safeguarding in every way
the good stock...we shall effect the object which
all right thinking persons have in view--namely an
increased fitness, physically, mentally and
morally, among the general population.

Lowe recognizes that "the belief that eugenic measures might lead to a
fitter population was evangelized by leading doctors and educators".

The alliance of medical doctors and educators found expression
in Canada through the Canadian National Committee for Mental Hygiene or
CNCMH. Medical physicians such as Charles Kirke Clarke, Clarence Hincks
and Helen MacMurphy carried out a social crusade to segregate as well as
sterilize the feebleminded through the Canadian mental hygiene movement.
These doctors found an ally in the field of Canadian educational
psychology, Dr. Peter Sandiford of the University of Toronto. Various
medical and educational experts spread the use of mental hygiene surveys,
confinement in asylums, segregated special classes for feeble-minded
children, enforced sterilization as well as other "reforms" across
Canada. The Canadian experience of mental hygiene appears to closely
parallel that of Great Britain which specifically tied the eugenic field
work of doctors with the efforts of educational psychologists to promote
intelligence testing in what Lowe has called a "quest for national
efficiency" from 1900 to 1939. As late as 1939 the British National
Board of Education had mandated medical examinations of pupils' hair
colour, eyes, skull size and racial features. Despite public objections,
Dr. R.H. Cawley of the Board’s medical division proclaimed such data was vital as "the propagation of undesirables is a national menace". When R.B. Cattell published *The Fight For Our National Intelligence* in 1937 about the spectre of racial degeneration and mental decline he caused such educational measures as mass psychometric testing to be vigorously promoted. Canada, like Great Britain, continued to emphasize race degeneration well into the late 1930s through its own mental hygiene movement as led by prominent medical doctors and educators.

ii. Canadian Medical Inspections and the Appearance of Intelligence Testing in the Schools of the Dominion:

The history of the mental hygiene movement in Canada and the initial entry of medical doctors into the public school system were inextricably linked. On the surface the rationale for school medical inspections was the very real need to bring basic health care to children in the most direct manner possible. Neil Sutherland (1976) has pointed out that the Toronto School Board "reluctantly moved into health work after they had been unable to persuade health boards to do the job". Public health officials in most large North American cities were burdened by such concerns as urban sanitation, disease control and fresh water supplies. Nurses with the public health departments attended to infant health concerns and the Toronto School Board assumed that all child health matters were the responsibility of local health authorities. The schools were not a high priority for local public health departments and thus some school boards had to develop their own systems of medical inspections. In Ontario the medical inspection of schools was legally mandated in 1907 while British Columbia followed suit with legislation in 1910. Sutherland has pointed out how local public health officials eventually tried to take over the school systems but were repulsed by school boards now anxious to keep control over their pupils' medical affairs. By 1914, Sutherland writes, it was the usual practice for doctors and school nurses to conduct mass examinations of students within the schools of most large Canadian cities. Allied with the educational
medical establishment was the field of mental hygiene, a progressive social movement that wanted to remove pupils from the general school population on genetic grounds and confine them in special classes or institutions for the feebleminded. Sutherland makes it very clear that the eugenic assumptions of the early Canadian mental hygiene movement can be seen in the "crude application of intelligence testing" which was itself first empowered by the broader program of school health care. 7 In the United States Sol Cohen (1983) has shown that mental hygiene and health professionals "after a brief flirtation with eugenics" rejected the hereditarianism of feeblemindedness and launched the child guidance movement in the 1920s. 8 In Canada the situation was very complex as such eugenic ideas as racial and mental fitness became associated with school medical inspections, educational testing and the creation of special classes for subnormal pupils. Furthermore, certain medical professionals actively encouraged eugenic practices within the Canadian school system itself.

Many of the first Canadian medical professionals who were involved with school health inspections openly expressed eugenic beliefs. Dr. Charles Hastings, a prominent Toronto surgeon and later member of the CNCMH, declared before a 1906 meeting of the Toronto Women's Council that if he were asked to defend the idea of school medical inspections, such an exercise would be seen by any "intelligent person" as utterly ridiculous in and of itself. He could not believe that the two goals of such medical inspections, "Preventive Medicine" and "the awful problem of race suicide" could not be readily appreciated by the public. Dr. Hastings talked of detecting poor eyesight, hearing problems and childhood diseases as part of the physician's mandate in the public schools but he also mentions that good physical development along with a "high mentality" are "the most valuable asset that any nation can have". 9 A.P. Knight, a Professor of Biology at Queen's University, was more blunt in his 1907 declaration that good health must be socially
preserved by boys and girls who "possess a good heredity". Knight wrote that the origins of such school medical inspections were found in continental Europe, particularly Prussia. School medical inspections served the needs of the strong Prussian military. He proclaimed "medical inspection can do a great deal...for society" and quoted evidence from Dr. C.K. Clark (sic-Clarke) of the Toronto Asylum that trained physicians can easily detect children of mental or moral degeneracy. To Knight, doctors needed to check school children for bad teeth, tonsils, poor vision, impaired hearing and other physical ailments. Proper nutrition was also important but as Dr. Hastings had already found, "mental, moral and physical degeneracy go hand in hand". In 1913 Dr. W.E. Struthers, Chief Medical Inspector of Toronto public schools, claimed the poor living conditions among some children as well as "the prevalence of venereal and other diseases are rapidly producing a degenerate race". To Struthers "health and education belong hand in hand". Educational agencies had to "ally" themselves with "expert medical officers" in order to "see that the health of children is conserved through the schools". He listed twelve duties of school medical inspectors, ranging from the detection of contagious disease, finding physical defects, instituting sanitation measures and health education programs. However, the seventh duty cited was the: "Examination of mentally defective children in an effort to measure the scale of intelligence of each child and determine its mental status". The physical and mental state of the child seemed to be inextricably linked in the minds of most early medical inspectors connected to Canadian public school system.

Dr. Peter H. Bryce, Chief Medical Officer for the Department of Interior in Ottawa, was typical of Canada's leading medical officials calling for the detention and removal of subnormal children. Dr. Bryce, writing in 1916, quoted evidence from Dr. A.F. Tredgold, a leading British medical authority on subnormal children, that the condition of feeblemindedness was a medical one caused by the pathological
"constitution of the germ in the feeble-minded child" as well as poor environmental conditions during early childhood. Citing the evidence from a survey of the Toronto school system, probably that of Charles Kirk Clarke, Bryce revealed that about 3 per cent of all children examined were feeble-minded. He called "for the removal of defects, whether physical or mental, in order not only to prevent retardation but also promote normal development". In the hands of doctors like Bryce, medical inspections began to do more than simply treat diseases, they became a mechanism to rank the future potential of human beings. Writing in 1918, F.N. Stapleford, a social worker, offered a rationale for the zealous exercise of such school medical inspections in his article "The Physician as a Factor in Social Efficiency". Doctors had a responsibility to find the "causes of social weakness" and thus promote "social happiness". Stapleford pointed out that "members of the medical profession should have the social mind" as "their work" must be seen "in relation to the whole of social efficiency which should be the goal of all effort". In the "new city" governed by science "the physician will occupy a position of commanding importance". What Stapleford clearly articulates is a new social role for medicine as a social force to shape the nation's destiny, because a healthy society is also an efficient society. The first medical doctors to examine Canadian school children clearly had the goals of social improvement and efficiency in their minds when they graded students as either fit or unfit because of mental or physical defects. In Canada such medical authorities did indeed become figures of "commanding importance".

A 1920 speech given by a psychologist, E.J. Pratt, before the Toronto Academy of Medicine left little doubt about the place of intelligence testing as a vital support for school medical inspections. Just as medical examinations had detected disease, the use of intelligence tests would allow the "careful sifting out, by psychiatric methods, of the mentally abnormal in the public schools". Using the
Binet-Simon tests and a grant from the CNCMH, Pratt selected students classified as backward in previous tests for detailed diagnosis. Over 502 Toronto school children were examined from the first to fourth grades. Most mental defectives came from children of the "last class" or working class whose parents were day labourers. The second class of artisans or self-employed furnished few examples of defective children, while the professional or first class contained no mentally retarded children. The "last class" had a mentally defective rate of over 50 percent within its group's confines. Pratt foresaw that such mental classification measures could serve a "valuable social function". In 1923 Chester E. Kellogg, an educational psychologist at Acadia University, published an article "Mental Tests and Their Uses" in the Dalhousie Review. Kellogg traced "mental tests" back to biblical times, using Gideon in the Book of Judges. After further historical evidence, Kellogg presented mental tests as natural instruments men have always used in order to select leaders who would guide society. Recent efforts to find feeble-minded children through testing and remove them from the schools was not a departure from the past. In fact Kellogg lamented that not enough action had been taken in the schools of Nova Scotia since a recent mental hygiene survey. In his opinion the general use "of intelligence tests as part of the routine of the public school system would be of great value". However, such examinations should not be attempted by just anyone involved in the educational system. Kellogg advised that "in many communities a physician interested in mental hygiene might be found who would be willing to make the effort necessary to acquire skill in using tests". In this statement he made it clear that the testing process in Canadian schools should always have some degree of medical involvement.

iii. Medical Doctors and Mental Hygienists:

a. Dr. Helen MacMurchy:

Dr. Helen MacMurchy, one of Ontario's earliest and most
prominent female physicians, made the feebleminded a popular social cause in Canada. She was a major force in recruiting both male medical professional and female political activists into the cause of educating the feebleminded as well as controlling their reproduction. MacMurchy had a wide audience for her views as she wrote numerous articles, several books and the very popular Canadian Mother's Books concerning the care of newborns. The Federal Health Department distributed over 220,000 copies of the Mother's Books between 1921 and 1923. MacMurchy was born in Toronto on January 7th, 1862, and she was educated at the city's Collegiate Institute. She graduated from the Toronto Normal School with a "first class" teaching certificate in 1881. Later that year she became assistant head mistress of her former school, the Collegiate Institute, and taught classes of girls for several years. However, she decided not to pursue teaching as a permanent career and attended the Ontario Medical College for Women from which she graduated in 1899. MacMurchy then went on to the University of Toronto and in 1900 completed a Medical Baccalaureate in Surgery and Medicine with first class honours. Her honours paper was published in The Lancet of December, 1901. MacMurchy did post-graduate work with Sir William Osler at Johns Hopkins and the Women's Medical College of Pennsylvania, graduating in 1923 with an honours Medical Doctorate Degree or M.D.D. The research she did for Osler was a study of school medical inspections and child welfare measures in London and Manchester, England; Boston; New York; Waverley, Massachusetts, and Vineland, New Jersey. MacMurchy's involvement with "school hygiene" was established soon after the completion of her medical degrees as she attended the 1907 International Congress of School Hygiene in London and wrote of the interest such dignitaries as the aristocratic/philanthropist Lady Ramsay had in the work of school hygiene among the poorer classes. The movement, according to MacMurchy, was already an international social cause for progressive men and women of the professional classes.
about the social desirability of sterilization MacMurchy was to expound about the feebleminded, particularly during the 1930s, it is very evident from her educational credentials that she was a very successful career woman. This was accomplished during a period of time when such prominent professional careers for women were highly unusual. MacMurchy’s later inflammatory tracts about the sterilization of the feebleminded should not detract from her accomplishments as a pioneering Canadian female physician in a largely male profession.

MacMurchy’s medical career began in 1901 when she became a general practitioner attached to the Toronto General Hospital. Soon she used her knowledge of gynaecology, obstetrics and the mental health of children to become the medical inspector for the Bishop Strachan and Westbourne private schools of Toronto. Her work became so highly regarded, Ontario’s Department of Public Health made her Inspector of the Feebleminded for the entire province in 1905 and she also worked with the British Royal Commission on Mental Defectives. From 1906 until 1920 she prepared annual reports for the department on the feeble-minded population of the province. New medical information, as well as management strategies, were included in the reports which were clearly designed to promote social reforms as opposed to merely suggesting them. In 1910 MacMurchy was made Medical Inspector for all female students in the Toronto public school system and was appointed to the permanent medical staff of the Toronto General Hospital in 1911. In 1915 she was made the first inspector of the "auxiliary classes" for feeble-minded school children under the Department of Education. She published annual reports on the auxiliary classes from 1915 to 1920 and gave public lectures on the humanitarian nature of segregating the feebleminded. However, by the end of the First World War and the publication of her infamous volume The Almosts in 1920, MacMurchy’s interests became less dominated by the feebleminded. Her professional efforts turned to other areas of medical concern that she had always been interested in such as
pre-natal care, infant care and birth control. The Little Mother's Books began as the Canadian Mother's Book in 1920 and was revised in six editions by 1932. The books were widely distributed by the Federal Department of Health which later had MacMurchy write pamphlets about rickets and infantile paralysis. The Federal Department of Health had made MacMurchy the head of its Child Welfare Division in 1920 partly to recognize her expertise on all matters concerning the health of children. In 1934 MacMurchy published her Sterilization? Birth Control?: A Book for Family Welfare and Safety which advocated eugenic social planning to deal with criminality and feeblemindedness. She praised the forward-looking policies of Alberta which had passed a comprehensive sterilization law in the late 1920s. The Toronto Globe described MacMurchy as "one of Canada's best known and best informed advocates of social and racial betterment". 25 "Racial betterment" is the key to understanding MacMurchy's belief that only sterilization could stop the reproduction of bad germ plasm or feeble-minded individuals. The race had to be purified by drastic medical measures. She was also a major force in Canada for differential education and the segregation of the feebleminded. It is significant that in the case of Canada, the impetus for this strategy of differential education arose from medical doctors under the mandate of social reform and mental hygiene.

Angus McLaren has described MacMurchy as a strange mixture of "compassion and cold-heartedness". She wanted feeble-minded children to be utilized by society as good workers and become full members of the social fabric. However, McLaren emphasizes that MacMurchy also wanted to deprive the feebleminded of their freedom. She believed the feebleminded spread venereal disease, produced defective children, committed criminal acts and were a burden to society. Therefore training education was only appropriate for the higher levels of the feebleminded as broad programs of special education were "time, strength, and money wasted". 26 Indeed, MacMurchy was firmly convinced the hereditary nature of feeblemindedness
presented an imminent social danger for the spread of disease and criminality. The two strategies MacMurchy applied were first, containment through the public schools and mental institutions, and then secondary measures for permanent birth control through sterilization. In the 1910 Report of the Feeble-Minded in Ontario MacMurchy made it perfectly clear what the role of the Canadian school system should be, to remove feeble-minded children from the general population. She quoted from a 1910 Montreal speech by Dr. Lightner Witmer, a psychology professor at the University of Pennsylvania, who warned that only 6 percent of feeble-minded children in the United States are being "cared for", while "the rest grew up at home and married". The establishment of special classes in the Vancouver and Toronto school systems was a forward-looking reform. Miss Elizabeth Farrell, the Inspector of Special Classes for New York City, assisted one or two Toronto teachers to go to New York and train for special class work. MacMurchy then proposed a more comprehensive program to send Canadian teachers "who may wish to train for this work" to the United States. MacMurchy concludes: "There are not wanting indications that such teachers will soon be needed in Canada". In the 1910 report MacMurchy examines how the medical inspections of schools in Great Britain screened out mentally defective children and place them into the special class system. A 1910 census of the Toronto school system found 117 children worth scrutinizing for low levels of mental functioning. 27 MacMurchy was adamant that school children had to be sorted and the below-average students segregated. Her reasoning was made abundantly clear:

Evidence has appeared, in the course of enquiry, to show that the normal children in the class, in most instances, are not only hindered, but are harmed by the presence of one or two, or more children so backward and delicate in mind and body that they require from five to ten times the care, training and patience required by the average child. 28

Under the motivational guise of humanitarianism MacMurchy appealed to the parents of these "border-line" pupils to stop the needless persecution
of their children and place them in special classes.

In her 1913 report MacMurchy pleaded that society "Must Find the Feeble-Minded". She was emphatic that "education authorities must ascertain what children within their areas are mentally defective". Medical authorities should work with teachers to identify these children and promote their appropriate placement in a special class or institution for mental defectives, depending upon the degree of impairment. It was noted that Vancouver and Victoria had permanent special classes, a sign of progressive educational policies in British Columbia. In fact progress towards identifying and placing mentally defective children was noted by MacMurchy in most Canadian provinces except Quebec and parts of the Maritimes. However, elsewhere in the report, MacMurchy notes special classes are only a "Clearing-House" for these children as their institutionalization in semi-industrial colonies is the most desirable permanent solution. In fact MacMurchy was very much taken with the clearing-house concept of New York Charities Commissioner, Michael J. Drummond, who established a central location for the assessment of suspect children from public schools, the courts, church charities and juvenile jails. A supervising medical doctor, three psychologists and seven assistant neurologists conducted mass screening exams to identify the children as idiots, low grade imbeciles, medium imbeciles, high grade imbeciles or morons. Each type of defective child was capable of some type of productive work, except the idiot. The act of productive work in a controlled setting was the most valuable social usage of these children. MacMurchy notes in her October, 1913, report that a public lecture series with moving pictures was given at New York's Metropolitan Insurance building to showcase the work of the "Clearing-House" to an audience of approximately two thousand. Her 1914 report highlighted the provisions made by the Ontario legislature for the province-wide adoption of a special class system.

These educational initiatives were complemented by the growth
Figure 6:

Dr. Helen MacMurchy’s view of the industrial worth of the feeble-minded child. Notice that each stage on the ladder is a higher grade of intelligence and the individual’s value to society increases with the degree of their work complexity. The illustrations are decidedly cruel in that the idiot is pictured slumped over while the moron is concentrating on a work task. Human worth becomes dependent upon an individual’s mental ability.

of social work training at the University of Toronto. The graduates "will help the community in dealing with the care of mental defectives" and hopefully many would soon be stationed in the school system itself.

33 However, MacMurchy believed the education of high grade feeble-minded children should be conducted in farming colonies. Citing the examples of the Waverley Colony in Massachusetts and the Training School at Vineland, New Jersey, MacMurchy believed such children were better engaged in useful activities in a rural setting. "Children should not remain in auxiliary classes too long" as larger institutions were more cost-efficient in dealing with these individuals. As "each auxiliary class pupil costs at least three times as much as each pupil in an ordinary class" the financial factor must be considered. The "active service" that the special classes provided was to identify defectives, train them and either reintegrate them back into society as self-supporting individuals or relocate them in a care institution. It was the only "humane, sensible, financially sound, economical and patriotic" solution, MacMurchy proclaimed. 34

The 1915 report was equally as visionary in that MacMurchy proclaimed in one section title "A Big Plan (Was) Needed" for Ontario. A provincial plan was required "to train the higher grade mental defectives to be masons, bricklayers, carpenters, builders and labourers" through vocational work programs. 35 The care of the feebleminded had to be a socially productive project and not merely custodial care. Once again MacMurchy praised the industrial farm colonies of the United States and model institutions in England, such as Starcross in Exeter. 36 An advisory committee on the care of mentally defective children in Toronto recommended a comprehensive strategy employing classes for backward children in the public schools, a mental defective registry system, a psycho-educational clinic for in-depth examination of defective children and an industrial farm colony school on the outskirts of the city. The committee's report ends by noting that at least 1 to 2 per cent of
Toronto’s school children "will be found to be mentally defective". 37 Special classes were noted in the 1915 report to have been formed in Winnipeg, Vancouver and Victoria, while New Westminster, Calgary, as well as Halifax, were considering such measures. Also in Quebec several Roman Catholic hospitals were dedicated to the care of the feebleminded. 38 Such social engineering, to MacMurchy, was a matter of patriotic duty as she felt the population owed it to the dead of the First World War to build a "better Canada". Dealing with the feebleminded in 1915 would make a better Canada in 1950, declared MacMurchy in the report's conclusion.

In a 1915 article on "The Mentally Defective child" MacMurchy declared that the "best place to begin our work is the school". A handbook was to be prepared for teachers on identifying feeble-minded children and a summer course to train instructors for the special classes should be in place at the University of Toronto by the end of 1915. In her handbook for teachers of auxiliary classes, MacMurchy proclaimed that investigators who have traced the history of tramps, paupers, drunkards, criminals and ne’er-do-wells "have often found that in the elementary schools they were recognized as mentally-defective children". She continued, "Teachers who have followed the career of such pupils know this". 39 Doctors also had to be vigilant in looking for feeble-minded children. MacMurchy relates the case of a twelve-year-old girl born in 1902 with a mongoloid look about her eyes, who learned to walk, as well as talk, rather late, was only in grade one and lacked bowel control. The family’s general practitioner was "perfectly right in thinking that the little girl is mentally defective". 40 Once children were classified as defective, MacMurchy recommended a two-tier system of custodial care. In "the case of the self-respecting, self-supporting and fairly well-to-do parents of a mentally defective child", a private care institution would be a more appropriate placement for that child than a government facility. A private institution could be inspected by public authorities
or perhaps be connected to a government facility but its provisions for feeble-minded children would provide care "on a reasonable and even generous scale". The indigent would be warehoused in a government facility with care on a less generous scale. It was time, MacMurchy concluded, that Canada listened to the parental pleas of "good Canadian families" and allowed the formation of such parallel facilities.

As the 1920s wore on, the cold-hearted nature that McLaren (1990) noted about MacMurchy became more prominent. She was less involved in promoting the education of the feebleminded and began to ridicule them, as well as call for their sterilization. In The Almosts (1920) MacMurchy wrote one of the most condescending works on the feebleminded ever conceived. She searched the tracts of great literature and found an array of characters who were obviously feeble-minded. Shakespeare's fool in King Lear, Walter Scott's Davie Gellatley in Waverley, Victor Hugo's Quasimodo, George Eliot's lead character in Brother Jacob and Robert Louis Stevenson's Tommy Hadden in The Wrecker were all feeble-minded. Charles Dickens' novels were filled with feebleminded characters, some innocents and some criminals. In Little Dorrit the character of Maggy was obviously feeble-minded in a pitiful manner. "What a clumsy child you are", Little Dorrit said, as she helped to pick up the basket of potatoes Maggy had dropped in the street. Maggy's description as a scruffy, dishevelled creature was a superlative portrait of the uncared-for feeble-minded child. MacMurchy proclaimed that there "are few descriptions of a mental defective in literature more accurate in every respect than this one". In concluding these lessons from literature, MacMurchy urged schools to stop torturing such children with tasks they cannot do and instead isolate them from society for their own protection. Give these children "a happy and permanent home" with the government as their "Permanent Parent". However, by the late 1920s and early 1930 MacMurchy was clearly disillusioned by the lack of progress in Canada towards a solution to the feebleminded problem. In
Sterilization? Birth Control? (1934) she unleashed her most direct attack on the "growing burden" of the feebleminded in Canada. The "mental health of children in the public schools is a fair indication of the mental health of the general community". In Canada "at least 2 per cent of children attending public...schools are mentally defective". Further research, she argued, would probably reveal that figure to be larger. 44 MacMurchy then stated that the right to life is one thing, but the right to be a parent is not the same. Defective parents will have defective children and this must be halted for society's good. In true medical fashion, MacMurchy advised vasectomies for men and tubal ligations for women. Hormone injections for temporary sterility also might be of value but were too new to yet evaluate. The sterilization of feeble-minded children was, in MacMurchy's opinion, a matter of national urgency:

Canadians should be aware of some disturbing facts in the national outlook. Teachers in our Elementary schools are confronted at times with evidence of low moral tone among their pupils, and in not a few instances the original cause of the mischief is found to be a mentally defective pupil. 45

There was little doubt that MacMurchy's influence on educators and fellow medical practitioners was to suggest the adoption of an eugenic view of the children they encountered in the course of conducting their professional duties. McLaren (1990) quotes MacMurchy's own words that the purpose of the entire project was to "redeem the waste products of humanity". Public schools, doctors' offices and hospitals were to become the bureaucratic instruments of a broad mental hygiene initiative for the betterment of Canadian society. Ian Robert Dowbiggin (1997) highlights MacMurchy's "sincere interests" in human improvement but also notes her preference for "punitive state policies" such as sterilization. 46 McLaren was correct in his assessment of MacMurchy as being basically cold-hearted. Through her influence Canadian schools, certainly those in Ontario, became equally as rigid and officious towards their disabled students.
b. Dr. Charles Kirke Clarke and Dr. Clarence Hincks:

It is difficult to separate the medical careers of Charles Kirke Clarke and Clarence Hincks. Clarke was much older than Hincks but both were linked by their work in the mental health field. Clarence Hincks was an Ontario native, born on April 8th, 1885, in the town of St. Mary's. He attended the University of Toronto where he received his B.A. in 1905, and continued on to obtain his M.D. in 1907, after which he interned at the Toronto General Hospital from 1907 to 1908. Hincks operated a private practice from 1908 to 1918 in Toronto but his growing interest in the mental defects of school children began in 1912, when the Toronto School Board appointed him as a Medical Inspector, a post he held until 1917. 47 In 1914 Hincks was appointed as an associate physician to the newly-created Juvenile Psychopathic Clinic of the Toronto General Hospital. The clinic was placed under the authority of Mrs. D.A. Dunlap of the hospital's Social Services Department and was not under the medical direction of Psychiatric Services. The decision was made to separate the service from the medical functions of the hospital by the clinic's sponsoring psychiatrist, Dr. C.K. Clarke, because he "strongly opposed mixing normal and defective populations even for the purposes of testing". According to Theresa R. Richardson (1989) the formation of the clinic brought together the major figures of the evolving mental hygiene movement in Canada: MacMurchy, the education-child-development specialist; Clarke, the greatest Canadian authority on mental diseases and Hincks who believed the root of juvenile delinquency lay in genetic mental disorders. 48

C.K. Clarke had also been born in Ontario, on February 16th, 1857, in Elora. In 1878 at age 21 he graduated with a medical baccalaureate from the University of Toronto and received a full M.D. in 1879. From the beginning, Clarke's medical training was directed toward mental illness as he served as a clinical assistant at the Toronto Lunatic Asylum in 1874 and became a full physician at the asylum upon
graduation. In 1879 he was offered the position of Assistant Medical Superintendent at the Hamilton Asylum, but Clarke soon realized the rural establishment on the town's outskirts was not as progressive as the one he left in Toronto. Clarke wrote:

This experience is like a horrible dream. The staff were impossible and in many instances an immoral and uncontrollable rabble. My real desire was...to hang on until I should have sufficient funds to set up in private practice. 49

Clarke’s brother-in-law, Dr. Metcalf, took charge of the Kingston Asylum and brought Clarke to work there in 1882. Metcalf had a reputation as a humane reformer from his tenure at the Rockwood Asylum near Guelph. After Metcalf was fatally stabbed by a patient, Clarke was offered the superintendent’s position. Clarke soon abandoned the traditional methods of restraints and seclusion, opting for a program of occupational work therapy, outdoor exercise, as well as drug sedation for violence. Local Kingston merchants opposed the asylum’s workshop programs and Clarke was forced to use such concepts as music and drama therapy. 50 Clarke replaced the old system of male attendants with female nurses and male orderlies. While at the Kingston Asylum he also became Professor of Mental Diseases at Queen’s University. In 1905 he was appointed Superintendent of the Toronto Asylum while retaining his Kingston position. In 1907 Clarke toured several European hospitals and was selected editor of the American Journal of Insanity. With such fame it was little wonder that in 1908 Clarke was appointed Dean of the Faculty of Medicine and full-time Professor of Psychiatry at the University of Toronto. 51 Clarke continued his directorship of the Toronto Asylum until 1911 when he was appointed Superintendent of the Toronto General Hospital. It was during this time that Clarke lobbied the Ontario government for a psychiatric institute at the hospital, but was not successful. It was Helen MacMurchy who suggested a Juvenile Clinic to Clarke which could take referrals from the court and school systems. The new clinic under Clarke as Medical Director and Hincks as Assistant
The initial work of the clinic in 1914 confirmed what Clarke and Hincks had suspected concerning juvenile offenders. The referrals contained "many delinquents of the moron class - children who are not only out of place in industrial schools for normals, but a menace where the population is of the mixed variety as far as mentality is concerned". It was clear that the preferred option for such children was mental examination and removal followed by complete segregation. Clarke reports that in 1914 the Juvenile Courts and Toronto Board of Education "sought our advice" on many difficult cases. Clarke adopted MacMurchy's favourite phrase to describe the clinic, as a "Clearing-House" for all cases of childhood mental disease "found in the City of Toronto". In 1915 the clinic saw 473 new cases, conducted 804 home investigations and had examined 692 public school classes. In 1916 Clarke notes that 643 new case files were opened bringing a total of 885 cases under active observation. The success of the clinic, according to the statistics Clarke presented, caused Hincks to write "Toronto is roused at last!". Thereby Hincks was suggesting the public had at last become aware of the menace of the feebleminded. The Board of Education considered the situation "intolerable". Of the total 1,455 cases seen in the clinic until the end of 1916, "a large proportion were feebleminded". Everything from habitual thieves, prostitutes, murderers, pyromaniacs, incorrigible behaviour problems and blatantly immoral children were seen at the clinic. Clarke notes that about 54 per cent of these defectives "were of foreign birth", that is, not of Canadian or British parentage. In 1917 over 1,549 cases were examined of which 489 were judged to be severe mental defectives. To Clarke there was an "intimate connection between feeblemindedness and delinquency". In 1918 the case load rose to 1,660 and by the time Clarke prepared his article on the clinic in 1919 he estimated the total patients being dealt with at 5,388 cases. Petty theft was considered a criminal act which constituted the bulk of
juvenile referrals to the clinic. Most of these petty thieves were not
of British or Canadian racial origin but foreign born.

Clarke and Hincks decided in 1918 to expand the role of their
activities to a Canada-wide program to alert school, legal, medical and
political authorities to the social menace of feeblemindedness. Hincks
first proposed the concept of a Canadian National Committee for Mental
Hygiene, or CNCMH, similar to one founded in the United States and
supported by the Rockefeller Foundation. On February 26th, 1918, in the
home of Mrs. D.A. Dunlap, plans were made for the committee after hearing
a speech by Clifford Beers. Beers was a mental patient who supposedly
cured himself and wrote a book about the experience, called A Mind That
Found Itself (1908). Clarke resigned in 1919 from the Toronto General
Hospital to be the full-time head of CNCMH after a grant was received
from the Rockefeller Foundation for $5 million to support its activities
in Canada. 56 The first test of the CNCMH came in October, 1919, when
the Guelph Public School Board asked Clarke and Hincks to conduct a
survey of their school system. After conducting an American-style school
survey, with an emphasis on mental measurement much like Bobbitt and
Terman advocated, they found 3.34 per cent of the total school population
or about 2,245 pupils had IQs of 75 or less. They advised the
segregation of these students in industrial classes. A few very low
subnormal children would require complete institutionalization. It was
stressed the survey "unearthed many important generalities" but the best
treatment for individuals remained difficult. However, whatever measures
were taken in regard to these subnormal pupils "their presence in the
school room should not be permitted". 57 Those pupils with an IQ of 74
or below should be sent to a special class with a teacher trained to deal
with such low pupils. Clarke and Hincks emphasized that the CNCMH would
be pleased to work with the Guelph School Board to hire suitable teachers
and set up special classes as necessary. Such changes would "place
Guelph on the list of advanced school cities". 58 The agenda was set for
the CNCMH as a national agency to sort school children by mentally grading them.

In 1919 the CNCMH came to British Columbia. Clarke and Hincks examined the Vancouver school district as it was the province's largest urban center, along with those of the provincial capital of Victoria and New Westminster, the neighbouring city to Vancouver. Hincks had already conducted a survey in 1918 of the Provincial Asylum at New Westminster or the Public Hospital for the Insane (PHI). He found 72 per cent of the inmates were foreign born, feeble-minded individuals and posed a serious eugenic threat to the general population. The prior creation of special classes in Vancouver, Victoria and New Westminster for low grade feeble-minded children was regarded as highly progressive. Vancouver was cited by Clarke and Hincks as one of the earliest school districts in the country to have special classes, beginning in 1910, and the work of mental hygiene has "...been more highly developed in that city than in any other Canadian center". When the CNCMH studied the schools of Vancouver there were fourteen special classes at the elementary level under the direction of a supervisor, Miss Josephine Dauphinee, the first special class teacher. The hiring in 1918 of a Vineland-trained psychologist, Miss Martha Lindley, to conduct a psychometric testing clinic within the Vancouver system was a most encouraging sign to Clarke and Hincks. Miss Lindley wrote that in the near future, with help from the CNCMH, she hoped "to permanently segregate those who are a menace to society, and provide more specific training for those who will be able to live in the world". The travels of the CNCMH through the western provinces in the years immediately following World War One resulted in several major structural changes, according to McLaren (1990). School systems began to increasingly use intelligence tests as a means of classifying students; industrial training schools were built for delinquents; mental hospitals were expanded; care hospitals for retarded children were promoted; immigration was restricted to stop the influx of
The Public Hospital for the Insane (PHI) in New Westminster. The photographs were taken around the time the CNCMH toured British Columbia. Dr. Clarence Hincks had surveyed the institution in 1918 and concluded that 72 per cent of the inmates were of foreign birth and constituted a eugenic threat to the province's populace.

Source: Front Plate, Canadian Journal Of Mental Hygiene, Vol. 2 (April-October 1920), pp. v - vi
feeble-minded foreigners and sterilization of the unfit was proposed in some provinces.

Corporate support for the CNCMH grew to include the Bank of Montreal, Molson Brewery, Canadian Pacific Railway and the British Columbia Electric Company. Lady Eaton, F.L. Klinck (President of the University of British Columbia), Canada’s Governor General (The Duke of Devonshire), the Honourable Vincent Massey, Professor Peter Sandiford, Dr. Helen MacMurchy and Dr. Henry Esson Young (British Columbia’s Medical Health Officer and for a time, Minister of Education), were but a few of the prominent members of the CNCMH. The British Columbia group under Mary Ellen Smith, a provincial MLA and prominent Vancouver clubwoman, was the most active outside of Ontario. By the late 1920s Clarke was dead and Hincks eventually relocated to the United States, where he headed the International Committee for Mental Hygiene and in 1931 was named general director of the American National Committee for Mental Hygiene. However, their influence on Canadian education and mental health practices was not diminished as the social crusade for mental hygiene they launched continued well after the Second World War, even as eugenics fell into disrepute.

Hincks was always the acknowledged ideological force behind the eugenic policies of the CNCMH. McLaren (1990) called him the "moving force of the committee". Hincks expressed his views on deficient children in a 1917 speech before the Ontario Academy of Medicine in Toronto when he declared "that the majority of cases should be placed in farm colonies". Hincks wanted the total segregation of mentally deficient children as the method then used, the Binet-Simon tests to detect idiots, imbeciles and morons, overlooked the immoral, an equally dangerous group of social defectives. Only "specially trained examiners" can find "those wherein the deficiency is largely in the emotional realm." Hincks wanted to collect and isolate not just the feebleminded, as defined by intelligence testing, but individuals having
weak or deficient morals. Hincks wrote in 1919 that mental hygiene "aims to correct many of these mistakes of the past". Canadians who are "well born" and "equipped with brains" have not been valued by society in the past but this will change. 65 In the future mental hygienists will direct the nation to consider its brighter members as a national resource. Thus "these children" will be assisted by society in the course of "conserving and developing a precious asset". 66 Schools which have attempted to teach abnormal children in regular classrooms only demonstrate "that efficiency is sacrificed by such a system". These abnormal students are a "disturbing element" which uses the teacher's time "at the expense of other pupils". Feeble-minded children were easily led into "bad habits". Hincks relates: "In one school the writer discovered that in a group of fifty children, sexual immorality of various forms was being practised". The "ringleaders" of these "evil practices were a feeble-minded boy and a defective girl". 67 Hincks clearly displayed the medical concept of contagion in his writings about feeble-minded children. Contagion or disease will infect the healthy hosts that surround it; the only solution is to isolate the diseased organism. Hincks seems to have internalized Goddard's concept of the feebleminded as sexual perverts. However, beyond sex there was the spread of crime, delinquency, venereal diseases and the creation of illegitimate offspring by the feebleminded. Hincks believed in the containment of abnormal individuals as a hygienic measure for society. As late as 1946 Hincks was quite unrepentant when he wrote an article entitled, "Sterilize the Unfit", for MacLean's magazine. 68 Hincks' commitment to eugenics was unwavering despite all the revelations about the Nazi death camps and the holocaust.

Clarke was equally as eugenically pessimistic as Hincks. In 1920 he wrote about the firm link between mental defects and juvenile delinquency as an almost genetic certainty. Toronto had a public school population of 85,000, of which only approximately 250 were believed to
be feeble-minded by school officials. The survey by the CNCMH of Toronto's public schools showed the rate to be at least 3 per cent of the total pupil population. Among girls involved in prostitution, Clarke found that over 90 per cent of those examined in his clinical work on venereal disease "were distinctly feeble-minded or insane". Clarke's many referrals from the juvenile court system had shown that most delinquents were "dull normal" or "high grade defectives" who easily spread their habits of vice to healthy children. Thus, to Clarke, "a wise public school board, no matter where situated, will go to no end of trouble to keep its normal children free from sources of contamination that are easily detected". Such abnormal delinquents are best placed in special classes and difficult cases held in industrial training institutions or detention facilities. To Clarke it was not "bad environment" that produced these children but the fact that the environment was "the outcome of the poor mentality of parents". The cause was genetic but the effect environmental, and "mental weaklings" were quick to succumb to the "evil influences" around them. In the early 1920s Clarke was very preoccupied with travelling in the course of his work for the CNCMH and left the task of dealing with subnormals in the Toronto school system to his son, Eric Kent Clarke. The young Clarke followed his father's footsteps, becoming a psychiatrist with the Public Health Department. In 1919-1920 he conducted a survey of 38 public schools within the Toronto system. Eric Clarke's work used racial origins and social class data to correlate with intelligence test scores. Of the 538 children found to be subnormal, 357 "came from poor districts", or an area called the "slums". Out of the 538 only 215 had an IQ range of 75-71, while 323 were under the 70 benchmark. Well-organized "gangs" of young criminals largely composed of mental defectives were operating in many schools. Eric Clarke urged the Toronto School Board to create industrial classes and remove these children from the regular class system. He also wanted a permanent central clinic
established for the mental examination of incorrigible children.

Eric Clarke assumed a leadership role, along with his father, in the Canadian Mental Hygiene movement. In a 1922 speech before the Canadian Public Health Association, Eric Clarke declared his dissatisfaction with the Toronto school board for creating only two auxiliary classes in a school population of 100,000, following the survey he and his father had conducted. He warned his audience that the slums of the city were filled with the feebleminded and their progeny. Of the 10 per cent of school children in the central district of the city found to be subnormal, 30 per cent were foreign born, 40 per cent Canadian born children of foreign parents and only 30 per cent were of purely Canadian parentage. From the 538 subnormal children, 163 families were found to have one or more subnormal member. Recent advances had led to scientific methods of classifying these children using the Binet-Simon tests but only trained psychiatrists such as Eric Clarke himself could find all those children with the "stigmata of degeneracy". At this point Eric Clarke departed from the subject of school children and talked of the plague, as well as other communicable diseases. However, the link is significant as the mentally subnormal were classified as diseased and contagious. Just as his father wanted "isolation" and "quarantine" measures, so did his son. The disease or contagion theory of mental degeneracy was upheld. In 1923 Eric Clarke spoke again about the lack of progress in Toronto's public school system to create a trade school for the older subnormals who couldn't be contained in the junior auxiliary classes. The entire problem "is essentially a medical one", he said. Clarke wanted the subnormal children "controlled" and contained in the school system "otherwise they will increase to such an extent that there is a danger of lowering the whole standard of the race". 74

The senior Clarke was to receive a great honour in 1923 as he was designated to deliver the Fourth Maudsley Lecture before the Medico-Psychological Association of Great Britain and Ireland in London during
May. Delivered in two parts, C.K. Clarke's speech was a polemic about the campaign for mental hygiene in Canada. In talking about the school system, he criticized the over use of intelligence tests by a "host of amateurs, especially teachers". Clarke stated "the enthusiasm for tests of all kinds has been gradually dulled". Psychology and proper child study are medical matters as lay people cannot understand that these school children are "suffering from mental disease". Isolate these children on industrial or farm schools, was C.K. Clarke's recommendation, much like the leper colonies of old. The schools should place their energies into practising positive eugenics by training the "well-developed children above the average in intelligence and physique". Removal and isolation of subnormal children was the medical consensus of MacMurchy, Hincks and Clarke, Sr. as well as his son. As with many diseases of the time that couldn't be cured, the only solution to such a spreading contagion is isolation. C.K. Clarke had reached the pinnacle of his medical career with the Maudsley Lecture and shortly thereafter he died. The *Toronto Daily Star* called him "an expert alienist" for his work on feeble-minded immigrants but also an "educational reformer". The strong eugenic beliefs of Clarke and the other medical doctors of the CNCMH can be attributed, according to Dowbiggin (1997), to their frustration with the world as it was and frustration in trying to have authorities share their vision. 76 Educators were one group who seemed attentive to the message of mental hygiene.

**iv. Psychometric testing in Canada: Professor Peter Sandiford:**

Peter Sandiford was Canada's most prominent advocate of psychometric testing. As a tenured Professor of Educational Psychology at the University of Toronto from 1919 to 1941, Sandiford brought the new science of intelligence testing to Canada's public school systems. He was born on January 15, 1882, at Little Hayfield in Derbyshire, England. His father, John E. Sandiford, was a professional engineer. The family was decidedly middle-class and the young Sandiford attended New Mills
Secondary School where he earned the distinction of being a Derbyshire Major Scholar from 1901 to 1904. Sandiford continued his education at the University of Manchester, England, where he earned a first class honours B.Sc. in 1905 and later, in 1907, a M.Sc. At the university Sandiford became active in student affairs and was president of the Manchester University's Student Union from 1907 to 1908. Sandiford's early training in science was concerned with biological studies and he would have been exposed to the genetic theories formulated by Gregor Mendel concerning the inheritance of traits in plants as well as animals. He also would have been exposed to the dubious translation of Mendel's theories to human beings by Francis Galton through eugenics. Sandiford's undergraduate education coincided with many scientific advances in education such as Charles Spearman's concept of a general human intelligence ("g" factor) and Cyril Burt's efforts to revise the Binet-Simon tests using London's school children. It is unclear from the historical record how Sandiford made the transition from science to education.

The facts of his biography record that from 1906 to 1908 he was an assistant lecturer at Manchester University and most of this time was spent in the Department of Education. This is also apparent from Sandiford's publications, beginning with his collaboration with F.W.D. Marshall on methods for "Instruction in Science" in J. J. Findlay's Fielden Demonstration School Record, No. I (Manchester, 1908). The work strongly suggests it was the pedagogy of science education which altered Sandiford's academic career and drew him into the study of education. In 1908 Sandiford also co-authored with Findlay a lecture on "The Scientific Study of Education" for the British Association Report (Dublin Conference). However, Sandiford's first research study in education concerned "The Half-time System in the Textile Trades" which was published in M.E. Sadler's Continuation Schools in England and Elsewhere (Manchester, 1907). Sadler identifies Sandiford as "a member of the
staff of our department" in the book's introduction. The two most likely sources of mental hygiene at the University of Manchester while Sandiford attended were R.T. Williamson and C.P. Lapage. Lapage was a physician and expert on mental/physical disabilities in children. At the time Sandiford was at Manchester, Lapage had just published "Feeblemindedness in Children" (Medical Chronicle, 1905). Williamson was more of a central figure in the application of mental hygiene to school children as in 1904 he published School Hygiene (Department of Education, Manchester) and he attended the First International Congress on School Hygiene in Nurnberg. In 1906 Williamson produced a major work entitled The Home Life of School Children in Relation to Education and Health (Manchester, University Press). Even Sandiford's supervisor, J.J. Findlay, published a tract on problems in child development in his Report on the Conference on School Hygiene (London, April, 1905). Sandiford's initial tenure in the Department of Education of Manchester University had provided him with a pedagogical basis for his future academic career and a firm conviction about the influence of biological factors in children's lives.

In 1908 Sandiford left England for New York to study at Columbia University's Teachers College where he took classes from Edward L. Thorndike. Sandiford's attraction to Thorndike's theories was only natural as both had a firm belief in the inheritance of intelligence and the genetic basis of human behaviour. At the time Sandiford arrived at the Teachers College to start his graduate studies, Thorndike had recently published his Measurement of Twins (1905) which was linked to his earlier work of 1903 on heredity and sex differences as predictors of school ability. It can be assumed that Sandiford was attracted to Thorndike because of his early work on Stimulus-Response or S-R theory in animals. The biological basis of learning and the genetic predetermination of native capacity by germ plasm were fundamental theoretical beliefs that Thorndike shared with Sandiford. In 1909
Sandiford took his M.A. and in 1910 earned a Ph.D. from the Teachers College. His M.A. in 1909 was entitled "Some Aspects of the Training of Teachers". The publication in 1910 of Sandiford's The Training of Teachers in England and Wales, the same year as he was awarded a doctoral degree from Columbia University, suggests this could have been the topic of his doctoral research. A search of the archives at Teachers College by the head archivist has confirmed that a Ph.D. dissertation by Sandiford was in fact never catalogued. It can only be concluded, in the opinion of the archivist, that Sandiford submitted his book manuscript and was given a doctorate. In 1918 he contributed to a volume on Comparative Education with four other authors. He wrote the two chapters on "England" and "Canada". The chapter on Canada profiled the use of modern psychology to differentiate education for academic/vocational students and to find backward or defective pupils in the school system. The chapter on England was drawn from his 1910 book which in turn was derived from his dissertation manuscript. The material for Canada was based upon the knowledge he had gained after coming to Canada in 1913, when he was appointed to the University of Toronto as an Associate Professor of Educational Psychology.

Between graduating from Columbia and arriving in Canada, Sandiford was senior lecturer in education at his alma mater, the University of Manchester, and superintendent of the Fielden Demonstration School which was attached to the campus. It was during this time from 1911 to 1913 that Sandiford wrote his first book on child psychology which applied the biological training of his earlier degrees and the hereditarian outlook on intelligence gained through his work with Thorndike. The Mental and Physical Life of School Children (1913) was dedicated to his former teacher, Edward L. Thorndike. In the preface Sandiford wrote that "all mental action has a physical basis". In the beginning of the book it is made quite clear that heredity "not only determines what traits a man shall possess, but also limits their
possible development". In a diagram of ray arrows emerging from a control point, Sandiford illustrates a genius (A) as one who goes beyond the limits of normal development, thus the ray line extends outside the dotted line that marks normal mental growth. The normal man (B) is one in which the ray lines reach the dotted line of normal development. The mental defective (C) is illustrated as a series of ray lines that never make the demarcations of the dotted normal line. The "limitations of nature" are always prevalent over the forces of the environment. Sandiford, considering the Mendelian law of genetics, Galton's studies of hereditary genius, Wiesmann's theory of germ-plasm and Thorndike's twin studies is forced to conclude that "present day schooling largely neglects the factor of nature (heredity)". Schools try to "develop all to an equal degree irrespective of endowment" and to Sandiford what is clearly needed is a "subtle analysis" of each child's individual capacity in order to reduce this wastage of effort.

Sandiford believed all school children could be divided into three main groups: the "bulk of children" or the mediocre normal, those of "exceptional superiority" or the supranormal and a subnormal group of "inferiority". These groups are not marked upon "sharp and rigid" lines but rather fade into each other at various ends of the intelligence spectrum. In England it was estimated 5 per cent of school children registered in the state school system were feeble-minded and Lapage's study of Manchester's working-class families found the average number of defective children in each of these households to be 6.14. Sandiford concluded that society was "recruiting" its racial "stocks from below rather than from above". Eugenic solutions were not volunteered but definitely implied by this statement. Educational solutions were fairly straightforward to Sandiford, a "booby" form of instruction was useless with feeble-minded children. Instead "they should be given tasks of an extremely practical nature" such as those associated with manual training. Sandiford did not abandon his interest in science education.
Peter Sandiford's ray diagrams to illustrate the levels of intelligence among: "A" - the mentally "well endowed"; "B" - the average individual; "C" - the mentally defective individual. The diagrams were a simple but effective means of introducing the reader to the concept of differing native mental abilities.

as he co-authored with A. Bartle a syllabus on "Natural Science" education for Findlay’s Fielden Demonstration School Record, No. II (Manchester, 1913). However, it was obvious even before Sandiford came to Canada that his eugenic views of society and his positivist opinion about the differentiation of children by hereditary intellectual capacity were firmly entrenched.

Three years after arriving at the University of Toronto Sandiford published a small article for a 1916 issue of the Public Health Journal, entitled "The Attitudes of the Educator Towards the Feebleminded". He wanted to alert educators to the "false democratic tradition in education" of common instruction. Nature's gifts to children are not in fact equal and a "vicious tradition" continues in public schools which gives "the same education to the Gentile on the farm as the Jew in the Ghetto". The "educational mill" developed a "lock-step" system based upon "dead-level standards". 93 Gradually educators came to realize that those stubborn pupils who couldn't learn were in fact feeble-minded and "clogged the educational machinery to the detriment of the education of their more fortunate companions". The rational solution was to segregate the dull and feebleminded into special classes so the teacher could concentrate on the worthier pupil, "the genius brand". The school teacher was caught between obeying the false mandate of public education to teach all students equally and being a good citizen by demanding segregation. Society, in segregating these dull children, had served to make the schools "in particular" and education "in general" more efficient. 94

Writing in 1918 Sandiford noted the Toronto General Hospital’s "Psychiatric Clinic" and its work within the Toronto public schools. Dr. Clarence Hincks had found that about 3 per cent or over 2,000 students out of the total school population of 70,000 were feeble-minded. Through such work "the terrible menace of feeble-mindedness in Canada has been realised". 95 It is clear from Sandiford’s comments that he admired the
mental hygiene program being carried out at the Clinic by Dr. Hincks and Dr. C. K. Clarke. In his *Comparative Education* (1918) Sandiford warned of the false hopes placed by American educators on a "uniform curriculum" to promote social equality. Only by creating a differentiated curriculum based upon a child's individual ability could the "injustice of preparing so many varied types of children in precisely the same way" be remedied. Thus larger school systems like Newton, Massachusetts, created an industrial school for those unable to cope with school between grades six and eight, a series of special classes for the backward, a technical high school for those inclined towards manual arts as well as commercial careers and a classical high school for the college-bound. Social differentiation was, to Sandiford, an absolute necessity in education as it suited the very laws of nature governing a child's mental and physical development.

After his appointment in 1919 to the University of Toronto as a full-time staff member in the Department of Education in the position of research psychologist, Sandiford expressed his eugenic ideas through the newly-established *Canadian Journal of Mental Hygiene*. Admiring the work of Drs. C.K. Clarke and Clarence Hincks on the CNCMH, Sandiford began to openly espouse the view that the education system itself had to be based upon the social fact of "mental variation". Citing the work of Spearman, Thorndike and Terman, Sandiford pointed to the natural distribution of intelligence in any group of school children as highly predictable. The bulk would be various ranges of normal, while the small upper-level group would be superior and the equally small lower-level dull to feeble-minded. To Sandiford there was "no doubt that the extension of knowledge of mental tests will lead to a more scientific grading of pupils in the future". The classes that Sandiford held for teachers and administrators at the university convinced him students were still being sorted on the basis of personal opinion and not on scientific measures of intellectual capacity. Those students found to
Figure 9:

Diagram showing the interrelation of various types of schools.

Peter Sandiford's organizational chart of how a child moves up the ladder in the modern system of differentiated education. Notice that between the fourth and fifth grades some students are moved into "special rooms" or a "vocation school" for "elementary industrial training". The high school system is equally divided between two institutions: the "classical" high school and the "technical" high school.

be feeble-minded were "sluggish" and had "poor memory powers"; no amount of remedial education could alter this fact. Such students had to be segregated and given a different curriculum, one more vocational in nature. For those pupils who cannot "make headway with the three R's", manual skills should be stressed "providing that it is possible to make them industrially useful". 99 Here Sandiford links educational psychology to social efficiency as the training given this type of student would be then utilized by the industrial economy. Boys could be taught boot making, carpentry, metal work and agricultural skills. Girls would be given domestic skills such as needlework, laundry work and cookery. Until this reclassification of pupils through mental testing could be achieved, the public school system was to be mired in frustration like Sisyphus, achieving nothing. By the early 1920s Sandiford's opinions had altered very little as he championed the views of his old mentor, Thorndike, that there was no such thing as general intelligence but rather particular abilities which could be accurately measured. These ability scores were the key to predicting an individual's chances of success in life. Spearman believed intelligence was general and could be upgraded by training. By contrast, Sandiford believed educators should follow "Thorndikes' view" which requires them "to give specific training to each mental power and capacity". 100 With the advent of Terman's revision of the Binet-Simon tests and measurement of IQ ratings among large populations of school children, the sorting of students by mental capacity become a fairly straight forward task.

In 1924 Sandiford embarked on his first and last great experiment in social sorting, the testing program for the 1925 Putman/Weir Survey of the School System. The Survey was conducted under the direction of George M. Weir, the education professor at the University of British Columbia, and J. Harold Putman, the senior inspector of schools in Ottawa, Ontario. Weir had approached the Liberal Premier, John Oliver, in 1924 to conduct a survey of the provincial
school system with a view to implementing long overdue reforms associated with the "new education" movement. Such innovations as junior high schools and a dual-track system composed of academic-vocational streams for senior high school were integral parts of this reform movement. Weir had been heavily influenced by graduate work at the University of Chicago under instructors like Bobbitt, and Putman was an early advocate of Hall's child-study approach to education. Jean Mann (1980) states the Survey evokes the progressive spirit of John Dewey but uses "the words of Franklin Bobbitt, David Sneddon, Edward L. Thorndike...to give weight and authority to their arguments". Mann states bluntly "it is essentially a conservative document" that wanted to keep the education system "abreast of social and industrial expansion". The rhetoric of the school as a factory for society producing useful pupil products was very evident in the Survey. Sandiford's testing program was the key to rationalizing education in the urban centers as here it was possible to sort students into educational tracks and provide a differentiated curriculum. The program of testing was conducted on 17,000 British Columbian students using American intelligence and achievement tests. The history and geography tests had to be created for Canadian circumstances but Sandiford was confident that on tests of such basic skills as mathematics or reading and native intelligence, Canadian children were directly comparable to American children. The high results tabulated were gratifying to Sandiford but as George Tomkins (1986) notes the province had "retardation and dropout rates much higher than those in American schools". The term "retardation" refers to overage students who remain at specific grade levels and indicates a high failure/retention rate creating system inefficiencies. Overall there were too many students being retained in current grade levels and a large number of dropouts at all levels. Retardation rates were particularly high in rural areas.

Sandiford's testing was called an "innovation" in the Survey
and support for the project by the province's school officials deserved the highest commendation, according to Putman/Weir. Standardized tests were utilized because of their scientific preparation, freedom of ambiguities and because only they could give a realistic picture of achievement levels in the province's schools. However, Sandiford's tests revealed a number of findings that supported the differential education of students, particularly at the senior high school level. Putman/Weir wanted to establish a new vocational high school in central Vancouver, adjacent to the traditional Eastside working-class district of the city. They stressed the need for a vocational high school to serve the needs of local commerce and industry for young workers. Sandiford's tests confirmed "Haggerty's finding" that parental occupations and their children's intellectual level were genetically linked. Professional parents produced intelligent progeny while labourers, farmers and semi-skilled workers did not create genetic issue with such high intellectual endowment. Sandiford's tests consistently demonstrated the link between parental occupation level and the intelligence of their children. To Sandiford it was "a matter of deep social significance". The data also nicely fit into the agenda of Putman/Weir to offer vocational education to working-class students, while preserving academic training for the children of professional parents. All students benefited from high school education but it was clear from the Survey that education had to be geared towards a student's natural ability.

What irritated Sandiford was the high birth rate of the lower classes and low reproduction of professionals. Sandiford writes: "What is of far greater importance is that the children of professional people are, on the whole, more intelligent than others and, eugenically, this is the group in which large families should be encouraged". Race was also prominent in Sandiford's testing program as social class divisions were linked to specific racial origins. Pupils of Scotch and English descent were superior to those of Irish and Scandinavian parents. The
Peter Sandiford’s testing data for the Putman/Weir Survey of the British Columbia school system in 1925. Using his cumulative data from high school, normal school and university students Sandiford grouped IQ scores according to the subjects’ parental occupation. This confirmed "Haggerty’s findings" that an individual’s native intelligence is linked to parental genetic material and social classes are the products of this natural inheritance. The high IQ’s of professionals is genetically reflected in their children’s test scores as is the low IQ scores of unskilled labourers and their offspring.

low results of the Scandinavian children was only to be expected as such groups as Norwegians had tested "slightly below average in the American Army Tests". A hurried testing of Oriental students of Chinese and Japanese descent produced troubling results. The assumed racial and intellectual inferiority of this group was not confirmed by testing. In fact "both are greatly superior to the average white population". Sandiford believed the sample of 500 Oriental students were racial hybrids because the most intelligent of their races had emigrated to places such as Canada and thus produced superior children. It was safe to assume, mused Sandiford, that "the dullards and less enterprising were left behind". The entire purpose of Sandiford's testing program was to mentally evaluate the students of the province's school system and justify their differential curricular treatment. Thus rural children as the most "retarded" of any group were a particular problem. Working-class children would naturally evolve into labourers like their parents and required a vocational form of education. The progressive reforms of the Putman/Weir Survey were justified as the supposed modernization of education in British Columbia but were in fact the conservative application of the principles of social efficiency. Sandiford's testing provided the scientific evidence for the logic of these conservative measures.

In August, 1925, Sandiford made a radio address on Toronto station CKCL about "Parental Responsibility". This speech signalled his growing interest in sex education and social hygiene. Parents had to shape their children into pro-social individuals through "habit formation". "All instincts can be sublimated", Sandiford proclaimed, sexual urges could be "redirected into higher and nobler channels". All boys want to be virile and all girls want to be attractive but only "right habits" can make children into healthy adults. This training was necessary to create "a noble race". Sandiford became preoccupied by the racial destiny of Canadian society and in 1927 he gave a lecture on
the "inheritance of talent" among the people of Canada. Recalling his findings on British Columbia's youth in the Putman/Weir Survey of 1925, Sandiford advised only admitting British immigrants as they would not dilute the collective intellectual pool of the nation. The "danger" to Canada's intellectual advantage came with "European emigration other than that from the British Isles". Immigration policy had to be based upon considerations of preserving the native mental capacity of the British racial stock. The message from the melting pot experience of the United States was clear, "the average intelligence of Americans has been seriously lowered by reckless immigration policy". All "white immigration" to Canada should be based upon the considerations of intellect, health and morality. "Coloured immigration" was a vexing problem and perhaps Canada's cold climate might discourage Asiatic immigrants. The "quality of inheritance" was an important factor in determining the future "of Canadians still unborn". Thus it seemed that eugenic considerations of race and mental capacity increasingly occupied Sandiford's attention by the late 1920s.

In 1928 Sandiford and his student, Elmer Jamieson, studied the mental capacity of southern Ontario "Indian" children. They found that First Nations children had low verbal ability on IQ tests and that their IQs varied from test to test. However, all the "IQs seem to rise with the admixture of white blood" as the test performance of "half-breeds" was superior to subjects of purer "Indian" blood. White children out performed First Nations children in reading writing and spelling. Even though the study cautioned that environmental factors were highly variable, it did not prevent Sandiford from drawing racial conclusions. It should be noted that the study proclaimed with pride on its opening page that "Jamieson is an Indian" who speaks fluent Mohawk. Sandiford also studied mental data on twins and orphans with A.H. Wingfield and reached the rather unremarkable conclusion that like-sex group twins show a high degree of intellectual resemblance.
publication of *Educational Psychology: An Objective Study* (1928) Sandiford made his position clear. He proclaimed: "Children are born with a biological heritage; they are born into a social heritage". Parents can surround their children with books, take them on interesting trips and converse with them intellectually, but despite this "good environment" the children may not improve intellectually, "probably because they cannot". Teachers, like parents, try to enrich the learning of children but often meet with failure. Sandiford concludes: "No social heritage, however good, can replace a sound biological inheritance". Teachers and schools can only make the best of the genetic potential each pupil brings to school. Education "cannot alter the level" or intellectual capacity of a child and can only extend "horizontal development at any level". Subnormal people "work at a lower level" and that fact is fixed by heredity. Education had to be geared towards maximizing pupils at their levels and should not try to raise children above their natural level. Vertical mental growth was impossible to Sandiford and thus a differentiated educational system that sorted children by intelligence testing was the best means of promoting horizontal intellectual growth. Standardized tests showed feeblemindedness to be high among school delinquents, from 15 to 30 per cent. Some racial groups do poorly on the tests, as Negroes, while others such as English-speaking Canadians do well. The children of professionals perform better on the tests than the offspring of labourers. Sandiford clearly articulated a vision of Canadian society emphasizing the social logic of differences in intellect, race and education.

No more blatant statement was offered on race and intelligence than the one made in the 1930s by H.A. Tanser, a graduate student of Sandiford. Tanser studied the black population of Kent County in southern Ontario which was descended from Negro slaves who had fled to Canada along the Underground Railway before the American Civil War.
Tanser, then Superintendent of Schools for Chatham, Ontario, published a book in 1939 which was a "condensation" of his thesis submitted for a Doctorate of Pedagogy at the University of Toronto. He traced the history of Negro settlement in Kent County and noted that their education was at first conducted in a separate school system. However, by 1852 the Elgin Settlement School of Buxton was altered from an all-Negro school to a common public school that accepted children of both races. The Chatham "coloured school" was not fully integrated until 1890. In many instances Tanser notes the education of Negro children "was almost on a par with white schools" with regard to such factors as attendance. 118 The fact that the school system in Kent County was fully integrated after 1890 should imply, at least Tanser reasoned, that different intelligence levels in testing could be ascribed to racial background. Using such measures as the National Intelligence Test, Tanser found:

...the Kent County Whites surpass the Negroes in every group and in nearly every case by a wide margin, that the Negroes both rural and urban are low in intelligence, that the urban Kent County Whites are slightly above and the rural ones slightly below normal intelligence, and that there is some evidence of positive correlation between intelligence as measured by this test and degree of white blood. 119

Drawing extensively in the book from Sandiford's work on native Indians in Ontario, orientals in British Columbia, and American research on the low intelligence of Negroes in both rural as well as urban settings, only one conclusion was possible. Whites were the most highly intelligent racial group in Canada "followed in order by Japanese, the Indians, the Chinese, and the Negroes". Negroes did surpass Indians on the Pintner-Cunningham Primary Mental Scale but this was due to the linguistic disadvantages faced by First Nations people. 120 Tanser's reasoning was very illustrative in this instance as he always had to maintain the notion of a racial hierarchy which put black people on the very lowest level of genetic intelligence. There was no widespread denunciation in Canadian academic circles which suggests Tanser's work was accepted as
Table 3:

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of Cases</th>
<th>Median I.Q.</th>
<th>Diff.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total N. W.</td>
<td>Negroes</td>
<td>Whites</td>
</tr>
<tr>
<td>All Pupils Tested</td>
<td>489 103 386</td>
<td>89.71</td>
<td>103.88</td>
</tr>
<tr>
<td>Rural Pupils</td>
<td>107 60 47</td>
<td>90.06</td>
<td>96.29</td>
</tr>
<tr>
<td>Urban Pupils</td>
<td>382 43 339</td>
<td>89.08</td>
<td>104.68</td>
</tr>
<tr>
<td>Negro Full-Bloods</td>
<td>48</td>
<td>87.0</td>
<td>....</td>
</tr>
<tr>
<td>Mixed-Bloods</td>
<td>55</td>
<td>91.69</td>
<td>....</td>
</tr>
<tr>
<td>Three-quarter Bloods</td>
<td>27</td>
<td>89.0</td>
<td>....</td>
</tr>
<tr>
<td>Half-Bloods</td>
<td>17</td>
<td>95.13</td>
<td>....</td>
</tr>
<tr>
<td>Quarter-Bloods</td>
<td>11</td>
<td>95.75</td>
<td>....</td>
</tr>
<tr>
<td>Grade III</td>
<td>65 17 48</td>
<td>82.0</td>
<td>103.25</td>
</tr>
<tr>
<td>Grade IV</td>
<td>42 9 33</td>
<td>90.0</td>
<td>100.33</td>
</tr>
<tr>
<td>Grade V</td>
<td>93 21 72</td>
<td>91.0</td>
<td>102.62</td>
</tr>
<tr>
<td>Grade VI</td>
<td>107 16 91</td>
<td>90.0</td>
<td>105.34</td>
</tr>
<tr>
<td>Grade VII</td>
<td>100 26 74</td>
<td>90.0</td>
<td>104.11</td>
</tr>
<tr>
<td>Grade VIII</td>
<td>82 14 68</td>
<td>104.0</td>
<td>104.5</td>
</tr>
</tbody>
</table>

The blatant racism of H. A. Tanser in his study of "Negroes" in Kent County, Ontario. The data Tanser gathered was first used in his doctorate dissertation for Peter Sandiford. Notice that urban and rural whites always scored higher on IQ tests than blacks. Blacks of "mixed blood" scored higher than those of "pure blood". Tanser's thesis was that over a century of integrated education has not altered the natural intellectual differences of the two races.

scientific evidence of black peoples' genetic inferiority. The fact that since 1890 white and Negro children had attended the same schools in Kent County affirmed the futility of educators who believed intelligence was plastic and not genetically fixed within the racial hierarchy. Tanser could easily reach such an eugenic conclusion under the supervision of Sandiford.

In the 1930s Sandiford took his interest in testing into many practical directions. Using a grant from the Carnegie Foundation of New York he launched the Department of Educational Research at the University of Toronto. He committed the department to the task of developing the Dominion Tests which sought to include nationally-normed tests of Canadian history, as well as geography, among a battery of achievement tests. The third bulletin of the department was a study of the norming process itself by John A. Long and Sandiford, called "The Validation of Test Items" (1935). 121 A new graduate student joined Sandiford, Clifford B. Conway, who would later begin a long career in British Columbia as an official in the statistics division of the Department of Education. 122 Through his graduate students Sandiford spread the gospel of psychometrics to the regions of Canada. However, Sandiford also conveyed his views about race and testing through the summer courses he conducted at various institutions, such as the Universities of California, British Columbia and Manitoba. In fact a notation in The Canadian Who's Who for 1936-1937 states that Sandiford "substituted for Professor Terman, Stanford University, 1936". 123 Terman's dogmatic views concerning genetic intelligence were shared by Sandiford who remained committed to an archaic belief in a society based upon intellectual distinctions as generated through the education system. In 1938 Sandiford published an article in the journal The School on "Curriculum Revision in Canada". His recommendations were unchanged from the early years of the century as when devising "new programs" school officials should "recognize that individual differences exist among the
pupils of every grade and make universal instead of local provision for them". 124 In 1941 when Peter Sandiford died in Toronto, he was still Canada's leading educational psychologist. His views on race, genetics, intelligence and differential education did not perish with him but were carried on by the teachers and graduate students he had taught. Perhaps this is why the eugenic viewpoint achieved greater longevity in Canada's academic circles than in the United States where environmentalists attacked its genetic underpinnings well before the outbreak of World War Two.

v. Conclusion:

The medical doctors who have been profiled in this chapter began their work in the school system with very legitimate concerns for the health of children. Helen MacMurchy's medical career was dedicated equally to improving child rearing as it was the sterilization of feeble-minded children. Charles Kirke Clarke did have a background in psychiatry but his asylum work was noted for its reform of harsh confinement. Clarke's later emphasis on saving juvenile delinquents from prison was also quite laudable. Clarke, Clarence Hincks and Helen MacMurchy constantly advanced such basic health reforms as the pasteurization of milk because contaminated milk killed many infants as well as young children. Eugenic theory and specific mental hygiene measures were seen by these Canadian doctors as merely a continuance of such progressive medical reforms. This was because what today seems like very harsh practices, such as segregation in institutions and sterilization, were regarded by them as merely a matter of prudent health initiatives to care for the subnormal or halt the reproduction of inferior genetic material. To Canadian doctors mental hygiene was simply an extension of the biological principles of disease prevention into the realm of the nation's mental health.

Canadian educational psychology was also locked into a eugenic/biological orthodoxy which centered upon racial origins and pre-
determined genetic inferiority. Peter Sandiford's career as Canada's leading educational psychologist was dedicated to advancing a clearly defined scientific explanation for differences in intelligence due to race, genetic factors and social class status. The longevity of Sandiford's dominance and his prolific training of graduate students ensured Canada would adhere to such rigid theories as genetic intellectual inheritance long after environmentalism had effectively challenged such notions in the United States. The fact that Sandiford's students such as C.B. Conway and H.A. Tanser gained positions of power in Canada's educational bureaucracy assured the continuation of the eugenic viewpoint. Dowbiggin (1997) has also come to a similar conclusion in that Canadian psychiatrists such as C.K. Clarke acted to extend the influence of eugenics well after the Second World War through the training of young medical doctors in its principles. There can be little doubt that within the ranks of Canadian medical professionals and prominent educators, the eugenic view of social problems was regarded as scientifically valid during the early twentieth century.

Notes:

3. R. A. Lowe (1979), op. cit., p. 293
4. Ibid., p. 293
5. Ibid., pp. 304-306
7. Ibid., p. 78
9. Dr. Charles J.C.O. Hastings, "Medical Inspections of Public Schools"

11. Ibid., p. 140

12. Ibid., p. 145


14. Ibid., p. 69


16. Ibid., p. 69


18. Ibid., p. 134


20. Ibid., p. 150

21. Ibid., p. 155

22. Chester E. Kellogg, "Mental Tests and Their Uses", The Dalhousie Review, Vol. 2 (January 1923), No. 4, p. 500


28. Ibid., p. 48

29. Helen MacMurchy, The Feeble-Minded in Ontario: Eighth Report for the...
30. Ibid., pp. 10-12
31. Ibid., p. 16
32. Ibid., p. 20
34. Ibid., p. 28
36. Ibid., pp. 26-32
37. Ibid., pp. 36-40
38. Ibid., p. 45
43. Ibid., p. 178
45. Ibid., pp. 83-84
50. Ibid., p. 839
52. C.K. Clarke, "The Story of the Toronto General Hospital Psychiatric Clinic", Canadian Journal of Mental Hygiene, Vol. 1 (April 1919-January 1920), No. 1, April, pp. 31-32

53. Ibid., p. 32

54. Ibid., p. 33

55. Ibid., p. 34

56. Theresa R. Richardson (1989), op. cit., pp. 66-67; Cyril Greenland (1967), op. cit., p. 841; For a comprehensive history of mental hygiene the volume by Theresa R. Richardson (1989) should be consulted.


58. Ibid., p. 345

59. The Canadian National Committee for Mental Hygiene, "Mental Hygiene Survey of the Province of British Columbia", Canadian Journal of Mental Hygiene, Vol. 2 (April 1920-October 1920), No. 1, April, p. 19; Angus McLaren (1990), op. cit., p. 93

60. Ibid., p. 21

61. Angus McLaren (1990), op. cit., pp. 110-111


63. Angus McLaren (1990), op. cit., p. 110


65. Clarence Hincks, "The Scope and Aims of the Mental Hygiene Movement in Canada", Canadian Journal of Mental Hygiene, Vol. 1 (April 1919-January 1920), No. 1, April, p. 20

66. Ibid., p. 22

67. Ibid., p. 26

68. Angus McLaren (1990), op. cit., pp. 158-159

69. Clarence Hincks, "Juvenile Delinquency and Mental Defect", Canadian Journal of Mental Hygiene, Vol. 2 (April 1920-October 1920), No. 3, October, pp. 228-229

70. Ibid., p. 231

71. Ibid., p. 232


74. Eric Kent Clarke, "Mental Hygiene in Toronto Public Schools", The


78. Ibid.

79. The Department of Education in the University of Manchester, 1890-1911, Educational Series No. 4, (Manchester: The University of Manchester Press, 1911), "Educational Publications", "Sandiford, P.", pp. 78-79


81. The Department of Education in the University of Manchester, 1890-1911, op. cit., "Educational Publications"; C.P. Lapage, p. 76; R.T. Williamson, pp. 79-80

82. Ibid., J.J. Findlay, pp. 74-75


87. Ibid., p. 3

88. Ibid., pp. 2-3

89. Ibid., p. 25

90. Ibid., pp. 296-297

91. Ibid., pp. 298-299. See Charles Paget Lapage, Feeblemindedness in Children of School Age, (Victoria-Manchester University Publications,
Medical Series No. 13, 1911). On page 299 Sandiford identifies Lapage's study as being concerned with feeble-minded families in Manchester, England.

92. Ibid., pp. 311-312


94. Ibid., p. 497

95. Peter Sandiford (ed.), et al. (1918), op. cit., p. 431

96. Charles Kirke Clarke, "The Story of the Toronto General Hospital Psychiatric Clinic", Canadian Journal of Mental Hygiene, Vol. 1 (April, 1919-January, 1920), No. 1, April, pp. 30-31

97. Peter Sandiford (ed.), et al. (1918), op. cit., pp. 78-79

98. Peter Sandiford, "Subnormal Intelligence as an Educational Problem", Canadian Journal of Mental Hygiene, Vol. 1 (April 1919-January 1920), No. 1, April, p. 67

99. Ibid., p. 68


106. Ibid., p. 458

107. Ibid., p. 461

108. Ibid., p. 508 See also Peter Sandiford and Ruby Kerr, "Intelligence of Chinese and Japanese Children", The Journal of Educational Psychology, Vol. 17, September, 1926, pp. 361-367


110. Peter Sandiford, "The Inheritance of Talent Among Canadians"
111. Ibid., pp. 18-19


113. Ibid., See footnote No. 1, bottom of p. 313

114. A.H. Wingfield and Peter Sandiford, "Twins and Orphans", The Journal of Educational Psychology, Vol. 19 (September 1928), No. 6, pp. 410-423


116. Ibid., p. 150

117. Ibid., pp. 164-165


119. Ibid., pp. 113-114

120. Ibid., pp. 136-137

121. George S. Tomkins (1986), op. cit., p. 242


125. Ian Robert Dowbiggin (1997), op. cit., p. 189
PART II:
The Impact of Eugenics and Mental Hygiene Upon the Vancouver School System as Seen Through the Medical Doctors, Teachers, Psychologists and Psychiatrists Who Managed the Pupil Population.

Introduction to Part II:
The second part of this dissertation will move away from medical and psychological theories about intellectual subnormality to how these ideas became educational practices within the Vancouver school system. Educational ideas that appeared highly efficient and workable in theory were often difficult to apply in the context of Vancouver's schools. Teachers and principals did adapt these visions of theoretical perfection when faced with the difficult problem of altering daily educational practices. From the creation of Vancouver's first special classes in 1910, the creation of a Psychological Clinic in 1918, then eventually a Bureau of Measurements in 1927 and finally a Division of Mental Hygiene in 1939, the Vancouver school system was fundamentally altered. In 1908 the School Board chairman, Charles E. Hope, acknowledged the high rate of failure in particular schools where many children came from families living in tenements. Schools had to provide these children with a different type of instruction and Hope wondered if "the urging on of the dull boy by the brighter ones, in order that the class results as a whole may be good" was a possible solution. However, the idealistic notions that Hope expressed about a helping hand to underachieving students were abandoned by the 1920s when hereditary differences, mental testing, efficiency and vocational education became the goals of a reformed school system. The process began with the first medical inspection of Vancouver's schools in 1910. Subsequent reports for each year thereafter revealed the presence of children with irreversible mental defects who had to be segregated for their own good as well as that of the other children. Vancouver's schools had special class teachers, a psychologist, and a psychometrician/statistician by the
late 1920s busily sorting as well as educating children according to their perceived innate mental abilities. Vancouver had been transformed into a modern, efficient school system employing the latest methods in psychometric testing and psychology in order to educate its diverse pupil population. What was a broad mass of children with different abilities in 1908 became an efficiently-sorted pupil population by the 1920s. This was regarded by educators of the day as the inevitable success of progressive educational measures.

Before the Second World War a psychiatric or Mental Hygiene Bureau was created, in keeping with the prevailing notions of mental health, which continued throughout the 1950s and 1960s as an extension of the regional medical authority. The principles of mental testing and ability streaming which began during, as well as after World War One, survived until the 1960s when the overt practices of this form of mental hygiene were finally discarded. Eugenics and its notions of segregating subnormal children was first operationalized within the Vancouver school system after 1910 with the founding of the special classes. It gained strength in the 1920s through educational efficiency measures and survived through the 1950s as a normative educational practice before its demise in the late 1960s with the beginnings of the integration movement.

This second part of the dissertation will focus on the individual professionals in the guise of special class teachers, medical doctors, psychologists, educational statisticians or psychometricians and mental hygienists (psychiatrists) who forever changed the Vancouver school system. The actions of these people were indirectly governed by such progressive intellectual forces as eugenics, social welfare, social efficiency and mental hygiene. These forces found expression in the educational training under which these people developed their expertise. Vancouver's public school system was highly conformist to the logic of these broader educational, medical and mental health movements then at work within the confines of North American social progressivism. In fact
Vancouver was the first Canadian school system to create a special class system in 1910 and the reasons behind that fact will be discussed in one of the chapters that form the latter part of this dissertation. The sometimes perverse aspects of these educational provisions for school children which survived until the contemporary era constitute the subject matter in the second part of this study.

Notes:
1. The Vancouver Board of School Trustees Annual Report for 1908, p. 12
CHAPTER FOUR

Evaluating the Physical and Mental Condition of the Race: The Medical Influence of Dr. F. W. Brydone-Jack and Miss Elizabeth Breeze, R.N., upon the Vancouver School System.

i. Introduction:

Around the end of the nineteenth century and early twentieth century Canadian schools became dominated by a new force, medical professionals in the form of in-house physicians and nurses. As we approach the end of the twentieth century little direct evidence remains in the public schools of this "public health movement". The only overt signs of medical provisions are the ubiquitous medical or school sick rooms and the occasional visit by a team of nurses giving vaccinations. Medical authority has been passed to classroom teachers through various curricular programs dealing with such health issues as sexually transmitted diseases. However, at the beginning of this century the doctors and nurses who were brought into the public schools of Canada to reduce alarming rates of child mortality represented more than mere agents of disease control. The medical professionals represented a new type of paradigm derived from biological science for examining and classifying children as either healthy or diseased. The first phase of the medical influence upon Canadian public schools was for the purpose of infection control. Such contagious diseases as tuberculosis, whooping cough, diphtheria, smallpox, measles, ringworm and the emerging scourge of polio were a few of the conditions that could now be medically managed by isolating pupils at home or in the hospital. School clinics with medical equipment were included in most large, urban Canadian schools to provide a venue for the doctor and nurse when they conducted medical inspections. Neil Sutherland (1977) describes this first phase from the 1880s to the early 1900s as being dominated by two considerations, disease control by isolation or treatment such as vaccination and sanitary measures. 1 Better water supplies and washrooms with flush toilets created a new sense about the value of personal hygiene since all
teachers knew that disease was caused by germs. The biological disease process of contagion was widely acknowledged by the early twentieth century as a fact of nature which could be controlled through medical measures. After the appearance of medical doctors and nurses in public schools the biological certainty of disease and its conquest by science assumed new importance for Canadian educators. Disease control and prevention became the main goals of the public health movement when faced with the widespread condition of contagion in the classroom.

The creation of laboratory testing for diseases, better sanitation, improved personal hygiene measures and vaccines helped diseases like diphtheria to decrease rapidly. Sutherland notes that in Saskatchewan free antitoxin caused the number of cases to drop from 1005 in 1917 to 776 in 1918 and to only 278 in 1919. It was the medical success of diphtheria control that convinced educators medical science could rectify the destructive forces of nature. The second phase of medical influence upon Canada's public schools was a shift in focus, according to Sutherland, around the years preceding World War One "from [school] premises to pupils". Children began to be checked for the "normal" diseases of childhood such as tonsillitis, measles, mumps, chicken pox and whooping cough. Previously regarded nuisance diseases like ringworm and assorted skin diseases were now being treated. Pupils had their fingernails inspected for dirt, their sleeves were pulled up by teachers looking for dirt rings (a sign of not bathing), and scalps were checked for head lice. The forces of medical science became more individualized, or focused upon individual students, as a lack of attendance to hygiene by a child could represent a neglectful family or a wayward child. School nurses became more prominent in school medical inspections and their work was supported by social workers during the 1920s. Dental hygiene began to be seen as a medical function of Canadian public school systems in that bad teeth were thought to lead to more devastating diseases. Fresh air classes were created with courtyard
classrooms for students with respiratory problems such as asthma and tuberculosis.

The scientific wisdom of the medical professionals employed by Canada's public schools altered the thinking of teachers and administrators about the children they taught. When the germ plasm theory of cytologist August Weismann emerged in 1893 it was medical doctors who carried this new biological view of the child as a genetic entity into the Canadian school system. It became a biological fact that the mental fitness of an individual was set before birth and later reproduction by such people would create inferior progeny. The previous advances made by medicine in controlling childhood diseases paved the way for acceptance of this new biological fact of nature. Some children were simply born mentally inferior and they had to be controlled by segregation or sterilization to prevent the spread of their bad germ plasm. This new focus resulted in what Sutherland described as "more specialized public health measures" with medical professionals "trying to come to grips with what they described as 'feeble-mindedness'". The Vancouver school system represents an example of this change in medical thinking from a general concern for childhood diseases to a specific focus on the physical as well as mental health of individual pupils.

ii. The Arrival of Medical Inspections in the Vancouver School System:

Medical inspections of school children began in Vancouver at the same time as many other larger urban centers around the world. In New York school inspections were started on a casual basis in 1897 and routine examinations for contagious diseases commenced in 1908 when the New York Board of Health created the Division of Child Hygiene. In Europe German doctors took a forceful approach in advocating schools as instruments of child hygiene policy. Dr. Herman Cohn's survey of Breslau school children in 1866 showed an abundance of short-sighted youngsters. In 1867 Dresden appointed three school doctors and in 1892 Leipzig engaged fifteen doctors for medical work. In Great Britain London got
its first school doctor in 1891, while Edinburgh hired two physicians in 1892. In 1906 London had a medical team headed by a single senior medical doctor with twenty-four physicians under his direction. Compulsory medical inspections began in England in 1908 with the passage of an act giving municipal health inspectors or medical officers mandatory access to the public school system. In 1915 London alone treated 125,486 children for medical defects, while 180 school clinics existed in the nation as a whole. At the same time that medical inspections began in England, a Royal Commission on the Care and Control of the Feebleminded was also suggesting that mental defects should be treated as a medical problem. Francis Galton believed the work of the Commission made a strong case for the "forcible segregation of the feeble-minded". 7

In Canada a pioneering doctor associated with the public health movement, Peter H. Bryce M.D., advised the "removal of defects" when detected in children of school age "whether physical or mental, in order not only to prevent retardation but also to promote normal development". To Bryce, "the importance of fully equipped scientific departments of health in each municipality is becoming increasingly obvious". In the case of Vancouver, it was obvious as early as 1902 when Dr. Glen Campbell held training sessions for Vancouver teachers about various simple methods to detect pupils with poor vision. The report of the Inspector for Vancouver schools, W.P. Argue, describes a "card system" for vision testing in which parents would be advised if their children displayed any signs of defective eyesight. Argue relays that: "Full instructions are given to the teachers to enable them to conduct the examinations". In the 1904/1905 school year over 3,386 pupils were examined for defective eyesight with 576 found to have vision difficulties and 135 of these were referred to a physician. Poor vision was often seen as the cause of children's failure to be promoted to the next grade and other explanations of physical defects were assumed
to be the base cause of student problems. In this early phase of school inspections the medical profession gave direct physical reasons for a child's poor school performance as opposed to more theoretical mental or genetic rationales.

The first medical doctor appointed on a permanent basis to inspect the Vancouver schools was a female practitioner, Dr. Georgina L. Urquhart. Early in 1907 the School Board "resolved to appoint a medical officer for the schools" and had Dr. Urquhart on duty "full time during school hours" for the purpose of the "regular and systematic examination of all school children" in a sickly state. 12 The enrolment in April, 1907, of the Vancouver school system was 6,628 pupils and by April, 1908, about 980 had been added for a total of 7,608. As of June, 1908, the only medical personnel listed by the School Board was the "School Medical Health Officer" as no nurse had yet been hired. In her first year Dr. Urquhart "sent home from school" a "comparatively large number" of pupils. The main task of the school doctor was to "guard the schools from all forms of contagious and infectious diseases" as well as to "secure cleanliness of body and clothing" among the pupil population. Parents had to be notified of "weaknesses or defects" that required further medical or dental attention. The entire work of the school doctor was "under the direction of the city Medical Health Officer". 13 In her report to the School Board for 1907 Dr. Urquhart stated that she had found 312 children suffering from "abnormal conditions" of the nose and throat who required treatment. Most contagious disease found in children was dealt with by prompt isolation measures. The majority of parents were cooperative and Dr. Urquhart was happy to report she had been able "to render the schools entirely free from sources of contagion". Over 128 cases of deficient sight were found which seemed to justify the need for yearly mass screenings of pupils' vision. Dr. Urquhart brought a disease model to the schools of Vancouver but it was solely concerned with physical ailments and their immediate treatment.
14 The provincial government had not yet mandated or funded medical inspections in the public school system. The School Board had taken an overt reformist initiative by hiring a school doctor. However, the provincial education minister as of November, 1907, was Henry Esson Young, M.D. L.L.D. who as a scientific medical practitioner would have regarded the medical provisions for inspection of Vancouver's schools as a socially progressive initiative. Dr. Urquhart's report for the school year ending 1908 reveals that she had inspected all schools at least twice during the year. Over 500 free vaccinations were given by Dr. Urquhart and she was pleased to note an improvement in the incidence of skin diseases as well as cases of pediculosis or lice infestations among the school children. She recommended medical reinspection of children wishing to return to school after being confined to their homes as contagious. "There is a lack of responsibility on the part of parents", Dr. Urquhart wrote, "who send their children suffering from milder infectious diseases to school before the period of contagion is over".  

15 However, her main concern was the treatment of physical ailments which could readily respond to clinical measures.

The fall of 1908 would be the last reporting period for Dr. Urquhart. It is not clear who actually replaced her. The medical report to the School Board for the year ending 1908 was written by E. Lazelle Anderson who was not identified as a medical doctor. His concerns were with the rising number of "poverty cases" in which parents could not afford the required medical treatment. The help of the City Hospital in providing a number of "free beds" should ease the burden on the school doctor, Anderson predicted. Simple measures by teachers to prevent childhood illness would help such as visual inspections for pediculosis and teaching children "the value of properly masticating (chewing) their food" for better digestion. However, for the first time "high standards of physical" health are linked to "mental development" by Anderson. A plea is made to give greater attention to "the weak and poorly
developed". The medical model has begun to be altered from mere diagnosis, treatment and cure of disease to the development of physically as well as mentally-fit youngsters. 16 Dr. F.W. Brydone-Jack was made the Vancouver school system's new Medical Health Officer at the School Board meeting on December 21, 1909. On January 31, 1910 a nurse, Elizabeth G. Breeze R.N., was hired to assist the doctor in his work. Dr. F.W. Brydone-Jack was the son of Dr. W.D. Brydone-Jack, a prominent Vancouver physician and school trustee. Elizabeth Breeze, the first school nurse, appears to have been related to another school trustee, J.D. Breeze, but no definite evidence of this could be located. 17

However, aside from the family as well as political connections of the new school doctor and nurse, a more fundamental change had come about in the form of provincial legislation mandating school health inspections. Chapter 45, Statutes of the Province of British Columbia, "An Act to Provide for the Medical Inspection of Schools", was proclaimed as law on February 25, 1910. The Act gave the school doctor the power to "remove from the school any child or children, teacher or janitor whose health is so reported by the School Health Inspector as being dangerous to children in such school". If the doctor found any "physical disability or defect liable to prevent his [the student's] receiving the full benefit of his school work" the recommendations could be made for the "modification of the school work in order to secure the best educational results". Records were to be kept "on each child" according to the "form as the Provincial Board of Health shall prescribe". 18 The Medical Health Officer or school doctor was given broad powers to segregate children when they were judged to be contagious and could affect the health of other students. The doctor could alter the delivery of education to that student "in order to secure the best educational results". The intention was to have children with infections sent home or to the hospital and away from schools where they could spread disease. If the child had a long-term condition such as
tuberculosis, or a physical defect as blindness or deafness, then the medical doctor could insist that special classes be provided for such students. The clear intent was to control contagious or infectious disease and isolation of the patient at home or in a hospital as necessary.

The problem arose when physical diseases began to be augmented by the recommended segregation of children for mental defects. Certainly the legislation empowered the Medical Health Officer to insist upon such measures. In 1911 the Act was revised but the key provision about the modification of a child's school work "in order to secure the best educational results" was retained in Section II. 19 The revised Act gave the Medical Health Officer more power to order direct changes in school facilities for purely medical reasons such as sanitation and hygiene improvement. The two Acts firmly established the medical profession in the public schools of the province and gave these health experts broad powers over school children to the point of even altering the delivery of education to selected pupils.

iii. Dr. F.W. Brydone-Jack and Miss Elizabeth G. Breeze: Mental Hygiene Comes to the Vancouver School System:

In the last school year that Dr. Georgina Urquhart served as Medical Health Officer, the School Inspector, W.P. Argue, noted that "regular and systematic medical inspection has been carried out for three years with excellent results". A "card system" for regular record keeping was introduced so that cumulative data could be kept on each pupil. At the time Dr. F.W. Brydone-Jack was appointed Medical Health Officer the Vancouver school system had 8,265 pupils, an increase of 657 over the total of 7,608 for 1908. 20 At the end of the 1909-1910 school year the inspector's report declared that: "In no department was more progress made than in that of medical inspection". Dr. F.W. Brydone-Jack "gives his whole time to the work" and he "is assisted by a competent nurse" Miss Elizabeth Breeze. Innovations made during the school year by the doctor were record keeping, first aid boxes in each school and
examination equipment purchased for each school. School Board chairman J.D. Breeze reported proudly that the work of medical inspection had "gone beyond the experimental stage" and the results were a source of "satisfaction". Trustee Breeze noted with great favour the suggestion to create a "special class for unfortunate children" who cannot "advance by ordinary class instruction". 21 It was very apparent that a new type of medical professional had taken charge of the Vancouver school system.

Dr. F.W. Brydone-Jack was descended from a dynasty of Canadian academics and medical professionals. He was one of four children born to Dr. W.D. Brydone-Jack and Miss Alice Hicklan who were married in Staffordshire, England, on April 2, 1884. Dr. W.D. Brydone-Jack had been trained as a medical doctor at McGill University (Montreal) and finished his studies at the University of Edinburgh in 1884. After his marriage Dr. W.D. Brydone-Jack practised medicine for six years in Cheshire, England, but in the autumn of 1889 he moved back to Canada, settling in Vancouver. From 1892 to 1910 Dr. W.D. Brydone-Jack was a staff doctor at the Vancouver General Hospital. In 1895 he ran for the position of school trustee and was selected Chairman of the Vancouver School Board periodically until he finally retired in 1913. Dr. F.W. Brydone-Jack followed the path of his father to McGill to take his medical degree and became Medical Inspector of the Vancouver public schools soon after he returned to Vancouver to practice medicine. Dr. W.D. Brydone-Jack was described as holding a "position of distinction and prominence" in Vancouver society. 22 However, he also came to Vancouver with a very prominent Canadian family pedigree. His father, Dr. William Brydone-Jack, son of a Scottish stone cutter, earned an M.A. from St. Andrew's University and was recommended for the Chair of Natural Philosophy in 1840 at King's College, New Brunswick in distant Canada. After the abolishment of King's College in 1860 and creation of the University of New Brunswick, Dr. William Brydone-Jack rose to prominence, eventually becoming university president. However, his main work was not connected
with the university but the reform of the province's grammar school system and the creation of the free school system in New Brunswick. It was very clear where Dr. W.D. and Dr. F.W. Brydone-Jack received their sense of duty in connection with public education.

When Dr. F.W. Brydone-Jack began his clinical examinations of Vancouver's pupils, his initial findings were of a standard medical nature, according to the summaries found in the Annual Reports of the Public Schools of British Columbia. The report he submitted for 1911/1912 detailed 56 cases of ringworm, 1,053 of pediculosis (vermin), 27 of impetigo and 138 pupils who were merely "unclean". Infectious diseases noted for that year were measles (60 cases), whooping cough (1 case), scarlet fever (3 cases), diphtheria (4 cases), chicken-pox (3 cases) and enlarged tonsils/adenoids (2,572 cases). Non-infectious diseases noted during this period were goitre (138 cases), anaemia (456 cases), ear-trouble (479 cases), eye-trouble (996 cases) and bad teeth (6,057 cases). Open air classes for delicate children and segregated classes in a sterilized setting for children suffering from tuberculosis were being considered by the Board. A clinic for children "who have been out of school" due to illness or infectious disease was held at the School Board offices. The personnel records in the report for that year show an "Assistant Medical Health Officer" had been hired along with a second nurse. It was also noted that two special classes had been created at Central School for children with "arrested mental development" who were a drain on the classroom teachers' valuable time. The Board "is prepared to extend this work" if the situation warrants such measures.

It had been only a little over two years since Dr. F.W. Brydone-Jack had been hired as Medical Health Officer for the Vancouver public school system. In that time the medical staff had doubled in size, accurate case records and statistics were being kept and the concept of segregating intellectually subnormal children was introduced into the school system under the guise of a medical procedure. In 1911 Dr. F.W.
Dr. F. W. Brydone-Jack and his nurse examine a class of boys during the 1911 school year. Notice the eye chart on the black board and Dr. Brydone-Jack conducting chest examinations for respiratory diseases such as tuberculosis.

Source: The Vancouver School Board Annual Reports for 1911, p. 51
Brydone-Jack's salary was given as $225 a year, making him the highest paid employee in the school system. Miss Breeze's salary as a nurse was given as $175 a year in 1910. Their remunerations represent the importance placed on their roles in the school system.

In marked contrast to the Provincial Reports, the records of the Vancouver School Board Annual Reports reveal a different side to this process as Dr. F.W. Brydone-Jack submitted his yearly synopses directly to the School Board. In his first report for 1910 Brydone-Jack notes it is not only "diseases" that he will be examining pupils for but also the many "defects which may affect a child during his school life". He notes that the powers given to the Medical Health Officer in the 1910 legislation emphasize the need to safeguard the health of all those involved in school work. The educational solution that Dr. Brydone-Jack saw as most appropriate for the protection of children's health was the segregation of unhealthy pupils into special classes. He reported that:

We are now opening up a class for pupils suffering from physical nervous affections of such a nature that progress in the ordinary class is impossible or very slow. A specially trained teacher will take charge of this class and each child will receive special instruction.

It was not clear what kind of pupil population Dr. Brydone-Jack was referring to but he suggested that these classes could later be subdivided into classes for the deaf, blind and "those suffering from affections of the nervous system". He even mused that before long it would be "necessary to open up a class for pupils affected with ringworm" as these pupils had to be absent from school for long periods. It was clear that Dr. F.W. Brydone-Jack preferred the segregation solution for a child with either a physical disease like ringworm or a mental/physical affliction such as nervousness. The statistics in his yearly synopsis for 1910 differ from those of the Provincial Report as 28 pupils are identified under the category "Mentally deficient". The 1911 Annual Report states specifically that children are biologically unequal in many
senses. The Report declares bluntly: "We must recognize that the mental qualities of children are not all the same any more than the physical qualities, that the same care should be exercised in adapting mental work to the capacity of the pupil as there is in adapting physical work to the strength of the individual". The Chairman of the School Board at this time was Dr. W.D. Brydone-Jack and this remark formed part of his Chairman's address of January 2, 1912. At one point in his address Dr. W.D. Brydone-Jack stated that the "Medical Department should be of great assistance to the earnest teacher who is desirous of understanding his or her pupils, and who may perhaps wonder why her efforts are so unproductive". 30 Dr. F.W. Brydone-Jack noted in his medical report that the two special classes for children with mental defects which had been established in 1910 were so successful that "many inquiries are constantly being made". It would soon be necessary to open a third class. 31 For the year 1911 Dr. F.W. Brydone-Jack found another 40 "Mentally Defective" pupils who would seem to supply the recruits needed for a third special class. For the first time Miss Elizabeth Breeze submitted her own yearly nursing synopsis entitled "School Nursing" and she identified herself as the "Head Nurse". 32 Miss McLellan is cited as the new junior nurse in the Medical Department of the Vancouver school system.

In the Annual Report for 1912 of the Vancouver schools, the Chairman, Dr. W.D. Brydone Jack, could point with pride to the "separate schools" for the feebleminded and physically incapacitated who are "unable to keep up with others of the same age". 33 Dr. F.W. Brydone-Jack noted that of the 68,380 examinations dealt with in his 1912 medical report 42 more cases of "Mental Defectives" were found. He stated that all 42 were attending school, while 22 of the total had already been placed in special classes. However, Dr. F.W. Brydone-Jack was sure that: "There are quite a number not attending school". None of the 42 were capable of looking after themselves and need to be trained to be "good
The Vancouver School System's medical staff at the end of 1912.

Source: The Vancouver School Board Annual Report for 1912, p. 30
citizens". Dr. Brydone-Jack suggested creating a kind of day school with facilities for a few permanent residents. The children could be trained in domestic science, manual training and agriculture. Milder cases of mental deficiency could be trained in an "ungraded class in each of the large schools". The only slightly feebleminded or backward could be deemed "capable of rejoining classes of normally advanced children...from time to time". In conclusion to his 1912 synopsis of the Medical Department Dr. Brydone-Jack stated: "The aim of the medical inspection is to elevate the physical and the mental condition of the race by carefully guarding children". 34 In the Public Schools Report for 1912/1913 the section on "Vancouver Schools" noted that two additional nurses had been appointed in January so that the Medical Department comprised the School Medical Health Officer, his assistant (Dr. A.W.Hunter) and four nurses. The school population was 12,393 pupils. The 42 cases of "Mental Defectives" are the first reported figures in the Provincial School Inspector's report which now ranks mental disabilities alongside various physical afflictions. 35

Angus McLaren has stated that medical inspections "were aimed more at the labelling and segregating of the handicapped than providing for their special needs". 36 The feebleminded were "discovered" only when school authorities finally enforced compulsory attendance laws and the educational as well as medical bureaucracy established "norms of intellectual achievement". 37 The eugenic belief that poverty and crime were the products of socially diseased, feeble-minded individuals scientifically mandated medical doctors to suggest the segregation of these dangerous people. When Dr. F.W. Brydone-Jack stated his overall mandate was to medically safeguard the "physical and the mental condition of the race", he alluded to the fact he was a person who held eugenic views. When his father and Chairman of the School Board, Dr. W.D. Brydone-Jack, stated in his January 2, 1912 address that the mental capacities of children differed just as their physical attributes also
naturally varied, he confirmed his belief in the unalterability of genetic predetermination. It was thus through this medical influence of both father and son that the Vancouver school system became oriented to the educational implications of such biological theories as Weismann's germ plasm. Thus the Brydone-Jack family of physicians brought a scientific modernity to Vancouver's public school system which included the eugenic segregation of subnormal children.

iv. Mental Hygiene in Vancouver's Schools at the Outbreak of World War One:

In 1913 Dr. F.W. Brydone-Jack reported to the Vancouver School Board that his course of medical examinations for the year had detected 25 children of "defective mentality" and an astonishing 48 in an "extremely backward" state. There was an "urgent need" to establish another "class for very backward pupils" as during the past year many "of these pupils were examined and all were in need of some special modification of the ordinary curriculum". The parents of these children "were visited" and a sufficient number "expressed their desire to place their children in a special class" in anticipation of which the Board had set a room aside at the new Dawson School in east Vancouver. A teacher would be hired and the class was expected to start in February, 1914. 38

The Public Schools Report for 1913-1914 noted that the Victoria School Board had engaged the services of Miss Bertha Winn who established a completely segregated school room for subnormal children near the Girls Central School. Miss Winn was a graduate of Columbia University in New York City and she had already started to spread the wisdom of segregating subnormal children through her addresses to such groups as the Victoria Teacher's Institute. Her school room had only 15 pupils to begin with of which the majority were so seriously handicapped "that there is practically no hope that their condition can be ameliorated". Parents of "merely backward children" refused to send their children to Miss Winn's school and it was hoped the provincial government would establish a training school for these low grade feeble-minded children. 39
several ways these two incidents reveal the fact that the parents of school-age children in the province's two largest urban centers began to internalize the scientific logic of classifying their children as mentally subnormal. The Vancouver parents not only accepted the medical judgement of Dr. Brydone-Jack but lobbied the School Board itself for the new class at Dawson School. The Victoria parents clearly internalized the logic of grading mental defectives into categories of social worth and they did not want their higher functioning children to associate with low grade mental defectives. The concept of mental hygiene practices being enforced through the education system was coming to be accepted by the public as a standard pedagogical practice. The doctors in the school system were authoritative experts representing the combined forces of science and the state. Parents readily respected the authority of the doctors concerning the classification of their children. The medical influence upon the public schools had been successful in fostering among the public an acceptance of the notion of classifying their children in a eugenic fashion as mentally fit or unfit.

At the end of 1913 Dr. W.D. Brydone-Jack marked his twenty year tenure as a school trustee and sometimes Chairman of the Vancouver School Board with a lengthy address to the year-end meeting. Since his election in 1895 as a school trustee, he had served the citizens of Vancouver through the School Board for nearly twenty years and was considering retirement from public office. In his address he reflected on the progress that had been made in the school system as to how pupils were dealt with. Dr. W.D. Brydone-Jack noted:

*It is necessary for the Board and teacher to have a certain knowledge or idea of the home life of the pupil, the home environment, home sanitation, food, clothing, hereditary tendencies and general health, in order to obtain the best results. The physical and mental condition of the child must be studied, taken into account and considered carefully in all educational work, and conditions of education must be altered in certain cases in order to get any results at all. Thus the Board and its Municipal Inspector have many and various problems to work out with the individual pupil.*
The present system of medical inspection should be of great assistance in solving some of the above problems and should be of material benefit to pupil and parent, and be the means of affording valuable information to the teacher and Board for the better prosecution of their work. 41

It is clear from his statements that Dr. W.D. Brydone-Jack viewed the medical inspections of pupils as more than the examination of physical ailments. It was necessary, he stated, to take note of "hereditary tendencies" and that the "mental condition of the child must be studied" before action can be taken on a particular child's case. He advised that "in certain cases" the "conditions of education must be altered" so that educators can "get any results at all" from these children. The central concepts of mental hygiene are present in Dr. W.D. Brydone-Jack's remarks as he openly advocates a separate form of education for those of subnormal intelligence due to hereditary causes. The process is clearly classified as a medical function which supposedly attempts to objectively appraise the whole child by considering each individual's mental capacity, physical condition and home environment. It was suggested by eugenicists that bad home conditions often coincided with feeblemindedness in children. There was no doubt in Dr. W.D. Brydone-Jack's mind that once this condition was detected, a segregated educational setting was the best treatment for the child concerned. Medical authorities seemed to openly support the eugenic argument for the forcible segregation of subnormal children from their peers.

In 1914 the head nurse of the Medical Department, Elizabeth G. Breeze, presented a major report to the School Board concerning her tour of various North American school systems and their medical activities. She reported her findings to a meeting of the School Board on October 19, 1914, and the trustees recommended publication of the address in the Annual Report for 1914. Under the title "Medical Inspection in Other Cities as seen by our Head Nurse-October 19, 1914", Miss Breeze praised the work of medical inspectors and nurses in the larger cities of North America such as Boston, New York, Chicago, Detroit...
and Toronto. In reference to special classes Miss Breeze related: "Many of the educational authorities have inaugurated special classes for various types of children, whose defects bring them particularly under the care of the Medical Department". In fact Breeze asserted with pride that:

Detroit, Chicago, New York and Boston all conduct classes for the mentally weak. These are carried on much along the same lines as in Vancouver... The Binet tests were "used to determine the mental state of the pupil". Manual training was given great prominence in these classes and older boys were taught by Manual Training teachers. Special advanced trade courses had been organized for mentally defective children who were promoted to high Schools. Boston had a dedicated school for the deaf with sixteen teachers, while classes for the visually impaired were common in most large American cities. "Cripple" classes were also prominent for children with physical deformities and a nurse was in attendance. Boston had developed special classes "for children for whom the regular work does not give enough to do". These "rapid advancement classes" for bright children "were new to me", Miss Breeze declared. In closing, Miss Breeze felt her trip had collected both "valuable information" as well as "insight into the many systems" of public education that she had visited. She thanked the Board for granting her the leave of absence necessary to make this fact-finding tour and hoped her report would be to the "advantage " of Vancouver schools. In fact Miss Breeze's tour served to legitimize the educational reforms made since school medical inspections commenced in 1910. Vancouver's special classes and the mental hygiene provisions coming from the Medical Department were completely in accord with what many large, progressive urban school districts were doing across North America.

In January of 1916 The Daily Province newspaper had an article on its education page entitled "Vancouver Was Among First Cities in Canada to Have Pupils Medically Examined". The return of school children
to Vancouver’s schools each fall without any "traces of infection is almost impossible", the article proclaimed. Vancouver's commencement of medical inspections in 1906 was parallel to the experience of Montreal, and the 1910 province-wide medical inspections of public schools put British Columbia in line with "older...more experienced countries" in Europe, making the city a leader in the medical control of disease. The article declared that "medical inspections of schools results in a healthier and more vigorous, physically and intellectually, race". The physical forms of disease are again equated with mental defects when the article lists common disorders such as bad eyesight, enlarged tonsils/adenoids, spine disease, bad ears, bad teeth, as well as heart disease which could create "a retarding influence on the physical and intellectual growth of the child". Physical disease, if neglected, can lead to permanent physical as well as mental disorders in the adult. The article stated that:

If left, the child becomes a physically and intellectually defective adult, but if taken in time and treated, the child is cured, makes rapid physical and educational advancement and becomes infinitely of greater value to the state. It is not enough to discover physical or even mental defects, but the parents must be notified and visited and re-visited, the need for treatment being explained and facilities provided for giving treatment...

Very few physical diseases if unattended could cause mental damage except for syphilis which had never been a common childhood disease. The lumping together of physical and mental disorders was a central concept of mental hygiene in which the combination of poverty and disease resulted inevitably in feeblemindedness.

Medical coverage of both the schools as well as the homes of students had grown considerably. Larger schools were visited twice a month by the doctor and six to eight times a month by the nurse, while smaller schools only once a month by the doctor and two to four each month by the nurse. The "home visiting" or "follow up work" is called "an important feature" of the school medical service. In many ways this
was the most important aspect of the process when the medical expert visited the homes of parents to tell them about infection control or the fact their child was mentally defective. In this way the parents internalized the medical/scientific view of their children as diseased or defective. Dr. F.W. Brydone-Jack's visits to parents of the proposed special class at Dawson School in 1913 has been previously cited as an example of this process. In 1916 the medical staff consisted of Dr. F.W. Brydone-Jack (School Medical Officer), Dr. Belle H. Wilson (Assistant Medical Officer), Miss E.G. Breeze (Head Nurse), Miss M.A. McLellan (Nurse), Miss M. Ewart (Nurse) and Miss A. Jeffers (Nurse). 48

Vancouver's schools were the first in Canada to have all pupils systematically examined by physicians and it was also one of the first public school systems in the Dominion to adopt a medical stance towards children based upon eugenic reasoning. The 1910 British Columbia legislation mandating school medical inspections was not emulated in provinces like Ontario where the Chief Medical Officer of Toronto called such mass examinations of school children "a pure fad, instituted principally by women". In the face of public pressure the Toronto School Board agreed in 1910 to begin school medical inspections but they were not as comprehensive as the British Columbia provisions. 49 This is why Vancouver's schools were regarded as in the vanguard of progressive public health measures. Eugenics and the emerging mental hygiene movement would profoundly affect many of Vancouver's educational services in the years ahead for what today are called "special needs" children.

v. Conclusion:

On the eve of World War One Vancouver had developed specific educational provisions through the work of its Medical Health Officer and nursing staff for those children judged to be of a defective mentality. The notion that physical disease could be cured or controlled by isolation was extended to children with mental defects. Parents of these children, many of Vancouver's school trustees and the majority of school
personnel working within the Vancouver school system had, by the start of World War One, accepted the scientific logic of mental hygiene. A vocal minority, the special class teachers themselves, were calling for the extension of this mental hygiene work throughout the Vancouver school system using the new forms of mental examination or intelligence testing. In January, 1918, an American psychologist, Martha Lindley, was hired and charged with the task of sifting through the pupil population to ferret out pupils with mental defects. It had been Dr. W.D. Brydone-Jack as school trustee/chairman, his son Dr. F.W. Brydone-Jack as School Medical Health Officer, and the first school nurse, Miss Elizabeth Breeze, who had forcefully advocated the principles of mental hygiene through the medical inspections of the Medical Department within the Vancouver school system. Miss Breeze would continue her nursing career until the early 1940s when she retired. Dr. W.D. Brydone-Jack appears to have retired from public office after 1913. Dr. F.W. Brydone-Jack left his position at the end of June, 1919 and was replaced in September by a Dr. Robert Wightman. This initial phase of mental hygiene as conducted by medical doctors within the Vancouver school system and their isolation of defective school children came to an end when the first school psychologist began her work in early 1918.

In 1922 a collection of documents about mental hygiene practices was assembled in a volume edited by Dr. Helen MacMurchy entitled Handbook of Child Welfare Work in Canada. Cited in the volume is an "Official Guide For Use of Teachers and Medical Inspectors of Schools" in the Province of British Columbia. Relevant sections of the province's "Schools Health Inspection Act" are quoted at length. The official procedure outlined for mental examinations is as follows:

The examination of the child's mental capacity and the general state of the nervous system is to be next conducted. If the child counts slowly up to twelve (12), defects of speech may be noticed. The mental capacity may be gauged by the general deportment of the child, his answers to questions, and the teacher's report. It may be classed as follows:--Mentally defective, very dull, dull,
average, quick and bright. The various points observed in the examination of the child are to be recorded on form A, which is kept in the school-room. 52

By 1922 mental examinations had become an integral part of the medical practices then occurring in British Columbia's public schools. The distribution of these official guides among teaching staff only served to legitimatize the educational worth of such procedures. Pity the poor child who slouched or daydreamed too much in class and was noted on form A as mentally defective due to his poor deportment.

Notes:

1. Neil Sutherland, Children in English-Canadian Society: Framing the Twentieth-Century Consensus, (Toronto: University of Toronto Press, 1977), pp. 40-41. For a different version of this chapter see Neil Sutherland, "To Create a Strong and Healthy Race: School Children in the Public Health Movement 1880-1914", History of Education Quarterly (Fall 1972)

2. Ibid., p. 44

3. Ibid., p. 49

4. Ibid., pp. 51-52


8. Dr. Peter H. Bryce (1916), op. cit., p. 62


12. Ibid., Thirty-Sixth Annual Report of the Public Schools of British Columbia (1906-1907), p. A 41


14. The Vancouver Board of School Trustees (Hereafter Vancouver B.S.T.) Annual Report for 1907, p. 24

15. Vancouver B.S.T. Annual Report for 1908, p. 40


17. Vancouver School Board Minutes, December 21, 1909 (Appointment of Dr. F.W. Brydone-Jack) and January 31, 1910 (Appointment of Miss Elizabeth Breeze, R.N.)

18. Chapter 45 "An Act to Provide for the Medical Inspection of Schools", The Statutes of the Province of British Columbia, 1910, (Victoria: King's Printer), Sections 5 (2) and 6 p. 380

19. Chapter 27, "An Act to Provide for the Medical Inspection of Schools", The Revised Statutes of British Columbia, 1911, (Victoria: King's Printer), Section 11, p. 2601


25. The V.S.B. Minutes for January 31, 1910 state Miss Elizabeth Breeze, R.N. was hired at a salary of $175 a year. The salary statements of School Board employees for January, 1911, show Dr. F.W. Brydone-Jack's salary as $225 per year. That is the highest employee salary listed.


27. Ibid., p. 43

28. Ibid., p. 43

29. Ibid., p. 45
30. Vancouver B.S.T. Annual Report for 1911, p. 12, p. 17
31. Ibid., p. 59
32. Ibid., p. 64
33. Vancouver B.S.T. Annual Report for 1912, p. 11
34. Ibid., pp. 34-36
37. Ibid., p. 38
38. Vancouver B.S.T. Annual Report for 1913, p. 31, Special Classes p. 36
40. V.S.B. Minutes, J.S. Gordon, Report of the Municipal Inspector, October 16, 1913, p. 1.; J.S. Gordon after consulting with Dr. F.W. Brydone-Jack and the parents of the children concerned supports the opening of a special class at Dawson School. The only concern he had was the difficulty in finding a "competent teacher".
42. Elizabeth G. Breeze, School Nurse, "Medical Inspection in Other Cities as Seen by Our Head Nurse" Vancouver B.S.T. Annual Report for 1914, p. 43. See also V.S.B. Minutes, Report of Miss Breeze, Nurse, at Meeting of October 19, 1914, pp. 9-10
43. Ibid., p. 43
44. Ibid., p. 43
45. Ibid., p. 45
46. "Vancouver Was Among First Cities in Canada to Have Pupils Medically Examined", Daily Province, Saturday, January 8, 1916, p. 11
47. See for a discussion of how medical conditions were inappropriately associated with mental deficiencies, A.C. Rogers, "The Relation of the Institutions for Defectives to the Public School System", Proceedings of the National Conference of Charities and Corrections (1907), pp. 469-477
48. "Vancouver Was Among First Cities in Canada to Have Pupils Medically Examined" (1916), op. cit., p. 11
50. Angus McLaren (1990), op. cit., p. 92

52. "Official Guide For Use of Teachers and Medical Inspectors of Schools", Abstract-Provincial Board of Health-Medical Inspection of Schools-Chapter 2-To The Medical Inspector-"General Examination of Children" in Dr. Helen MacMurchy (ed.) *Handbook of Child Welfare Work in Canada: For the year ended March 31, 1922*, (Ottawa: Department of Health-King's Printer, 1923), p. 45
CHAPTER FIVE:

Special Classes With a "Special Teacher": Miss Josephine Dauphinee and Her Supervision of the Special Class System from 1911 to 1941.

Introduction:

In the spring of 1910 the newly-appointed school physician of the Vancouver school system, Dr. F.W. Brydone-Jack, was joined in his efforts to segregate those school children found to be feeble-minded. The School Board appointed Miss Josephine Dauphinee as the first special class teacher for subnormal students of elementary-school age. Special or auxiliary classes were segregated educational settings where mentally subnormal children could be trained in the rudimentary skills necessary for social and economic survival. Dauphinee was a fully-trained teacher as well as a nurse who, over her thirty-one year career in the Vancouver school system, single-handedly created the special class system for mentally retarded children. She, more than any other individual in British Columbia, advanced the notion of segregated special education classes as a socially progressive and humanitarian form of educational reform. Dauphinee also made special education and the care of retarded children in a training institution a political issue through her lobby group, the Mental Hygiene Committee, which operated within Vancouver's Local Council of Women. She helped to promote the expansion of special classes within the public schools, the custodial care of the severely retarded in an institutional setting and the forced sterilization of all feeble-minded individuals as practical solutions to the social treatment of the subnormal.

Regarded by acquaintances as a kindly woman who liked to be called "Miss Jo", she held annual year-end picnics for all the special class teachers at her North Vancouver shoreline camp. Dauphinee expressed very hard, strident views on eugenic measures for the feebleminded but always advocated such solutions within the language of humanitarian caring. Like Dr. Helen MacMurchy of Ontario, Dauphinee was
a strange mixture of caring and cruelty who left the Vancouver school system a historical legacy of special education services born out of these contradictory motivations. Angus McLaren has called MacMurchy "a curious mixture of compassion and cold-heartedness" but that could also be a valid description of many of the doctors, teachers and social activists involved in the crusade to save the feebleminded in Canada. 1 In championing such measures as special classes for feeble-minded children in the public schools, Dauphinee projected an overtly progressive exterior which belied an interior of very firm eugenic convictions.

In late 1917 Miss Dauphinee gave an extended speech before a combined meeting of such Vancouver women's groups as the Local Council of Women, King's Daughters, the Imperial Order of the Daughters of the Empire (I.O.D.E.) and the Canadian Women's Club. Her speech was entitled "An Appeal for the Feeble Minded" and it was reprinted in the January, 1918, issue of the Western Women's Weekly, an early Vancouver feminist magazine. Dauphinee addressed her speech to all those like-minded "western women" and she wanted them to set to work on "a task worthy of the highest thought", the segregation of the feebleminded from society for their own protection. The women of Canada had just succeeded with their first great national cause, the prohibition of alcoholic spirits. Miss Dauphinee continued: "Now is the time for us to tackle the second problem and remove from our midst these unfortunates, who through no fault of their own form the largest proportion of our poverty-stricken, criminal and socially degenerate class". "Look about you", Miss Dauphinee admonished the audience, "Whom would you characterize as 'Feeble Minded'? A maid in a kitchen or an office boy appear normal but when asked to "exercise a little common sense is found wanting". 2 The feebleminded become criminals as adults unless they are rehabilitated as children. Heredity guides their natural tendencies unless the state intervenes through custodial care and educational training. "Our city
School Boards are doing their best by auxiliary classes in the public schools" but a better vocational preparation for life was urgently needed. Miss Dauphinee closed with a hopeful message that "the mentality of our race may not degenerate" if public authorities mandate the institutional care of these "unfortunate human misfits". It could be said that in raising the fear of the feebleminded and offering segregated special education as a solution, Miss Dauphinee was also furthering her career as a teacher. In fact many of the doctors, teachers and social workers who promoted mental hygiene directly benefited from its growth as it advanced their professional careers. However, her concerns about the mental degeneration of the race and belief in the iron laws of heredity place her in line with the mainstream eugenic social policies. Miss Dauphinee's speech gave an example of a local crime by a feeble-minded man, "the drug-crazed negro" who was "responsible for the death of our good Chief of Police". The issue of race and an association with an inferior mentality would play a prominent role in her writings and also surfaced in her teaching career. When Miss Dauphinee died in a Vancouver nursing home at age 102 on December 4, 1977, she was called "a pioneer teacher of Vancouver's retarded children" which was factually an accurate assessment of her career. This chapter looks into the eugenic motivations behind Miss Dauphinee's pioneering efforts in the field of special education.

i. The First Special Class Teacher: The Arrival of "Miss Jo":

Miss Josephine Dauphinee was born on November 15, 1875, in Liverpool, Nova Scotia, to a family whose surname signified membership in an old Maritime clan with ties to the Acadians and United Empire Loyalists. The young "Miss Jo" must have shown promise in school as she was sent to Normal School and taught as a grade school teacher in Liverpool for nine years. She then decided on a career change and trained as a nurse in Boston, Massachusetts. In 1910 Dauphinee came with her sister to New Westminster, British Columbia, to work as a nurse for
her uncle, Dr. G.E. Drew. Miss Jo remembered the primitive living conditions and recalled how "poor and dilapidated" the cities of the Lower Mainland looked then with their wooden sidewalks and how "my sister tore her best dress when she stepped on a loose board" which "flew up" to catch "her skirt flounce". Apparently a nursing career did not suit Miss Dauphinee as she made a trip from New Westminster through the wilderness of Burnaby to Vancouver to see Mr. Argue, Supervisor of Vancouver schools about a teaching position. She was initially assigned to a primary class, but in 1911 she was given a small class of children at Central School, judged by the medical doctor, F.W. Brydone-Jack, to be of subnormal intelligence. Her personnel card at the Vancouver School Board's records division reads: "April, 1911 - opened first class for subnormal children at Central". The Central School was located between Cambie and Hamilton Streets on Pender Street in downtown Vancouver and initially served local elementary pupils until converted to the first high school in 1890. It was later used for the offices of the School Board until January, 1911, when it was vacated as new offices were established on Hastings Street.

The first special class moved into Central in late spring of 1911 and it was used again as an elementary school annex until demolition in 1948 for the campus of Vancouver Technical College. In her 90th year Miss Dauphinee recalled: "It was, I feel, the latter [nursing experience] that caused the school board here to put me in charge of the retarded children, some of them were epileptic". There is no firm evidence in the records of the Vancouver School Board or the minutes of the School Board that this was the reason Miss Dauphinee was given a class of retarded children to teach. However, such a nursing background seemed to have made an impact on Dr. F.W. Brydone-Jack who, in his 1911 report, described Miss Dauphinee as "a nurse and a teacher of marked ability". The class of twelve created in the spring of 1911 "proved so successful" that a second class was created in September under another
newly-hired teacher, Miss Ruby Kerr, who also "displayed a great deal of enthusiasm for her work". 10 The special class teacher in the Vancouver school system was seen from the very beginning as an "expert" with a certain expertise in teaching skills that merited not only the special teaching conditions of a small class, specialized facilities and equipment but also greater financial remuneration. On April 10, 1911, the School Board’s Management Committee passed the unusual resolution "that Miss Dauphinee, teacher of the special class, receive $10 per month in addition to her schedule salary, to date from the opening of the class". 11 This was not the first special provision made for Miss Dauphinee as on March 16, 1911, the School Board approved a resolution which read "That Miss Dauphinee’s expenses to Seattle when visiting the Seattle special classes be paid by the Board". It was the Board’s decision to send Miss Dauphinee to Seattle in order "to take instruction on the teaching of the mentally retarded". 12 What Miss Dauphinee observed in Seattle was to shape her early conception of how the first special class in Vancouver would be conducted.

When Josephine Dauphinee examined the special classes of the Seattle public schools in early 1911, a "modern" system to segregate and train mentally-handicapped pupils was already in operation. The special classes were modelled upon those of the Vineland Training School in New Jersey which, under H.H. Goddard and E.R. Johnstone, had pioneered the concept of segregated training classes for subnormal children. The teacher who had been given the task of organizing Seattle’s special classes for the subnormal was a young energetic teacher who had been in the district since 1907, Miss Nellie A. Goodhue. In early 1910 she began the first special class at Cascade Elementary School with fourteen pupils "whose mentality is below normal but above the imbecile type". 13 Miss Goodhue had been prepared for her work through summer courses at the Vineland Training School the previous year and she would later teach some of those same teacher-training classes at Vineland itself as well as at
the University of California, specifically "for the preparation of teachers of slow-learning children". 14 When Miss Dauphinee arrived for a visit in early 1911 there were three classes of 46 pupils under Miss Goodhue's direction.

A referral system had been developed by the medical inspector to send children to a Psychological Clinic at the University of Washington for specific testing under Dr. Stevenson Smith of the psychology department. In the 1910-1911 school year 300 children were examined with seventy being found to be retarded three or more years in their schooling. Of these "fifty examined at the University of Washington are reported to be in need of special school treatment". The annual report of the Seattle public schools for the school year ending 1911 declared bluntly that the "large difference between the number of children found to be retarded and defective and the number actually enrolled in this school [Cascade Elementary] indicates that considerable expansion of the school's facilities is needed". Unlike students with physical handicaps, "these children gain nothing by being associated with normal children". 15 The 1911-1912 annual report stated that the new Child Study Laboratory established in the Cascade Special School was conducted "with the assistance of Dr. Smith of the University and...four Medical Specialists approved by the Board". In the last school year over 348 children had been examined, 125 were recommended to the special classes and 65 actually enrolled. The purpose of the psychological testing was to give each subnormal child's "exact mental status" for the purpose of judging trainability. Isolation in a special class school would prevent the dull pupil from being "subjected to the taunts and jeers of the other children". As of June, 1912, there were four classes at the Cascade School and Laboratory for Child Study. Another special school was planned at nearby Ballard. There was a waiting list of over 100 students approved for special class placement who constituted a "hindrance to the progress of the normal children". 16 Mental hygiene
was clearly an integral part of the Seattle public school system.

Miss Dauphinee could have only been inspired by the Seattle system and may have regarded Miss Goodhue as a kindred spirit. Certainly Dr. Stevenson Smith would have met with her approval as he was an ardent eugenicist. His first major published work was *A Summary of the Laws of Several States Governing the Feeble Minded* (1914) which focused upon provisions for institutional segregation as well as forced sterilization. With the help of the Bailey and Babette Gatzert Foundation for Child Welfare he expanded his Psychological Clinic at the University of Washington. In an advertisement on the back cover of his 1914 book, the clinic was called a "laboratory for the free examination of children" whose purpose was "to increase the efficiency of the child". 17 Dr. Smith was the "Clinical Director" and the 1914 report of the Superintendent of Public Instruction for the State of Washington cited Dr. Smith for his "great assistance" in using the Psychological Clinic at the University of Washington to refer many cases to the State Institution for the Feeble Minded at Medical Lake near Spokane. The Director of the State Institution, S.C. Woodruff, regarded the special classes for backward and defective pupils as clearing houses, for "as they become older and less amenable to control...most of them will undoubtedly have to be sent here". 18 The Medical Inspector of Seattle's public schools, Dr. Ira C. Brown, a former army doctor, wanted all of Seattle's feeble-minded children sent to the State Institution at Medical Lake as he believed they were ultimately incurable.

However, the Superintendent of Seattle's public schools, Frank B. Cooper, saw the Cascade school and its like as a progressive and humanitarian force which was clearly needed to educate subnormal children. The School Board found Cooper's views more in sympathy with their own and sanctioned the creation of a special class system, according to historian Bryce E. Nelson. 19 However, Nelson fails to point out the major role played by Dr. Stevenson Smith in conducting
testing screens in the school system followed by referrals to the Psychological Clinic. In the school year 1912-1914 over 129 children were "brought to the clinic by their parents" to receive "careful mental and physical examinations". Mental hygiene in the Seattle public school system had been pursued as an educational goal since 1910 with the active removal of children from the mainstream followed by their segregation in a restricted classroom setting or the State Institution at Medical Lake. Miss Dauphinee must have observed this process in action and her recommendations for Vancouver schools from 1911 to 1918 when such reforms were initiated reflected what she had found in Seattle. Miss Goodhue shaped the Seattle special class system according to the Vineland model. In 1911 she requested special chairs, toys, supplies and a phone line for the Cascade special classes and she adopted the play-to-learn methods of Maria Montessori. In 1912 she wanted a stop watch, rubber tips for chair feet, a weaving loom, reading primers and folding chairs. Between 1912 and 1913 three more teachers were hired as "specials" for the new classes. Also medical equipment, round tables and chairs were requested. However, by 1916-1917 Miss Goodhue was complaining that the special classes had too many children of the imbecile type, with thirteen at Rainier School and five in the Laboratory Class. They are "incapable of being educated" and should be moved to the State Institution at Medical Lake. The experiences of Miss Goodhue in Seattle would prove to be remarkably similar to the later fortunes of Miss Dauphinee in almost every respect.

ii. The early years at Central School: Miss Dauphinee and Miss Kerr: Returning from Seattle Miss Dauphinee knew what was required to equip a special class program for the various grades of imbeciles (mental ages 5-10) she was being asked to teach. She remembers that it "wasn't too long before we acquired additional Montessori things, toys, primitive manual tools for our boys and equipment to enable us to give laundry training to the girls". The emphasis was on strict task
training as the special class students could only be expected to work at menial tasks when they left elementary school. Just as Dr. Helen MacMurchy had emphasized the need for such training to serve the needs of industrial society, so Miss Dauphinee declared that she had mistakenly believed that such "low grade defectives" could "be taught some form of unskilled labour by which they might be made self-supporting". For six years Miss Dauphinee and Miss Kerr conducted training classes for the low-grade defectives assigned to them "most of whom were imbeciles" but made little progress. The two teachers "laboured to instil the principles of the most menial tasks, only to find them forgotten or disregarded". Dauphinee slowly came to realize that for such imbecile children training was futile and "only under permanent custodial care would they be safe and happy". In 1918 a custodial cottage was opened by the provincial government with the School Board’s assistance and the two original special classes were closed. The special classes could now turn "to the higher forms of mental defect" which Miss Dauphinee called "the moron problem". Morons on the Goddard scale were mental ages 10-12 and supposedly formed the largest social threat due to their criminal and anti-social tendencies. However, they could be trained in a most effective manner for industry as educational programs at such institutions as the Vineland School had clearly shown.

During the first six years of special class work Misses Dauphinee and Kerr demonstrated effectively how mental testing could facilitate the "segregation of the imbeciles from the regular grades". Given the two teachers’ valuable "knowledge gained of their needs", it became important to educate "the public through pity and sympathy of all who came in contact with them". There is little doubt that this early period of the special classes helped Dauphinee and Kerr to develop a program of simple work tasks for their pupils emphasizing such skills as cleaning, laundry and even gardening. Vocational skills such as carpentry began to be supplemented with artistic crafts as in 1916 when
Miss Dauphinee applied for funds from the School Board. The minutes record that: "A communication was read from Miss A.J. Dauphinee of the Central School auxiliary classes asking the Board to consider the purchase of a...loom at present operated by the...Handicraft’s Guild and which is for sale for $62.00". The purchase was approved by the Management Committee. Photographic evidence survives of what the special classes at Central School looked like and are reproduced on the following page. The upper picture shows the children at work in a school gardening plot which was part of a nature study program begun under the auspices of the Macdonald-Robertson Vocational Education Movement which lasted from 1900 to the 1930s. The children are tilling the soil and weeding, judging by the photograph. The lower picture is one of the special classes at Central School. There are desks and a blackboard as in a regular class but only ten children are shown. They are working on a craft project of some kind, the girls are engaged on a separate project in the foreground while in the background the boys appear to be constructing a model. In the back left hand corner of the room there appears to be a class display of the various handicraft/art projects. It is difficult to discern if these children are the imbeciles who Miss Dauphinee found so frustrating or the first moron children to arrive in the reconstituted Central classes as the photographs were found in the 1919 Vancouver Board of School Trustees Annual Report.

There can be little doubt that the first special classes were created because of certain specific factors. For the first time compulsory attendance laws were enforced and previously ignored children began to enter the school system. Medical doctors began to classify children as mentally subnormal during their routine school clinics and administrators as well as teachers began to find a population of unteachable children who frequently disrupted their classes while often failing a grade repeatedly. The removal and segregation of such unfit children was seen as a progressive, humane as well as scientific
educational reform. The Report of the Public Schools for 1912 notes the formation last year of the "two special classes in the Central School for children would could not receive the full benefits of the regular school-room". The chief cause of the lack of progress among these pupils was their "arrested mental development". The results of segregating these children into special classes had been so successful that if "the demand warrants it the Board is prepared to extend this work". The actual motive for creating these classes is cited at the end of the report on the new "Special Classes". The main benefit had been the "good results" obtained by the regular classroom teacher who was now "relieved of the attendance" of these troublesome children. There was a "rebounding benefit to the thirty or forty remaining children who then receive the entire time of the teacher". The removal of specific pupils to the special classes allowed the majority of normal students to proceed at an unencumbered educational pace. This was the real purpose of the special classes: to remove the mentally unfit so that the fit pupils could proceed without any hindrances to their classroom progress, a eugenic division of children according to mental capacity disguised as simple humanitarianism. School Board Chairman, Dr. W.D. Brydone-Jack, in his yearly address for 1912 recommended that provisions should be made "for separate schools for those feebly minded" who "are unable to keep up with others of the same age". Segregation was seen as the scientific solution to the educational problem of teaching subnormal children who attended Vancouver's public school system.

In 1913 Dr. F.W. Brydone-Jack reported that twenty-four children were enrolled in the two special classes at Central School. He stated that there were "a number on a waiting list" and there was "sufficient material for a third class". The children in the two classes "have progressed very favourably under the influence of their two very capable teachers, Miss Dauphinee and Miss Kerr". The concern that Dr. F.W. Brydone-Jack had was the fact he had found forty-eight very backward
children in the last year who "all were in need of some special modification of the ordinary curriculum". The New Dawson School was mentioned by the doctor as the most likely location for a new special class. However, by 1915 a third class had still not been added and the two classes at Central School "are always well filled--too well filled in fact". The work of Miss Dauphinee and Miss Kerr "is most gratifying when the type of children dealt with is considered". Dr. Brydone-Jack observed that this "work calls for much insight into human nature, great perseverance and a never-ending enthusiasm". In 1916 doubts began to be expressed in the Report of the Public Schools that the two auxiliary classes had a pupil population "too large to ensure the best results". The low mentality of the pupils made the pupil/teacher ratio of two to twelve unworkable and a fifty per cent reduction would not be unwarranted.

However, by 1918 even the School Board had come to the conclusion that the type of children enrolled in 1911 when the special classes were first begun at Central School did not belong in the school system. In the spring of 1918 the School Board observed that "the pupils now attending this class will have assimilated all the knowledge of which they are capable, and in consequence will be leaving school". These pupils were "not sufficiently strong mentally to become useful citizens without supervision". There was an urgent need for an institution dedicated to the training and caring for this type of children. This is why a custodial care cottage was opened with provincial funding in late 1918 but Miss Dauphinee's report of 1919 to the School Board relates that "one low grade class was continued at the Central". F. Henry Johnson, in his history of public education in British Columbia, ignores this pre-World War One period of the special classes and cites 1918 as when the "Vancouver School Board started its first classes for defective children". However, this in fact marked the end of the first phase of the special classes within the Vancouver school system. The process
of grading feeble-minded or subnormal pupils had been refined according to the Goddard mental criterion of imbeciles and morons. Imbeciles were relegated to custodial care in an institution while the schools would now concentrate on morons or the more trainable type of feeble-minded child. That criterion of trainability is reflected even today in the contemporary pupil classification of M.I.D. or Moderate Intellectual Disability.

iii. The Psychological Clinic and the Beginning of a City-wide Special Class System:

As the First World War began, education in British Columbia was undergoing a profound change. The special classes for subnormal pupils and the medical inspection of school children in Vancouver represented the vanguard of a new approach to education based upon differential instruction along with the varied social treatment of students themselves. Vocational education programs, differentiated tracks of curriculum to promote education efficiency and mental testing as well as grade-wide achievement testing surveys would alter how schooling was provided to the pupils of the province. It is commonly assumed that education efficiency was first raised by the Putman/Weir Survey of the School System in 1925, but as early as December, 1917, a report was presented to the Vancouver School Board by Principal Vance and Dr. Mackay, also a principal, entitled "On the Efficiency of the Vancouver School System". A section on "Retarded Pupils" suggested a new program should be developed for students who fail and remain in the lower grades only to drop out of school "when they feel so out of place" because of their advanced age. Several "Rooms of Opportunity" were seen as the solution to this inefficiency in that specialized assistance could be given to these children to help them catch up to their peers. This idea was "as per the Seattle School System" which had been observed during March, 1917. 33 A major visit had been made by the Chairman of the Vancouver School Board, Mrs. Irene H. Moody, as well as Trustees Welsh and Seymour to the schools of Seattle during the early spring of
1917. They presented a report to the full School Board on March 27, 1917. Almost immediately reforms were made based upon the Seattle school system such as the approval of a dental clinic on March 31, 1917. 34 But the most profound innovation brought to the Vancouver school system from Seattle was in the field of mental hygiene and the education of subnormal pupils.

There is little doubt that the person who had forged this link to the Seattle school system was Miss Josephine Dauphinee whose efforts on behalf of the special classes began to yield results after the selection of Mrs. Moody as Chair of the School Board from 1917 to 1920. However, the Vancouver special classes for subnormal children had already begun to influence other school systems. In August, 1914, a class for "backward or subnormal children" was established near the Girls' Central School in Victoria under an experienced teacher, Miss Bertha Winn. The class was already facing problems as the "parents of the merely backward children...shrink from sending their children to school" with the more profoundly retarded children. In 1915 Miss Winn was said to be a graduate of Columbia University in New York and she provided "able instruction" for "such children who are mentally above the idiot and imbecile classes". 35 Yet it was in Vancouver's schools where the next phase of the special class system would initiate a profound change in the education of British Columbia's children with the arrival of the first school psychologist and a psychological clinic to conduct mass psychoeducational assessments of pupils.

In her January 9, 1918, Chairman's address to the School Board, Mrs. Moody recalled the course of events in the fall of 1917. In the early fall Miss Dauphinee had given "a report on her visit to various schools in the East and their handling of subnormal children". Miss Dauphinee specifically "asked for the appointment of a psychologist" in order "to examine and classify our children". Moody suggested at the opening of her remarks that Dauphinee had cited the Seattle school's
The photograph above shows the Special Classes at Central School engaged in routine gardening chores while the lower photograph depicts a classroom in which the children are busying themselves with various tasks.

Source: Vancouver B.S.T. Annual Report for 1919, p. 49
special class system as an example of what Vancouver should adopt. Moody began her address by recalling: "Returning from Seattle and reporting on their school system, I urged the consideration, with a view to adoption, of their plan for special classes, child laboratory and child observation work". 36 Later in 1919 Mrs. Moody relayed that it was at the "urgent request of Miss Dauphinee...to secure, if possible, Miss Martha Lindley, as school psychologist". F. Henry Johnson incorrectly notes the hiring of a school clinician in 1918 named "Miss Margaret Lindley". 37 Lindley was trained by Henry Herbert Goddard at the Vineland Training School in New Jersey and had been a psychological researcher as well as field worker with the school's research staff. She had come to Seattle to work in the Psychological Clinic of Dr. Stevenson Smith and in the city's schools. 38 The rationale Moody offered in her 1919 address to the Management Committee about the adoption of a Psychological Clinic to screen children for the growing special classes was that it provided a "logical answer" to the growing problem of "the number of pupils showing retardation in their work". 39 The minutes of the School Board reveal that this logic was generally understood by all Trustees and it was not merely the effort of Mrs. Moody.

In reaction to complaints by parents of the Grandview Ratepayers Association about the exposure of their children to incorrigible youngsters, Trustee Hall expressed the opinion that measures were being taken "to prevent incorrigibles from being brought up in a criminal atmosphere". Hall stated:

The Board was entirely in sympathy with both parents and children, and steps were being taken to give the closest attention to mentally defective children, a psychologist having been engaged to make a special study of each individual case with a view to remedying the defects which caused wayward tendencies. 40

In fact the creation of a Psychological Clinic to screen Vancouver's school children had community support. The Board minutes record that on March 21, 1918: "A communication was read from the Local Council of Women
thanking the Board for the interest they are taking in the matter of defective children and the appointment of a psychologist". 41 It had been the Local Council of Women that had supported Moody's election to the School Board in 1916 and their role in lobbying for mental hygiene measures will be examined in a later part of this study. Miss Dauphinee believed the Psychological Clinic was established because subnormal pupils "were hindering the regular work of the class room by absorbing too much of the teacher's time with but little, if any, result". 42 The hiring of a psychologist to test Vancouver's school children and thus expand the special class system was the result of a concerted effort by specific teachers, School Board officials, parents and community groups. It was a measure that had a remarkable degree of consensus.

The Report of the Public Schools of 1917-1918 acknowledged that a psychologist had been appointed in Vancouver to make "a special study of retarded pupils" in the city's schools. The aim was to segregate as many subnormal children as possible in special classes which would have a negative effect in terms of the educational costs for these small classes. However, such an expenditure would also "do much to increase the efficiency of the schools". Teachers could do much more with a class of "approximately equal mental ability". 43 Office space was immediately given to Miss Martha Lindley, the new psychologist, and the clinic opened in February, 1918. The first school targeted was an elementary in which "the need in this regard was great". Out of 500 pupils examined, twenty-five were deemed subnormal and one of the children "was an absolute imbecile". Mrs. Moody wrote that the twenty-five children "were a continual draw-back to the advancement of the other members of their class". Thus only "by taking these children away" was the regular class "able to progress in a much more satisfactory manner". There were now six special classes at the end of 1919, including one dedicated to "low-grade defectives". The report also notes a class of ninety children (all boys) being trained to be "citizens of real value
to the community and to the state". 44 This class was originally formed at Dawson School to teach wayward boys work skills as their "abilities lie in a practical direction". The parents of the boys had to be contacted by school officials due to a misunderstanding that their children were being classified as subnormal. It was made clear that school officials had "no intention to regard such students as mentally deficient". 45 The first teacher was Mr. J.A. Stuart and in the 1914-1915 school year the class was moved to Central School where Miss Dauphinee conducted her special classes. The "pre-vocational classes" in the Central elementary school would be a continuous feature until the 1940s. For a complete statistical record of the special classes as taken from The Report of the Public Schools of 1910-1911 to 1940-1941 the reader should consult Appendix I as indicated. Only special classes which could be confirmed are indicated and official tallies from annual reports often vary with the number of actual classes that could be documented from the returns.

All this effort to create a special education system in Vancouver at the elementary level for vocational skills among normal pupils and simple work skills for mentally retarded children was done without additional provincial funding. Such funding would not appear until the late 1950s. Mrs. Moody wrote that "the Board realized that this should be a provincial matter" and in fact such assistance was requested from the Department of Education, but this was not made "immediately available". The School Board was developing classes for deaf children and those with speech problems. Another class was being created for students with defective vision and it became known as the "School for the Blind" which did receive some financial assistance from Victoria. 46 This would eventually become the Jericho School for the Blind by the 1940s and a fully-funded provincial institution until the late 1980s. Such provisions for deaf and blind pupils will not be dealt with here as the focus of this research is students with mental
disabilities, either perceived or real. J.S. Gordon, the Municipal Inspector of Schools, stated that the special classes for subnormal children were "very expensive". The teachers of these classes "are paid more than ordinary grade teachers" and only taught their pupils the equivalent of four days per week of classroom instruction. Gordon was making these points not to condemn the small special classes of only 12 to 19 pupils but "to make it clear that if our school system is to be improved it must be at considerable additional expense". 47 The School Board seemed prepared to adopt such educational innovations and bear the expense they entailed.

Martha Lindley did not disappoint her new employers after arriving from Vineland in 1918. She began her work in February and by the end of the year had surveyed a number of schools. In a most officious tone she stated: "We selected those incapable of further academic advancement and segregated them in special classes". An Observation Class under the direction of Miss Ruby Kerr was created to screen and examine specific children referred to the Psychological Clinic. Lindley notes that "Dr. Brydone-Jack gave excellent assistance through the medical clinic" to further her work on mental classification. During her first year Lindley examined over 400 children, 166 were sent to the Observation Class, 95 were subsequently enrolled in the special classes. However, the six special classes that were opened in the 1918-1919 school year to accommodate such subnormal children were only a beginning. Lindley declared confidently: "For a city of this size the present number is but a beginning, a mere drop in the bucket compared with the need". She wanted "at least ten more special classes" in the next school year and it would be no trouble finding suitable candidates. 48 The Provincial Department of Education, although not funding these classes, lauded their creation. In his summary report on "Vancouver Schools", J. S. Gordon recorded that such "money will be well spent if these children become an economic asset instead of an economic liability
In December of 1918 the Western Women’s Weekly ran a profile of both Miss Lindley and Miss Dauphinee under the title "New Ideals in Education". The article praised the "selective system" being implemented by the new school psychologist. Lindley had sixty to seventy psychological tests at her command that could "help to determine where a child is so far as mental development is concerned". She tested a pupil and if he were found to be lacking in mental ability, she sent the child to Miss Kerr. After various "work and play" trials, as well as a medical examination, certain decisions could be reached. The children might be "sent back to their classes with special instruction as to how to deal with them". Physical defects such as hearing or eyesight problems were a medical matter. Mental age was the key to special class assignment as those "too slow for the pace" of the regular class qualified for the Central School program. These children were five to six years old in mental age and could "do a little school work" but were mostly kept occupied by "a great deal of handwork" for industrial training. Those children of mental ages two to four were "cottage cases" awaiting admission to the proposed provincial institute for defectives. The special classes were limited to fourteen pupils each and at the time there were seven classes. Miss Dauphinee "visits each class twice a week and on Friday afternoons she conducts a class with intent to helping these teachers". The boys received manual training two half days a week and the girls are given lessons in "practical household work" such as dusting, scrubbing, as well as simple cooking. The girls did sewing, knitting, crocheting and rug making. Lessons in subjects such as mathematics were taught in a practical way, as a pretend trip to a store. The goal of this education was "to keep these children healthy and happy" through play, as well as digging in the school gardens. Miss Dauphinee looked forward to a future industrial training school as a more appropriate place for the lower grade children who clearly required
custodial care. The article concluded that "every thinking...woman of
today" must realize "that this work is the beginning of a new era in the
welfare of children". 50

The Psychological Clinic launched the second phase of the
special class system which employed the principles of mental hygiene to
select and segregate higher-level moron children in Vancouver’s
elementary schools as opposed to just imbeciles. It also became
associated with the first efforts to screen out children who were deemed
more suited to vocational education as early as the elementary grades.
It was eugenic in the sense it expanded the categories of selection for
a substandard education on the basis of a supposed natural mental
inferiority. This system would remain unchanged until the 1950s and the
outcome was to identify an ever-growing population of subnormal children
as the years progressed. Miss Lindley was correct when she said she had
just touched the surface as the 1920s would be an unprecedented period
of special class expansion.

iv. Mental Hygiene Comes to British Columbia:

In Martha Lindley’s first report to the Vancouver School Board
she complimented the dedication of Ruby Kerr who takes "much interest in
the psychological work". Lindley noted that Kerr will "with the
preparation that she intends to make this summer be of even greater
assistance". 51 In an interview with Miss Grace Jamieson, herself a
special class teacher in the 1930s and later successor to Ruby Kerr as
psychologist, an interesting fact emerged. Miss Jamieson’s aunt, Miss
G.C. MacLean, was a special class teacher hired at Dawson School in 1919.
When Miss Jamieson was ten years old she remembers her aunt, Miss
Dauphinee and Miss Kerr "went down to Berkeley" so that they could "take
special classes or courses in retarded children". She remembered
receiving a postcard from her aunt in Berkeley and that it was the summer
of 1919. The annual report of 1918-1919 records that several special
class teachers willingly endeavoured "to increase their efficiency by a
Summer School course at Berkeley, Cal. 52 The 1919 summer calendar of the University of California, Berkeley, reveals that specific courses were offered to "teachers who wish to increase their professional skill" or "revise and extend their knowledge of a chosen field". Courses were offered in the Department of Education by Dr. Berchard W. De Busk, a visiting Professor of Educational Psychology from the University of Oregon. De Busk gave two courses in the second term of the summer session, running from the third week of July to the first week of August, 1919, that were taken by the visiting Vancouver teachers. "Mental and Physical Aspects of Child Development" and "Hygiene of Learning" were offered as consecutive courses by De Busk. 53 The educational facilities at Berkeley were well suited to the study of mental hygiene as the university had just recently opened a well-equipped Psychological Laboratory. The summer calendar noted with pride that the "whole of the second and third floors of the Philosophy Building and part of the basement are devoted to the Psychological Laboratory". There was "an extensive collection of the printed forms and other materials for use in conducting mental tests with children". In 1919 the calendar notes that there were 3,479 students at Berkeley during the previous summer session and of these 1,705 were teachers. There were forty-one "foreign" students enrolled and in the summer of 1919 three of these would be Canadian teachers from Vancouver, British Columbia. 54 However, the summer session at Berkeley was not merely mental hygiene lectures and laboratory demonstrations of mental testing techniques. Sports events, theatre performances at the newly-completed Greek amphitheatre built into the Berkeley hillside and excursions to the nearby Napa County wine country were offered. The three special class teachers from Vancouver did not devote their entire summer to mental hygiene.

In 1919 the Canadian National Committee for Mental Hygiene, or CNCMH, came to British Columbia on a tour of inspection of the province. Among the public agencies and issues examined were the
hospitals for the insane at New Westminster and Essondale, the detention homes for juveniles, the industrial schools for juvenile offenders of each sex, the new Vancouver Children’s Aid Society for dependent children, the psychiatric diagnoses of prisoners in provincial gaols or jails, the problem of feeble-minded immigrants landing in the Port of Vancouver, as well as the Vancouver special class system for subnormal children. The CNCMH, headed by Dr. C.K. Clarke and Dr. Clarence Hincks, extended their thanks to the many people who helped by contributing to the provincial survey, including Mrs. Moody, Inspector J.S. Gordon, Miss Dauphinee, Miss Lindley, along with the principals and teaching staff of the Vancouver school system. The special classes were singled out by the CNCMH for their function as both a sorting mechanism and collector of feeble-minded students. Since Miss Lindley’s appointment as school psychologist in February, 1918, "rapid strides have been made" with the "most enlightened methods". Lindley in her remarks states that the Vancouver schools "followed to a great extent the plan so well worked out in the Seattle schools". In June, 1919, there were eight special class teachers, two manual training teachers, a special class supervisor (Miss Dauphinee), a clinical assistant (Miss Amos) and field worker (Miss Clark), for a total of fourteen personnel. Refer to Appendix I and the charts for 1918-1919/1919-1920. Testing surveys were the chief means of sweeping through the schools to detect feeblemindedness in school-age children. The special classes became linked to other institutional provisions for wayward youth such as the Children’s Court and Juvenile Court Detention Home. To Lindley the next step was the creation of a training school for the feebleminded which would "relieve us of many low-grade children" in the public schools in order to "increase our capacity for the higher grades". Such a training school was expected to open soon in order to accommodate the growing population of juveniles diagnosed as feeble-minded. Lindley ended her remarks to the CNCMH by stating she had tried "to infuse into my work the Vineland spirit" which meant the
principles of mental hygiene she had been taught through the eugenic field work of Henry Herbert Goddard. 56

Mental hygiene had impacted upon the public school, court, hospital and juvenile service systems of the province. The school system incorporated a detection system for mental and physical abnormalities, followed by specialized therapies. Dr. Clarence Hincks wrote in 1920 that such "defective children" were a drain on the teacher's time and their "restless disposition" sends the classroom completely "out of gear". Segregation and separation are the only mechanisms suited to such children as "efficiency is sacrificed" when they are left in the general school population. 57 Also writing in 1920, the Director of the Public Hospital for the Insane in New Westminster, Dr. Charles E. Doherty, wanted permanent "arrangements" for the "diagnosis of the mental states of school children, juvenile and adult delinquents, prostitutes, and unmarried mothers". A training school for mental defectives was urgently needed to deal with "many of these cases...to be found in the schools, in the jails, reformatories...maternity homes...and in the general community". Doherty reserved special praise for the special class system in Vancouver whose work should, in his view, be extended. The classes provided a valuable service by detecting those children who are feeble-minded and the minority of these who will "require prolonged institutional care". Doherty praised the present initiative of the provincial government to establish a subnormal boys' school at Essondale which would detain juveniles for "their mental health improvement (and) education". 58

Martha Lindley's role in bringing American mental hygiene to British Columbia before the CNCMH survey visit of 1919 has not been previously established. Upon her arrival in Vancouver Lindley began to work closely with the Local Council of Women who were the main political supporters of School Board Chairman, Irene H. Moody. In March, 1918, only one month after assuming her duties, Lindley published an article
in the magazine of the Women's Council, the Western Women's Weekly, entitled "The Deviate Child in the Public Schools". She advised the immediate removal from regular classes of those "misfits" that "do not profit by the teaching to which the larger group of children respond". Special classes which segregate these children was the modern answer to this dilemma, Lindley proclaimed, as only in such circumstances can the "specific abilities" of these children be developed "if they have any". It was all a matter of "good heredity" as "we are not all born equal" and only such special instruction can provide for such "individual development". 59 Lindley put herself forward to speak to the first convention of the newly-formed Child Welfare Association of British Columbia. She gave an afternoon talk in December, 1918, on the subject of "Community Control of the Feebleminded" in which she urged segregation in an institution "so that there would be no possibility of their producing more of their kind". 60 So well received were Lindley's remarks that the Association asked her to address the second convention in 1919 on "Modern Methods of Dealing with the Defective Child". Lindley seemed proud of the fact science had enabled psychologists to diagnose a child as feeble-minded and "not wait until he has socially run amuck before we do anything". However, she believed that even though Vancouver was segregating these children it was the "wrong way" as "the rest of the province is doing nothing". There must be "a general scheme" that "will help us to move forward together". Province-wide segregation was clearly Lindley's goal in that the real danger was social infection, for the feebleminded had the "power to affect every normal child with whom he comes in contact". 61 A follow-up discussion was led by Bertha Winn who proclaimed it was a well-known fact the feebleminded "constitute an enormous source of crime, indecency, poverty and unwholesome living in general". 62 In December, 1919, Lindley spoke to the University Women's Club on educational provisions for defective children in "different countries" that "opened the eyes of a great many club members
to a very urgent need in our own land". It was a great shock to all concerned when Miss Lindley resigned in January, 1920, to become Mrs. Lashley Hall. She was obliged to resign her position as married teachers could not be employed, except for widows. Lindley's short term of office had nevertheless altered many educational practices in Vancouver's schools. Mental hygiene practices were acquired through the voluntary professional development of special class teachers travelling to the United States, while support in Canada came from the medical establishment of the CNCMH. The general effect was to change the manner in which exceptional children were dealt with by the province's public institutions.

v. The Expansion of the Special Classes in the 1920s and the Criticisms of the Putman/Weir Survey of 1925:

In early June, 1919, an exhibition of craft and art works created by special class students was mounted by Miss Dauphinee at the School Board's main office. The special class exhibit in the "art rooms" of the School Board was described as an "educational feature worthy of wide public interest" by the Western Women's Weekly. It had been ten years since the special classes had been formed and the various products of the "sense training and muscle training" program such as hand-woven rugs, baskets as well as wood carpentry were on display for the public to see. It was an attempt to promote the social benefits of Dauphinee's special class system to a public largely unaware that such educational provisions even existed. Such special class projects, proclaimed Miss Dauphinee, helped to "train muscles in co-ordination, teach fingers to be nimble, eyes to read quickly and brain to respond to stimulus as it never did before". It was all a matter of mental challenges in Miss Dauphinee's educational program for children of the higher-grade moron category during the early 1920s. However, the real challenge to Dauphinee would actually be trying to preserve the special class system after the devastating criticisms of the 1925 Putman/Weir Survey of the School System.
The exhibition of "manual work" done by Special Class students held at the offices of the Vancouver School Board in June of 1919.

Source: Vancouver B.S.T. Annual Report for 1919, p.51
The basic problem for Josephine Dauphinee after the First World War was the lack of classroom space for her special classes. The work of classifying school children as feeble-minded continued unabated by the new psychologist, Ruby Kerr, who also studied under Dr. Henry Herbert Goddard in Columbus, Ohio, so that she could qualify for the position after the untimely departure of Martha Lindley. The low grade defectives of the Central School classes had been placed in a "custodial cottage" at Essondale, the new extension of the Public Hospital for the Insane built in Coquitlam. However, the 1920 Report of the Public Schools relates that although the past year "has further demonstrated the necessity for them" the work of the special classes has been "but little extended". There was a population "in the city of over 300 school-children who should have been receiving instruction in such classes". It was a severe lack of additional classroom space that "stood in the way" of special class expansion. In 1921 it was reported that despite the difficulties of finding classroom space, four more special classes were opened. Inspector J.S. Gordon wrote that:

It has been found that the removal of special-class children from the ordinary classes makes it possible to increase the size of the latter and do better work than could be done in smaller classes handicapped by the presence of subnormal pupils. The work now being done in Vancouver in the special classes is conceded by experts in such work to be of a very high order. I cannot speak too highly of the unfailing devotion to the duty of the members of the staff who are carrying on this important but trying work.

To Gordon it was simply a matter of school efficiency to segregate the feebleminded in special classes as the size of regular classes could then be increased once the burden of these subnormal children was removed. In Miss Dauphinee's report for 1920 she noted the addition of four special classes at several city elementary schools. The expansion in only a few short years is quite astounding. The yearly charts in Appendix I should be consulted along with the graph of Appendix II. From 1910 to 1918 there were only two special classes at Central School.
Between 1918 and 1919 the pupil focus changed from lower grade imbecile children to higher-grade morons as has been previously explained. During 1918-1919 the two classes were increased to five. In 1919-1920 seven more classes appear to have been created for a total of twelve. In 1920-1921 three more classes opened in September and two were added during the school year for a total of first fifteen and then seventeen special classes. In 1921-1922 the total of seventeen was increased to eighteen. These totals were obtained from annual provincial Reports of the Public Schools which contain tables for Vancouver detailing each school, the teachers, class size and curriculum data. The special classes are easily identified by their small pupil-teacher ratio of one teacher to an average of ten to twelve students. The only year that the classes are labelled as "special" is in the 1918-1919 annual report's statistical tables for Vancouver schools; thereafter it is only the small class size which distinguishes the special classes. This information was compared to statistical data in Miss Dauphinee's own yearly reports but the provincial tables for Vancouver schools are taken as the final source for the data in Appendix I. The same data was employed to create a graph of special class growth, Appendix II, and a record of pupil/teacher ratios in the special classes from 1910 to 1941, Appendix III.

In 1920 Miss Dauphinee complained that the Board's decision to close the Observation Class was "decidedly against my wishes" and the class should be "restored as soon as possible" to deal with pupils of the "higher grade moron type". They were being "returned to grade for lack of observation" and in fact they required more intensive study to diagnose. Dauphinee was trying to classify a new type of student population for the special classes, the higher level morons. These outwardly normal students would provide the raw material for the expansion of the special classes in the 1920s. Morons were preferable to children of the imbecile type which had dominated the special classes in the period before World War One as the moron could undertake more
sophisticated project work. In 1920 Dauphinee records that the first special class exhibit was mounted at the Vancouver Exhibition in late summer of that year "which excited favourable comment". A concert was given by the special class students on their recorders, cymbals and drums at King Edward Auditorium on December 14. During the year much new equipment had been purchased for the special classes such as six gramophones, several footballs, a sewing machine, and cooking utensils for food preparation lessons. Handicraft sales had helped to provide extra monies. The work routine and task-oriented approach to training was producing results as several students were being placed in shops or factories by the social worker but the absence of trades instruction as in the prevocational program for wayward children at Central School under Mr. J.A. Stuart was regrettable. (Consult Appendix I (1913-1914) for details of the prevocational program.) However, Miss Dauphinee was pleased with the progress special class pupils had made in mental concentration and following directions. It was all a matter of rigid training, in Dauphinee’s opinion, as "these children will never be leaders, and always will follow the orders of their 'boss', the discipline and training they have obtained is invaluable". 68 It wasn’t education but habitual training to work routines that dominated the curriculum of Vancouver’s special classes.

The statistics for 1921-1922 in connection with the special classes can provide some insight into what these classes were like and what was being taught academically. Below the table for 1921-1922 of special classes in Appendix I is a reading curriculum analysis for the special classes showing many pupils were reading in the first primer (37), the second reader (69) and the third reader (98). Only two pupils could handle the fifth reader. The total population of the seventeen classes was 275 students of which 182 were male and only 93 female. This sex ratio of males to females with a decided bias in favour of males (approximately two to one) is typical of any given population of
A tradition begun by Miss Dauphinee after the First World War was the August display of Special Class work at the Vancouver Exhibition, known today as the Pacific National Exhibition or P.N.E.. Notice the display contains various small wood projects, woven baskets, baskets of dried flowers, embroidery and even large pieces of furniture.

Source: Vancouver B.S.T. Annual Report for 1922, p. 61
learning-disabled students. Contemporary learning disabilities scholar, Janet W. Lerner, states that of the children diagnosed with a learning difficulty "they are four to six times more likely to be boys than girls". 69 During 1922-1923 the special classes were increased from 18 to 22 and two manual training instructors, male of course, were added to the staff. Mr. A.P. Tingley and Mr. C.A. Cameron conducted rotating shop lessons in schools equipped with the necessary facilities. A remedial class for students experiencing learning problems or having trouble adjusting to school routines was created under Miss L. Cotsworth. As can be seen in the chart for 1922-1923 in Appendix I, the pupil population of 250 was still weighted towards male students with 164 boys and 85 girls. Miss Dauphinee reported that "in the Manual Training classes, the older pupils have made couches, Morris chairs, lamps, gramophone stands, humidors, etc." She was pleased Miss Jean Cantelon had been made a permanent social worker in the Special Class Department and that the Detention Home class under Miss Jean P. Leach had been formed. Dauphinee noted the Detention Home "has pupils of all mental types" and this "seems to prove that exceptionally bright children often get into mischief. The fact they "finally end in Juvenile Court" is probably due to their not being challenged in school to the high mental level "which nature has so generously endowed them". 70 In 1921 a very large display of the products of the special classes was mounted for the Vancouver Exhibition in August. Miss Dauphinee was absent at an unspecified university taking summer courses and Miss Cantelon "took charge of the exhibit". In Miss Dauphinee's view there was still "the need for a central trade school for older pupils" as the special classes increased "more and more". 71 In fact the entire special class system was expanding too rapidly in the opinion of school officials and this would also be severely criticized in the 1925 Putman/Weir Survey of the School System.

In the early 1920s Miss Dauphinee and Miss Kerr, now the new psychologist, were publicly advancing the cause of special class
expansion. In February, 1922, they spoke to the Strathcona Heights Parent Teacher Association about the work of "The Special Classes for Subnormal Children". Their speech emphasized the fact that these classes helped such children "to support themselves when leaving school". In June, 1922, the two women spoke to the Child Welfare Association about the need for a "travelling psychological clinic" to locate feeble-minded children throughout the province. Also in June, 1922, the University Women's Club declared "there is a general approval of the existence of such classes" and advocated the extension of these special classes to any future Junior High School as was already the case in Seattle. In 1923 the "Mental Hygiene Committee" of the Vancouver Local Council of Women was formed by Mrs. Irene H. Moody with Kerr and Dauphinee as vital members. One of the committee's early resolutions was to advocate a training school for "mental defectives" who at present are a burden on the public schools or are inappropriately placed in the industrial detention schools. It was clear that Dauphinee and Kerr actively promoted not just the expansion of the special classes in Vancouver's school system but advocated mental hygiene measures that would affect the entire province.

In 1923-1924 the special classes stabilized at twenty-two and the pupil population at 313 which included 205 males and 108 females as one can see from the table for that school year in Appendix I. The remedial class under Miss L. Cotsworth was judged so successful that another under Miss H.M. Wright was created for normal children having learning problems at school and requiring remedial educational training. Miss Dauphinee reported for the year 1923 that she was pleased with the two full-time manual training instructors for the special classes but "we could obtain better results with more of this class of instruction". The curriculum for the special classes during the early to mid-1920s was very traditional and highly sex segregated. As was mentioned in the analysis of 1921-1922 statistical data, most students were reading at the third
grade level or below. Simple reading and arithmetic along with writing practice comprised most of the academic component of the curriculum. The boys spent about half of their time in manual training activities such as woodwork which could range from simple projects as cheese boards to furniture items, depending on their age. The manual "work for the girls includes simple cooking and house cleaning and sewing". Recently-purchased sewing machines were proving their worth, while girls did "cooking at home" and mended their own clothes at school. Miss Dauphinee reported: "Both boys and girls are given instruction in basketry, bead-work, toy-making, reed-work, knitting, painting, etc. and a Work Record is kept for each pupil so that we may know just what he or she has been able to accomplish during the year". On the next page a "special class time table" appears and the practical nature of the education is quite apparent.

Miss Dauphinee declared that in the special classes "the stress should be laid on manual, muscular and physical training, with the aim of a trade for a life work". "Habits" are what should be taught to these children, Miss Dauphinee declared, such as "cleanliness of person and clothing,...play in the open air,...not drinking tea or coffee, and...trying to be kind and helpful to others". Reading was linked to daily activities, arithmetic drills were replaced by games, and oral spelling was "discarded" because "spelling becomes a game too". Physical training should correct "bad habits of posture" while folk dancing would "do more to improve the little bodies than hours of uninteresting drill". All this is done, rationalized Dauphinee, because the "mental equipment" of these children "will never enable them to earn a living by brainpower and therefore need muscular training from childhood". This conception, the brain as a mental muscle, was taken from Edward Sequin who believed the brains of these children were underdeveloped and required exercise to become functional. In contrast the eugenic argument of inborn, natural mental limitations has caused some historians to
<table>
<thead>
<tr>
<th>Time</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.00 to 9.15</td>
<td>Opening exercises.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.15 to 9.30</td>
<td>Morning talk on subject of day's work.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.30 to 10.00</td>
<td>Manual work in cutting, painting, pasting, crayons, etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.00 to 10.30</td>
<td>Correlated with previous period.</td>
<td>Arithmetic.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.30 to 10.45</td>
<td>Written language, Spelling.</td>
<td></td>
<td></td>
<td>Recess</td>
</tr>
<tr>
<td>11.00 to 11.15</td>
<td>Spelling</td>
<td>Written work or memory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.15 to 11.45</td>
<td>Reading correlated with morning work.</td>
<td>Corrective physical drill.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.45 to 12.00</td>
<td></td>
<td>Lunch</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.15 to 1.20</td>
<td>Roll call and weather observation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.20 to 1.50</td>
<td>Dramatization, story, game, geography or history (oral).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.50 to 2.00</td>
<td>Singing, folk-dancing, or physical drill.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.00 to 3.10</td>
<td>Manual work, bench, clay, weaving, sewing, basketry, knitting toy-making, etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.10 to 3.15</td>
<td>Cleaning up and closing exercises.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The schedule of the Special Classes for a typical instructional day in the 1920s. Notice the emphasis is on manual work and little time is devoted to formal remedial education. However, the schedule bears a remarkable resemblance to contemporary Resource Rooms for children with mental disabilities— with one noticeable difference, life and social skills are very important in the modern special education curriculum while in this schedule the habituation to work tasks seems to dominate.

suggest the special class curriculum was in fact designed to be inferior. The fatal flaw with such special classes was not their curriculum but their cost and Miss Dauphinee recognized this fact from the onset of her supervisory career. The special classes needed certain equipment such as manual training benches, small tables, small desks, tools and material for handwork. However, the fact "there are only fourteen pupils and the teachers are paid more than regular teachers" served to raise the cost of educating these special class pupils significantly. In conclusion Miss Dauphinee stated: "We feel however that the cost of any work is small, when viewed in dollars and cents, which is a preventative of pauperism, vagrancy and crime". The cost of educating subnormal children in special classes was justified as the necessary imposition of mental hygiene as supported by the scientific logic of eugenics. Society was being saved from the high social costs it would incur if these subnormal children were allowed to reach adulthood untrained and likely to become career criminals.

In the 1920s the special classes increased at an exponential rate as ever more feeble-minded students were detected in the school population. In 1918-1919 there were five, in 1920-1921 seventeen, in 1922-1923 eighteen and by 1924-1925 twenty-two, as shown on the graph of their growth in Appendix II. In June of 1925 there were 303 special class students composed of 201 males and 102 females as can be seen on the table for 1924-1925 in Appendix I. Of the 303 pupils, testing revealed 296 to be "retarded from two to seven years". Teachers of special class students were encouraged to read new works on subnormal psychology and juvenile delinquency in "our fine library in the Community Room". Several teachers had also taken "summer courses at various Universities, specializing along this line". The special classes with their expert teachers were a costly educational project and it was gradually being recognized by the School Board that such classes were becoming prohibitively expensive. In a May 4, 1922, address to the
School Board, J.S. Gordon spoke of "certain difficulties" which took place in the last school year. Point four on his list was the special classes and the suggestion that the expenses connected to their operation be controlled. Gordon stated:

The difficulty I experienced during the past year was to prevent the cost of these special classes being increased. The only possible means of retrenchment is to be found with increasing the size of the classes. An effort will be made to do this for next term. ... I recommend that she [Miss Dauphinee] reorganize her classes ... With finances as they are now and more likely to be for some time a decrease rather than an increase in the number of special classes will be necessary.

These economy measures had little actual effect on the special classes which by 1924-1925 were twenty-two in number and included twenty-two teachers, two itinerant manual arts instructors as well as four administrative personnel. Retrenchment had not occurred in any visible manner. When Putman/Weir published their famous 1925 Survey of the School System the special classes received an unwanted degree of negative attention. The authors began by stating the "pride in achievement" of the subnormal classes would be "justifiable if only we could shut our eyes to its cost". Such humanitarianism "dips deeply into the ratepayers' pockets" and could be conducted for "half the cost under a more businesslike system". The cost of the twenty special classes and two manual training instructors listed was $53,300 or $256 per pupil per year for the 208 students found in the program during October, 1924, while an ordinary classroom pupil cost $65.00 per year. The average attendance per class was "unnecessarily low" and the other "excessive cost is the system of organization which adds a psychologist, a supervisor, a social service worker, an Observation Class teacher and two special manual training instructors to the nineteen regular teachers who have an average class attendance of only eleven pupils each". While Putman/Weir saw the psychologist and social service worker to be "necessary", the supervisor as well as Observation Class teacher were
"wholly unnecessary". The subnormal classes were "based on an esoteric philosophy" which propounded that "there is something mysterious and very difficult to learn about the detection and treatment of feebleminded children". The professionals who taught Vancouver's subnormal children carefully guarded their "mysterious secrets". The "special supervisor", Miss Dauphinee, "spoon-fed" her teachers who "are not even competent to observe and report upon a pupil who has been given the Binet-Simon tests and found to have an intelligence quotient of sixty-eight or seventy-two".

Putman/Weir saw the entire system as faulty as it required a special class supervisor and Observation Class teacher. If the psychologist could train special class teachers to administer intelligence tests, great savings could be realized. Rather than "nineteen classes in fourteen centres", there ought to be three centres located at "strategic points". For "every dollar spent on car fares for pupils would save $5 to $10 in teacher salaries", Putman/Weir reasoned.

Elsewhere in the Putman/Weir Survey it was recommended that a Bureau of Measurements be established "under the direction of a successful educationist, who is also an able psychologist". This new agency would extend intelligence testing so that "promotions could be scientifically determined and applied in all schools of the city". The special classes would be one component of a larger educational strategy to classify children on a scientific basis. The social crusade for mental hygiene that Miss Dauphinee had so eloquently spoke of in her 1918 speech "An Appeal for the Feeble Minded" was now being recast into a new strategy for the efficient and scientific rationalization of the entire Vancouver school system. It was no longer an emotional appeal that the Bureau of Measurements would offer for segregating subnormal children, but rather the efficient preparation of these children for industrial society. Two recommendations concerning the Vancouver school system dealt with the compulsory attendance of selected children in special training classes
for the subnormal. 86 Putman/Weir were in complete agreement with the segregation strategy for subnormal children but for very different reasons than those held by Miss Dauphinee.

vi. The Special Classes under the Bureau of Measurements during the late 1920s and the Great Depression:

When Robert Straight became head of the Bureau of Measurements in 1927 it was with the full mandate of the Putman/Weir Survey to bring scientific efficiency to Vancouver's schools. Straight had done several years of summer course work at the University of Washington in Seattle on the new methods of scientifically assessing children utilizing intelligence tests. Straight was born in 1886 in East Florenceville, New Brunswick, and was educated at the Provincial Normal School in Fredericton. He came to Vancouver in 1905 and taught at Kitsilano as well as Central School before becoming principal at Grandview School. After he became principal of Tennyson School in 1914 Straight aligned himself with a progressive group of like-minded administrators who also took course work at the University of Washington. 87 Robert Sparling, principal of Aberdeen School and Herbert Baxter King, principal of General Gordon School, were his close associates. The three men were "among the most active proponents of an up-to-date curriculum and the application of new scientific methods in education". 88

Robert Straight had initiated one of Vancouver schools' most important educational experiments using scientific management techniques to teach children, the platoon school. Platoon schools were organized so that students rotated between classes with specialist teachers duplicating lessons. More pupils could be taught in less space and with fewer teachers. In September, 1924, Straight used a $3,380 grant to structurally alter Tennyson School to create a twenty-two class building with forty pupils in each class, where formerly only sixteen such classes had existed with a smaller pupil population. The report of J.S. Gordon notes that "given a principal with a genius for organization and a clear understanding of platoon school methods" the future of such scientific
school organization in Vancouver looked promising. In 1925 the platoon system was also introduced at Hastings School. It was Straight’s work on educational efficiency and his testing expertise that lay behind his appointment in 1927 as head of the Bureau of Measurements. He began with a tour of "a number of cities in Canada and the United States" which would enable him "to organize the work of the Bureau along lines...found most profitable by other cities". One of his excursions was to the Ford Plant in Dearborn, Michigan, which tends to confirm his interest in Taylorism and industrial efficiency. Thus Straight would attempt to introduce scientific efficiency into Vancouver’s schools.

After the first year of the Bureau’s operations, J.S. Gordon noted that its work in the area of statistical data gathering and district-wide testing was comparable to "similar work in other progressive school systems". The testing findings have "been of estimable value in properly evaluating the relative abilities of various groups of pupils" from "those beginning school" to "those entering high schools". Gordon stated that such "reliable diagnoses of mental capacity of pupils, obtained through scientifically conducted tests...ensures better classification for teaching purposes". The Bureau used testing results to "aright students in the choice of secondary school courses" through vocational guidance before entering high school. It was actually the first formal attempt to track or stream pupils into programs in the new junior high schools then being created. In his first year Straight gave 381 pupils individual intelligence examinations as a result of being "discovered by means of group tests". It was Ruby Kerr who conducted most of the individualized testing and home investigations of 614 cases were done by Miss Cantelon who remained as a social service worker. The two main thrusts of Straight’s early efforts as head of the Bureau of Measurements were to conduct mass survey testing for screening as well as tracking purposes and begin to gauge the retardation problem across grade levels. Retardation rates or the number of overage
pupils in each grade level was seen as being caused by system inefficiency.

Tracking and streaming could move overage elementary pupils into vocational programs in the high schools and arrest the high dropout rate. This had been a concern since Leonard Ayres' classic volume *Laggards in Our Schools* (1909) launched the efficiency movement in American education. Straight imported many American achievement as well as intelligence tests into the Vancouver school system such as the Detroit Intelligence Tests, Thorndike-McCall Reading Tests, Haggerty Reading Tests, Woody-McCall Mixed Fundamentals of Arithmetic Tests, Monroe's Standardized Reasoning Tests in Arithmetic and, most importantly, the Terman Group Test-Form A. As the table on the next page clearly shows, all pupils in grade 8 were tested in June, 1927, and those recommended to high school were clearly screened by IQ into either vocational or academic streams. Those leaving school and not recommended to high school had low IQ ratings. Straight was a mental hygienist but his was a more functional view of intelligence testing as a management tool to promote school efficiency. He never mentioned the terms feeble-minded or subnormal in connection with students of low IQ but merely suggested children who scored below IQ 95 "should be given prevocational instruction". Clearly Straight was not a believer in eugenics as was Dauphinee but rather wished to create a better means to scientifically manage the pupil population.

Straight supported a "clinic for problem cases" from the new junior high school population who scored low on mass screening tests. Overage students in elementary schools should either be placed in vocational programs or receive night school after fourteen years of age. Of the special classes, Straight complimented the "capable supervision of Miss A.J. Dauphinee". The special class work should be "carried on much the same as in the past". However, Straight wanted the School Board to "seriously consider increasing the size of the classes".
As Table 5 from Robert Straight's report for 1927 clearly shows, IQ tests were being used to justify the recommendation process. Those promoted or recommended to High School in the "General", "Technical", "Home Economics" and "Commercial" streams had significantly higher IQ scores than those not recommended to High School. The largest average IQ rating for students 15 - 16 years not recommended to High School was 90 - 94. Compare this to those recommended in the Commercial stream whose largest average IQ rating is 105 - 109.

Source: Vancouver B.S.T. Annual Report for 1927, p. 62
Straight had seen special classes in Detroit with as high as twenty-six students. Certainly he believed junior high school classes for special students could contain a higher number of pupils. Special class high school students could rotate between an academic focus while another "group was taking shopwork". Straight believed a platoon method was appropriate for the special classes which would shortly be formed at the junior high school level.

The special classes in the 1925/1926 school year contained twenty-two classrooms with four administrative staff. In 1926/1927 there was an enrolment of 325 pupils in twenty-two classrooms. In 1927/1928 there were 370 pupils and the two manual training teachers were moved to the new junior high classes at Kitsilano and Templeton. In 1928/1929 there were eighteen elementary special classes and two junior high school classes for a total of twenty classes. The academic classes in junior high school were taught by Miss C.A. Mackenzie at Kitsilano and Miss M.K. Anderson at Templeton; both were veteran elementary special class teachers. Mr. C.A. Cameron was shop instructor at Templeton and Mr. F.W. Templer taught shop at Kitsilano. Mr. Cameron had been hired in the early 1920s to be a shop instructor for the elementary special classes, while Mr. Templer replaced Mr. A.P. Tingley who retired in the late 1920s. This information is displayed in the relevant school year charts in Appendix I. The pupil/teacher ratio rose from 13.5 to 1 in 1925, to 18.5 to 1 in 1927 and 20.5 to 1 in 1928 due to the increasing enrolment in the elementary special classes. This was somewhat eased in 1929 when a large group of elementary special class pupils was moved into the junior high school system. These statistics can be seen in Appendix III which concerns pupil/teacher ratio levels. The graph of special class growth in Appendix II clearly shows how the initial opening of junior high special classes caused a sudden drop in elementary totals. Miss Dauphinee wrote at the end of 1927 that "the senior classes" worked on a "two to one basis" in that two hours of academic work was balanced by
"one hour of industrial work". However, despite the expansion into the junior high system, Miss Dauphinee lamented that "the east end of the city is not being served by enough classes to care for its subnormal pupils".

Miss Dauphinee was now testing all special class students with the Stanford Achievement Tests and the Pressy Attainment Tests. Progress cards were being kept on each student's scores over several years. The influence of Straight was obvious in this respect. Dauphinee was again busily showcasing the economic value of the special classes to the community through such events as the spring Sun Cooking Contest and the Vancouver Exhibition in August. Also a fall sale of crafts made an impressive $265.00 but the overall purpose of the special classes was more "intangible". Dauphinee believed it was "a sense of honor, obedience, pleasant ways, punctuality, diligence...which...is more our aim to teach". In February, 1927, "the Department of Special Classes for subnormal pupils was included in the Bureau of Measurements". This loss of autonomy actually made little difference despite the negative verdict of the Putman/Weir Survey which clearly contained harsh criticisms of the special class system. Straight wanted to not only continue the elementary special classes but also advocated their expansion into the junior high schools. An efficient school system had to have segregated classes in order to properly train subnormal pupils, Straight reasoned. However, this was in stark contrast to Miss Dauphinee's attitude that she was actually carrying out a social duty in saving the subnormal pupils from a terrible criminal fate. Straight wanted a classification system for pupils and did not regard the special classes as a social safeguard.

In 1928 Mr. T.A. Boroughs, Assistant Inspector of Schools, wrote an essay on the history of Vancouver schools from 1886-1928. Boroughs was celebrating forty-two years of progress in Vancouver schools and he observed that since the first class of subnormals had opened in
1910 they had spread beyond the elementary to the "industrial classes of the junior high schools". The instruction such pupils received in manual work "will best fit them to earn a living in the after years". Boroughs noted with pride that the new Bureau of Measurements was actively testing "the intelligence estimate of all pupils alike, normal, subnormal and supranormal". Principals could now "proceed by scientific methods in the classification, grading, teaching and management of their pupils".

Robert Straight continued to conduct survey testing for pupil grade placements, while Miss Kerr tested 481 pupils with the Stanford-Binet individual examination. However, Dauphinee noted that the special elementary classes were reduced due to a "shrinkage of school population" at Central School as business development replaced residential housing in the emerging downtown core. The oldest pupils moved into the new junior high classes at Kitsilano and Templeton. The two teachers, Miss Mackenzie at Kitsilano and Miss Anderson at Templeton "had many years of training in special class methods". The boy and girl groups rotated between such subjects as Music, Art, General Science, Manual Training and Home Economics. The median IQ of the two classes was an average of 70. Dauphinee still regarded her work as more than merely the functional segregation of subnormal pupils for training purposes. She wrote: "This work the special class teachers have undertaken with subnormal pupils with the general aim of making self-respecting and - as far as their abilities permit - self supporting citizens". She hoped to extend psychological examinations to all pupils who, if found to be of IQ 75 or less, could "get the training that will enable them to fit into the community industrially and socially". The new junior high classes of subnormal students had a limited academic range as most work in reading, spelling, mathematics and social studies ranged from grade three to six level. Despite Dauphinee's hopes of making the special classes an integral part of the new junior high schools, the lives of the students enrolled largely "centered around the classroom and their own teacher",
Central School was opened in 1890 as an elementary school. It was located in the block between Cambie and Hamilton streets and faced Pender street. It was used as a high school from 1890 to 1893 and then reverted back to an elementary school. It was here in 1910 that Vancouver's first Special Class was opened. However, by the late 1920s its residential population had declined as the area became the commercial focus of the city. Central School was demolished in 1948.

As the Great Depression approached in 1929 testing continued with Miss Kerr conducting over 500 individual examinations using the Stanford-Binet tests, while over 242 specifically selected classes were given group testing. Miss Dauphinee proclaimed the success of "Division 35", the two junior high subnormal classes which were at first seen "largely as an experiment" by the School Board. Division 35 contained two very large groups of pupils at the two new junior high schools, each teacher "having forty and forty-two pupils, respectively". Social maladjustment was most noticeable among the boys as opposed to the girls. The actual number of special classes rose by two as the subnormal classes at John Norquay were absorbed when South Vancouver's schools were merged into those of Vancouver City at the end of the 1928 school year. The average class size was 14.7 pupils per class in elementary and 369 pupils were registered. If Appendix I for 1929-1930 is consulted the array of special classes in 1929 was considerable with three open air classes and the prevocational class at Strathcona still in operation. Miss Dauphinee had been approached by "a number of parents...in regard to a special class at the Lloyd George School". She looked forward "to a new year of work for the subnormal children" of Vancouver schools with an obvious view to an ever-expanding special class system. The Depression would force her to place these plans on hold.

However, the impact of the Depression was not immediately felt by the special classes as their number did not actually decline to fifteen elementary classrooms until 1933. The two high school classes for subnormals remained stable in the Depression. In 1930-1931 the special classes stood at nineteen elementary and two at the junior high school level, according to data for that school year in Appendix I. A new class was created at Lord Tennyson under a Miss Edith Unsworth, while two "senior special pupils" classes were added at the John Oliver High School MacKenzie Annex. Over crowding at the MacKenzie Annex forced the
classes to be relocated at MacKenzie and Van Horne Elementary Schools. There were 412 to 416 elementary pupils with twenty-three teachers and 81 subnormal pupils in junior high school under two teachers. Ruby Kerr examined 479 pupils with the Stanford-Binet tests in 1930, 521 in 1931 and 474 in 1932. The classification of subnormal pupils seemed almost unaffected by the Depression and in January, 1932, the School Board Chairman, Annie B. Jamieson, declared that the testing work of "the Bureau of Measurements, by placing the child where he can best develop saves untold misery to children".

Even though ordinary class sizes had to rise in the Great Depression as less senior teachers were laid off and classes amalgamated despite a highly stable enrolment, the special classes seemed unaffected. Even at the end of 1931 Miss Dauphinee was reporting that the usual array of craft work and wood projects were sold at the annual Christmas sale which realized "over Two Hundred Dollars", while "our usual exhibit at the Vancouver Exhibition proved attractive and worthwhile". There were now twenty-one elementary special classes "with two additional double classes for senior special pupils fourteen years old and older" at Kitsilano and Templeton Junior High.

The end to expansion of the special classes did not actually happen until the worst year of the Depression, 1933. The data for school year 1932-1933 in Appendix I shows dramatically the cuts in special class services. Classes at Tennyson, Strathcona and Dawson Schools "were combined into one". Miss J.M. Cantelon was made a special class teacher and the social service worker position was disbanded. The longstanding class of pupils from the Detention Home under the supervision of Mrs. J.P. Leach at Hastings School was closed and given to civic authorities to manage. The classes at Laura Secord and Beaconsfield were combined at Laura Secord Elementary. The elementary special classes during the 1932/1933 school year were reduced by five from twenty to fifteen, while the enrolment actually dropped from 430 pupils to 363 pupils, although class size rose only slightly from 15.2 per class to 16.2. Miss
Dauphinee could only state that:

The closing of these classes undoubtedly worked a hardship on subnormal children of the city. If 2 per cent of the school enrolment is mentally inferior, then we were caring for a bare 50 per cent of the subnormal pupils. 108

Her concerns were still not for economy but mental hygiene and the social effect of the feebleminded upon the greater good of society. In a bold statement to conclude her report for 1932/1933, Miss Dauphinee revealed her adherence to eugenic fears about the criminal tendencies of the feebleminded when she wrote:

Since the inception of the first class in 1918, there has been a steady growth, and follow-up work has revealed, from the standpoint of citizenship particularly, the remarkably small number of special class pupils who embark on a career of crime. 109

In a gesture of fairness the School Board reduced the salaries of Miss Dauphinee and Miss Kerr by $200 each per year. In earlier and more prosperous times they had seen fit to raise one woman's salary to the level of the other in order to avoid professional discord. Robert Straight fared even worse as his directorship of the Bureau of Measurements was declared a half-time position. 110 In 1934 he was finally given a half-time school inspector's position to restore his salary level.

However, the most telling statistics for special class cutbacks during the Depression are found in the Report of the Public Schools for 1932-1933 in the comments of J.S. Gordon on Vancouver's schools. The statistics clearly show how staff levels were held firm in the special classes from 1931 to 1932 while regular classrooms were at a distinct disadvantage. Elementary "regular" classes had 27,434 pupils in 1931 which decreased to 27,002 in 1932. There were 744 teachers in 1931 and 36.87 pupils per teacher, a ratio more than double that of the special classes. Elementary "special" classes had 529 pupils in 1931 which decreased to 523 in 1932. There were 32 teachers in 1931 (16.53 pupils per class) and 33 teachers (15.85 pupils per class) in 1932.
There had actually been an increase in special class teachers (+1) and a decrease in their pupils per class of 0.68 of a pupil. In February, 1933, over 1,092 six year olds entered school but only eight new teachers were appointed or recalled. The report records that in March "the Board decided to close eight special classes". Open-air Classes, Preventorium Class, Detention Home Class, Crippled Children's Class, the Hospital Class, Sight Conservation Class and a number of other special classes for the various types of exceptional children were closed. The provincial government reversed the most contentious class closures which could provoke public outrage, such as the Sight Conservation and Crippled Children's Classes, but as the School Board Chairman reported, "this aid is only temporary". In closing some special classes and reducing the subnormal classes, the Vancouver School Board held out to the very depths of the Great Depression. It can be concluded that many School Board officials, such as 1931 Chairman Annie B. Jamieson, shared Dauphinee's opinion of the social importance of special class work for subnormal pupils. When Jamieson stated that "placing the child where he can best develop; saves untold misery to children" she was supporting a humanitarian form of segregated education. It took the worst years of the Depression to curtail these humanitarian measures in the face of pressing financial hardship.

However, in the depths of the Depression Josephine Dauphinee was to achieve her greatest notoriety with the passage of the Sterilization Act of 1933 by the provincial legislature. The provincial government also gave a firm commitment that the old Provincial Hospital for the Insane in New Westminster would be rededicated as a training school for subnormal children. The effort to secure these social measures for the feebleminded had actually started in 1923 when Irene Moody brought Kerr and Dauphinee together through the Mental Hygiene Committee of the Vancouver Local Council of Women as has been previously noted. The first draft resolution on forced sterilization of the
subnormal is found in a January, 1925, letter from the South Vancouver Women's Institute requesting more information on the matter. By June, 1925, a full resolution was drafted by the New Westminster Local Council of Women which asked that "a law be passed making sterilization for both sexes of the mentally deficient lawful". The resolution was refined and support gathered from the Y.W.C.A., Vancouver Nurses Association and Canadian Daughters' League. By 1927 Dauphinee invited Dr. D.M. LeBourdais of the Birth Control League of Canada who was lecturing at the Canadian Club in Vancouver on the "Social Control of Mental Defect" to speak before the Vancouver Women's Council. In March, 1927 a move was finally launched to petition the provincial legislature to pass a sterilization bill based upon the 1925 resolution. This effort failed and in June, 1929, a document signed by Ruby Kerr, Josephine Dauphinee, Irene H. Moody and the President of the Vancouver Local Council of Women, Mrs. J.H. Kirk, was presented to the Honourable S. L. Howe, Provincial Secretary. There were four resolutions which encompassed creating a psychopathic hospital, regularizing grants from the Education Department for special classes, building a provincial training school for the feebleminded and instituting the supervisory guardianship provisions as per the 1928 Royal Commission on Mental Hygiene's recommendation which would authorize sterilization procedures. Societies which endorsed the resolutions varied from the Elks, Gyro Club, Royal Canadian Legion, Y.M.C.A., University Women's Club, Rotary and Kiwanis Clubs, Child Welfare Association and several local chapters of the United Church. There were thirty-nine groups in total with a membership of "15,943+".

The Provincial Secretary did not reply until May, 1930, and merely pledged "to co-operate ...towards the attainment of a common end". Finally in July, 1933, the Sexual Sterilization Bill was passed under Premier Tolmie, a stockbreeder, which, as Angus McLaren notes, is ironic as North American eugenics began as an offshoot of the American Breeders Association. Dr. J.G. McKay, head of New Westminster's
Hollywood Sanatorium, claimed in the popular press that the province's doctors were fully supportive of the bill. 115 The creation of a training school for the subnormal was called for by Dauphinee as early as 1930 when she reported that the old mental hospital in New Westminster "is now being renovated and the building made suitable for the training of unstable and low-grade subnormal children". This was "a forward step in Mental Hygiene work in this Province". 116 In October, 1931, Dauphinee, "through the kindness of Dr. A.L. Crease", was allowed to tour the "new Home for the Feeble-Minded" with a group of special class teachers. The population of feeble-minded adults, over three hundred, was moved permanently to the Essondale site in Coquitlam and finally separated from the children. A school and trade shops were made available to train the feeble-minded children. 117 Dauphinee may have suffered some temporary setbacks in the Vancouver special class system during the Depression but two of her most cherished goals for mental hygiene were finally realized.

vii. Recovering Momentum in the Vancouver Special Class System During the Late 1930s and the Retirement of Josephine Dauphinee in 1941:

Between 1934 and 1935 the School Board "restored some of the services eliminated in 1933". There were now eighteen elementary special classes and the average class size was 17.4 in 1934 and 17.2 in 1935. Dauphinee reported that "I have seen the work of supervision in Special Classes change gradually". Social service work occupied her more as she collected clothing and goods for the needy families of feeble-minded pupils who refused relief. She stated that as a "consequence, I have less time to spend in the classroom". The two high school classes "have been a great boon during these bad years, although the accommodation is taxed heavily". The goal of the special classes was still social rehabilitation in Dauphinee's mind as "a large percentage make good citizens". 118 There is little doubt that she remained faithful to her social mission to save the feebleminded from both themselves and society even near the end of her career. An examination of the tables for
1934/1935 and 1935/1936 in Appendix I shows a slight fluctuation in special class population for subnormal pupils but the net effect does not impact upon the eighteen elementary and two junior secondary class totals.

The attitude of the Vancouver School Board seems to have been to designate all classes that did not teach the standard curriculum and had small numbers of students as "special". Eventually everything from classes for the blind to adults learning English became part of Miss Dauphinee's special class system. Her involvement with those other than the subnormal special classes is difficult to ascertain. This can be seen in 1936 when the Bureau of Measurements testing program noticed "a number of non-English-speaking pupils applying for admission to Strathcona and Seymour Schools". There were "fourteen Yugo-Slavs, seven Chinese and eight Japanese" who formed the basis of an English instruction class located at Macdonald School. The students were "eager to learn" and made "good progress". Dauphinee does not specify if the English instruction classes were under her personal direction. Also in 1936 the impact of progressive school reform in the area of curriculum practices is noted by Dauphinee but this "new curriculum is not new to us, since subnormal children learn through doing". There was still an annual Exhibition display in August and craft sale in December which Miss Dauphinee continued to organize. As of January, 1936, there were sixteen elementary and two junior high classes. The special classes held 350 pupils with an average of 16.9 per class. However, in September, 1936, an already over-populated Templeton faced a barrage of special class students after their failure in the "June examinations". As is noted in Appendix I for 1936/1937, a Macdonald extension class was created for a group of boys who would do academic as well as manual work. "A male teacher was provided" for the purpose by the School Board.

In 1937/1938 little changed in the special classes as there were still sixteen elementary classrooms with an average pupil-teacher
ratio of 16.42 to 1 in 1937 and 16.17 to 1 in 1938. The junior high classes at Templeton and Kitsilano were still very large containing roughly forty pupils each and a half class of twenty boys was created at Templeton. An English instruction class was moved from Mackenzie to Tecumseh School while the Seymour class "continued to be well filled with youth who had entered the Dominion from Southern Europe". The teacher turnover rate in the English instruction classes was high as two of three teachers had soon moved on "to more responsible positions". Dauphinee continued to praise the special classes as she noted that the two junior high groups had entirely on their own taken charge of all paper drives at their schools in 1937 and 1938. She seemed to delight in the social transformation of subnormal children through the rather utilitarian educational program of the special classes.

In her final three years as Special Class Supervisor Dauphinee saw an almost complete restoration of the special class system to pre-Depression levels. According to the tables for 1938/1939, 1939/1940 and 1941/1942 in Appendix I the elementary classes rose from sixteen in 1939 to seventeen in 1940 to eighteen in 1942. The junior secondary classes also expanded as there were two classes at Kitsilano by 1942 and one still at Templeton. In 1940 a new senior pupil class had to be opened at Dawson School while in 1941 a senior class closed at Seymour but was reopened at Macdonald School. Another junior class had to be opened at Selkirk School in 1942. The war caused "European immigration to cease" and the attendance in the English instruction class at Seymour dropped from thirty to eighteen thus the "need for this class may be over". The appointment of Dr. C.H. Gundry in 1939 as mental hygienist (psychiatrist) was greeted by Dauphinee with great approval as his "clinics for problem cases" had the effect of immediately dispatching two girls to the mental hospital. Miss Dauphinee pointed out in her 1939/1940 report that her work was being noticed by such outside authorities as Trustees from Victoria, Nanaimo and Chilliwack who have
taken an "interest in our work for subnormal pupils". The special classes had received visitors from "the East" (Eastern Canada) and "American teachers from Seattle, Everett, Bremerton" as well as classes in Public Health/Social Service from "our own university". The special classes had the honour of creating "a nicely dressed window in the B.C. Electric store at Granville and Dunsmuir Streets, for Education Week" in 1940. There were also abridged books coming available for slow readers such as the Washburne readers from Winnetka, Illinois. In fact reading theory was beginning to impact on special class instruction as "Teaching Reading to Slow-Learning Children" by Kirk "proved a good book for special class teachers". Yet Dauphinee remained convinced it was her handwork curriculum that would best prepare "them to earn a livelihood".

When Josephine Dauphinee retired in June, 1941, at the age of 66, it was "after many years of outstanding service", wrote her successor Edith Unsworth. Six additional teachers retired from the special classes in 1941 along with Dauphinee. By September, 1941, there were eighteen elementary special classes and three junior high classes. The boys' class at Templeton Junior High closed in 1942 as all the pupils found war work. Unsworth was a definite departure from Dauphinee even though she wrote that she wished to thank Miss Dauphinee "for the guidance which [she] so willingly gave me". She represented a new type of specialist teacher dealing with subnormal children, the special educator. Unsworth wrote an article for The B.C. Teacher magazine in 1937 about the use of new ways to teach reading to children who are mentally retarded. Drills were useless with backward children as they had a very limited attention span. Games to "secure the acquisition of correct eye-movements are important". Phonics is "not feasible" with these children, she wrote, but tracing the "word with coloured chalk while the word is being slowly sounded is helpful". The key to teaching reading to mentally handicapped children, to Unsworth, was "auditory and visual
stimulus". Using the latest Orton methods, Unsworth employed sand trays to trace letters, name cards on objects and word games to review previously learned material. This article is significant in that it shows that the advances made in the growing field of remedial education by reading theorists such as Kirk and Orton were being promoted by Unsworth. Unlike Dauphinee, Unsworth was not on a social mission to save feeble-minded children; she wanted to use newly developed educational techniques to teach mentally handicapped children rather than merely habituate them to the routines of handwork. It was actually the first appearance of what would be called by the early 1960s, special education.

viii. Conclusion: Miss Josephine Dauphinee's Last Words:

The question still remains, at the end of Josephine Dauphinee's career did she still adhere to a dogmatic eugenic view of subnormal children as a genetic threat to society that required their educational segregation and, if needed, forced sterilization? One common assumption about social movements such as eugenics is that they tend to moderate over time. Dauphinee's yearly reports always stressed purely humanitarian motives for the special classes. The passage of the Sterilization Bill in 1933 and a provincial government commitment to a training school for the care of subnormal children appeared to end Dauphinee's political involvement with the Mental Hygiene Committee of the Vancouver Local Council of Women. However, a series of three instalments Dauphinee wrote for The B.C. Teacher magazine in 1939, entitled "Glands and Our Pupils", suggest her views about some children being physiologically flawed survived intact until she left teaching. Reading problems, poor attention spans, distracted behaviours, hyperactive behaviour, poor memory, being easily tired and especially displaying a lack of mental alertness were due to gland problems, she insisted. A lack of calcium in a child's diet could cause him to become "a non-concentrating, irritable individual". Poor learning and mental
Figure 17:

Business and Professional Women Give Highest Office to Teacher

Miss A. Josephine Dauphinee

A striking photograph of Miss Josephine Dauphinee which appeared in The B.C. Teacher magazine of June 1928. The occasion was Miss Dauphinee's appointment as the president of the Vancouver Business and Professional Women's Club. She would later become a national president of the same organization in the 1930s. Miss "Jo" was described as a person of "vision, enthusiasm and a magnetic personality".

Source: The B.C. Teacher, Vol. 7, No. 10 (June 1928), p.46
dullness could be signs of hypothyroidism. Reading problems could be due to "a pituitary deficiency". Poor eye movement and fatigue in reading could be due to pituitary problems. All this was because Dauphinee had uncovered another simplistic explanation for subnormality in children much like the Weismann theory of Germ Plasm Continuity some forty years before. She wrote: "Recently an authority on gland therapy said in my hearing that medical care was needed in 95 per cent of educational failures". 125

In her second instalment of "Glands and Our Pupils", Dauphinee revealed her source of information, Dr. Florence Mateer's book, Glands and Efficient Behaviour. The thesis was amazingly similar to contemporary notions of hyperactivity in that physiological disorders afflict "girls and boys who labour under just such difficulties through their school years, getting into scrape after scrape, antagonizing parents, teachers and even Juvenile Court officials". Thus "the fault may lie in a defective glandular system", reasoned Dauphinee, and metabolism tests would reveal the facts of this matter. Glands, if left uncontrolled, lead to delinquency and criminal behaviour in children. Dr. Mateer's book points out that low IQ scores in children have a glandular basis, Dauphinee declared, and "if given proper glandular treatment" they "may be put on the road to educational and social salvation". 126 In her third "Glands and Our Pupils" instalment, Dauphinee openly called for a "gland specialist" to be appointed by the Metropolitan Health Board to "survey our school children" and use gland extracts "when need arises". 127 Eugenics with its genetic predetermination had been replaced by gland malfunctions in Dauphinee's mind. The search for a broad, causal explanation of varying mental abilities in children and the struggle to save them from their natural afflictions continued to preoccupy her until the very end of her career.

In May, 1941, Josephine Dauphinee received the Fergusson Award at the B.C. Teachers' Federation (B.C.T.F.) Convention as the "Teacher
of the Year". It was noted that she had served as vice-president of the B.C.T.F. and as president of the Canadian Federation of Business and Professional Women's Society, which she had helped to found in the late 1920s. She had been a past president of the Vancouver Elementary School Teachers' Association and its provincial counterpart. The B.C. Teacher was "confident that she will still find ways of serving children...and the citizen body as a whole". 128 In fact that is what she had always strived to do through the special class system, training subnormal children to make them into citizens rather than evolving into criminals within society's midst. There was no mention of her eugenic views and lobbying efforts to pass the Sterilization Bill of 1933 as those views had gone out of fashion with the wartime struggle against Nazism.

Notes:

3. Ibid., p. 3
4. Ibid., p. 2
7. Kay Alsop, "Memories made of this...but she looks ahead", Province, Thursday, December 31, 1970, p. 24; Record card of Josephine Dauphinee in the Personnel Department of the Vancouver School Board-quoted with consent.
10. Dr. F.W. Brydone-Jack, "Medical Inspection", Vancouver Board of School Trustees (Hereafter Vancouver B.S.T.) Annual Report for 1911, p. 59
11. Vancouver School Board (Hereafter V.S.B.) Minutes, Management
Committee Resolution, April 10, 1911, p. 1

1. V.S.B. Minutes, Management Committee Resolution, March 16, 1911, p. 1


13. Seattle School Board Minutes, August 15, 1954, p. 56


15. See Stevenson Smith, Madge W. Wilkinson and Louisa C. Wagoner, A Summary of the Laws of the Several States Governing the Feebleminded, (Seattle: Bulletin of the University of Washington No. 82, 1914)


19. Ibid., pp. 118-119


Vancouver B.S.T. Annual Report for 1917, pp. 20-21


33. V.S.B. Minutes, December 28, 1917, "Special Board meeting to consider report of Principal Vance and Dr. Mackay On the Efficiency of the Vancouver School System - Retarded Pupils", p. 11. Copies of this report were distributed in January, 1918, but could not be located in the Vancouver City Archives.

34. V.S.B. Minutes, March 27, 1917, Report (f 381), p. 340


36. Mrs. Irene H. Moody, "Chairman’s Address, January 8, 1918", Vancouver B.S.T. Annual Report for 1917, p. 11


38. Angus McLaren, (1990), op. cit., p. 92

39. Vancouver B.S.T. Annual Report for 1918, op. cit., p. 16

40. V.S.B. Minutes, Board Meeting, March 14, 1918, p. 59

41. V.S.B. Minutes, Board Meeting, March 21, 1918, p. 61

42. A. Josephine Dauphinee (1921), op. cit., p. 118


46. Vancouver B.S.T. Annual Report for 1918, op. cit. (No. 44), pp. 17-18


48. Martha Lindley (Clinician), "Psychological Department", Ibid., pp. 45-47

A 38


51. Vancouver B.S.T. Annual Report for 1918, op. cit. (No. 48), p. 45

52. Interview with Miss Grace Jamieson, February 27, 1997; Vancouver B.S.T. Annual Report for 1919, Irene H. Moody, "Chairman’s Address", p. 12


54. Ibid., pp. 12-13; p. 1


56. Ibid., pp. 19-21


64. "Exhibit of Special Classes", Western Women’s Weekly, Vol. 2, No. 25 (May 31, 1918), p. 11

65. Vancouver B.S.T. Annual Report for 1920, p. 13, p. 53


68. Miss Josephine Dauphinee, "Special Classes", Vancouver B.S.T. Annual

70. Vancouver B.S.T. Annual Report for 1921, pp. 53-54


75. Mrs. G.O. Fallis and Mrs. Margaret Sutherland, "Local Council of Women", *Western Women's Weekly*, Vol. 6, No. 14 (March 10, 1923), p. 2


77. Vancouver B.S.T. Annual Report for 1923. p. 54

78. A. Josephine Dauphinee (1921), op. cit., pp. 121-122


80. A. Josephine Dauphinee (1921), op. cit., pp. 122-123

81. Vancouver B.S.T. Annual Report for 1925, p. 52

82. J.S. Gordon, "Memo to Members of the Management Committee", *V.S.B. Minutes*, May 4, 1922, pp. 140-141


84. *Ibid.*, pp. 393-394


87. The Bulletin of the University of Washington lists Robert Straight and Robert Sparling as summer students in the Department of Education for 1922, 1923 and 1924. Sparling died in 1925 but Straight continued graduate work with H.B. King. Herbert Baxter King is noted for the summer sessions of 1924, 1925 (converted to graduate status) and eventually obtained a Ph.D. in Education in 1936. Straight attended with King in 1925 through 1928 as a graduate student but did not complete a Master's degree as planned. This information was compiled from The Bulletins of the University of Washington, 1922 to 1929, and an oral interview with the son of Robert Straight, Lee Straight, on March 5, 1997.

88. K.A. Waites, *The First Fifty Years: Vancouver High Schools 1890-1940,*


92. Interview with Lee Straight, son of Robert Straight, March 5, 1997


94. Robert Straight (1927), op. cit., pp. 52-53

95. See Raymond E. Callahan (1962), op. cit., p. 15

96. Robert Straight (1927), op. cit., p. 62

97. Ibid., p. 66

98. Ibid., p. 68


100. T.A. Borough, "Vancouver Schools: 1886-1928", Vancouver B.S.T. Annual Report for 1928, p. 17


104. Josephine Dauphinee, "Special Classes", Ibid., pp. 86-88


109. Ibid., p. 88

110. James Blackwood, "Management Committee-1933", p. 21; "Special Instructors Employed by the board", p. 57; Ibid.

112. Helen D. Smith, "Chairman's Address", *Vancouver B.S.T. Annual Report for 1932/1933*, p. 20

113. Annie B. Jamieson (1931), op. cit., p. 6

114. Correspondence taken from the Fond of the Vancouver Local Council of Women as found in the University of British Columbia's Special Collections Division. Correspondence cited in order of text references. Letter of January, 1925, from J. Baker, South Vancouver Women's Institute to Mrs. H.J.K. Labsik, Vancouver Council of Women, re working Resolution on Sterilization; June, 1925, copy of Sterilization Resolution; April, 1926, letter from Y.W.C.A. supporting Resolution; May, 1926, letter from Vancouver Graduate Nurses' Association supporting Resolution; May, 1926, letter from Canadian Daughters' League supporting Resolution; January, 1927, letter from Mrs. Irene Moody about Miss Dauphinee's efforts to secure Dr. D.M. Le Bourdais as a speaker; March, 1927, copy of final Sterilization Resolution; Petition to the Honourable S.L. Howe, Provincial Secretary, from Mrs. J.H. Kirk, et al. of the Vancouver Local Council of Women's Mental Hygiene Committee, June 21, 1929, including four Resolutions and full list of supporters; letter from the Honourable S.L. Howe, Provincial Secretary, of May 6th, 1930 to Mrs. H.J.K. Labsik of the Vancouver Local Council of Women concerning their letter of June 21, 1929.

115. Angus McLaren (1990), op cit., p. 105


120. Josephine Dauphinee, "Special Classes", *Vancouver B.S.T. Annual Report for 1937/1938*, pp. 112-113


125. Miss A. J. Dauphinee, "Glands and Our Pupils" (Part I), *The B.C.
126. Miss A. J. Dauphinee, "Glands and Our Pupils" (Part II). The B.C. Teacher, Vol. 18, No. 8 (April 1939), pp. 419-420

127. Miss A.J. Dauphinee, "Glands and Our Pupils" (Part III), The B.C. Teacher, Vol. 18, No. 10 (June 1939), pp. 532-533

CHAPTER SIX

The Psychological Clinic and the Psychometricians: Miss Martha Lindley, Miss Ruby Kerr and Dr. Peter Sandiford.

Introduction:

In March of 1919 Dr. C.M. Hincks came to British Columbia in order to conduct a survey of the province’s public institutions and their mental hygiene policies. Hincks was a prominent Toronto physician and founding member of the CNCMH (Canadian National Committee on Mental Hygiene). Even before he examined the public school system, industrial schools, detention homes, orphanages and the provincial asylum for the insane, Hincks had declared his admiration for the advanced attitudes of the province’s public officials. He held up British Columbia as a progressive jurisdiction that had made generous allowances for the education and institutionalization of the feebleminded. In the report’s forward it was proclaimed that: "Nowhere in Canada have similar advances in the development of certain grades of defectives been made". The "Province generally is to be congratulated on the progress made in the care and treatment of the insane", as well as the fact that defectives are "educated along lines that stand for the betterment of the individual, and the protection of the public". Before the actual survey work began in April, 1919, Hincks gave an extensive interview to the Western Women’s Weekly, the voice of Vancouver’s Local Council of Women, which openly endorsed the segregation of the feebleminded.

The survey was conducted at the request of the Minister of Education, the Honourable J.D. Maclean. 1 Hincks had made several trips to Vancouver in the years prior to his official report of 1919 for the newly-formed CNCMH and the Vancouver special class system made a positive impression on him. In the report it was stated a "most creditable beginning has been made in Vancouver...in connection with the diagnosis of mental abnormality in schools, and with provision for the training of those who are retarded or defective". The hiring of psychologist Martha
Lindley in February, 1918, by the Vancouver School Board served to extend the work already being done by Josephine Dauphinee, supervisor of the special classes. Lindley had been "a former assistant to Dr. H.H. Goddard of the Vineland (New Jersey) Training School" and since her appointment "rapid strides have been made". In fact, Hincks noted that it would be "difficult to find a more alert and energetic staff" who were extremely "keen to employ (the) most enlightened methods". 2 The provisions for the testing and segregation of feeble-minded children that Hincks admiringly reported in the 1919 Mental Hygiene Survey: Province of British Columbia had not come to Vancouver from eastern Canada but through a more direct route, from Seattle in the south across the 49th parallel. The effect of the Seattle public schools upon those of Vancouver is as yet an undocumented process. The largely eastern Canadian and British elite who governed the public institutions of Vancouver would, one might assume, try to preclude most influences from the United States but this was in fact not the case. The Vancouver School Board's decision to establish such progressive educational reforms as special classes for feeble-minded children serves as a very powerful example to the contrary.

i. Canadian Metropolitanism and the Seattle/Vancouver Urban Connection:

In the mid-1950s the Canadian historian J.M.S. Careless developed the idea of metropolitanism to describe the relationship of dependency between urban development and staple resource industries within Canada. 3 James W. Simmons believes that Canada's metropolitanism is based upon a "structure of interdependency" between regions created by Confederation and east/west transportation links. It was the very "nature of Confederation, the barriers to external trade that it imposes, and the networks of communication and transportation" which it initiated that both created as well as maintained an "interdependency matrix in its present form". 4 This basic formulation of eastern Canadian dominance and western dependency originated in the work of the economist
In Canada after Confederation the railway system created a kind of transcontinental metropolitan dominance centered in Toronto as well as Montreal that spread westward to the Pacific and Vancouver. Although British Columbia preferred to maintain its British character after Confederation, its physical situation on the west coast of North America between Washington State and the Alaska Territory of the United States would strongly affect its development.

Norbert Macdonald advanced the notion in the 1970s that Vancouver and Seattle shared a mutual historical context that bound them together in a very real sense. Both were Pacific ports, railway terminuses, resource exploitation centers for lumber as well as fish and they had been profoundly affected by the Klondike gold rush. Between 1897 and 1914 the two cities experienced major population increases. Seattle’s residents increased from 55,000 in 1897 to 275,000 in 1914, while Vancouver rose from 20,000 to 125,000 in the same period. Seattle’s population was composed of New Englanders and Mid-Westerners by 1910, while Vancouver had a core group of Ontario residents with "a sharper sense of Canadian identity". Vancouver also had a great number of Maritimers, while both cities had large populations of "Orientals" who were first imported as cheap labour for railway construction and later dominated such service trades as commercial laundries. However, in 1910 Seattle had 10,708 Canadian-born immigrants or 4.5 per cent of the city’s population, while 10,401 Americans comprised 10.4 per cent of Vancouver’s populace. The traffic in intellectual ideas between Seattle and Vancouver began as early as 1910 when the president of the University of Washington, Thomas F. Kane, extended an open invitation to any students of the fledgling University of British Columbia to become involved in academic exchanges and sports competitions. "Washington will benefit in many ways by the nearness of this great and friendly neighbour, as the University of British Columbia is sure to be," Kane declared. He expected the effect of the University of Washington on the
newly-created U.B.C. to be in the form of a "stimulus that comes through emulation". In fact many British Columbia teachers began taking education courses during the summer term at the University of Washington, particularly in the 1920s. Macdonald does not deny that Vancouver had a definite British character by 1911 as the population included 33,995 immigrants of English, Scots, Irish, Welsh stock and assorted colonials such as Australians, New Zealanders, along with South Africans. British accents dominated the ranks of professionals such as physicians, teachers and businessmen. Tudor-style houses, public tennis courts, abundant flower gardens and British newspapers for sale on the newsstands attested to Vancouver’s Britishness. Macdonald pointed to a very real situation of urban affinity between Seattle and Vancouver during the early twentieth century. The fact that the "population growth of Seattle and Vancouver since the 1880s reveals a striking similarity in the nature and time of this growth" acted to create a case of urban affinity. When the School Board of Vancouver looked south to Seattle for progressive educational methods such as special classes for feeble-minded children, it was because Seattle had come to symbolize a form of modernity which leading Vancouverites wanted to emulate.

ii. Public Education in British Columbia and American Progressivism: Mrs. Irene H. Moody leads the Vancouver School System:

It is commonly assumed in the study of British Columbia’s educational history that American progressivism was first openly embraced as a consequence of the Putman/Weir Survey of the Schools in 1925. The conservative nature of the Putman/Weir survey has been well documented through the work of Jean Mann, who accurately characterized the document as an exercise in educational efficiency which stressed a segmented curriculum (academic/vocational), educational testing and ruthlessly criticized rural schooling methods. Mann is quite correct to state it was "essentially a conservative document" that openly identified itself with the "promotion of scientific efficiency, practicality and vocationalism and testing and measurement in education". George M.
Weir came to British Columbia from Saskatchewan in 1923 with his appointment as Professor of Education at U.B.C. Weir had been educated at McGill, the University of Saskatchewan, University of Chicago and Queen’s University. His co-investigator, J. Harold Putman, was Senior Inspector of the Ottawa school system. It has commonly been assumed progressive educational reform was instituted in British Columbia during the late 1920s through the efforts of these eastern educational experts. The very concept of outside expertise from the urban center of Canada, Ontario, altering educational practice in the western hinterland, British Columbia, is a classic metropolitan thesis of historical change. F. Henry Johnson’s article on the Ryersonian influence upon British Columbia’s first Provincial Superintendent of Education, John Jessop, makes a similar point. There was a definite British influence on the development of private schooling along the lines of male-dominated “public schools” and finishing academies for young ladies which also took hold in British Columbia. However, in the early twentieth century the growing urban public school system of Vancouver began to look to the United States for progressive educational reforms. A model was found in the Seattle public system and the educational innovations it pioneered such as special classes for defective or feeble-minded children.

The transference of progressive educational methods from Seattle to Vancouver public schools occurred between 1910 and 1919. The elected officials of the Vancouver School Board involved in this exchange were W.F. Flumerfelt (1908-1913), Dr. W.D. Brydone-Jack (1895-1900; 1902-1903; 1908-1913), J.R. Seymour (1914-1917), Mrs. Irene H. Moody (1916-1920) and Dr. W.H. Lang (1916-1918). The most prominent of these individuals to promote the concept of looking to Seattle and American progressivism in general for educational innovations was Mrs. Irene H. Moody, Chairman of the Vancouver School Board from 1917 to 1920. Moody was the first female head of the School Board and by the late 1920s, along with Josephine Dauphinee and Ruby Kerr, had become a vocal advocate
of measures to educate as well as control feeble-minded children through a special "Mental Hygiene Committee" of the Local Council of Women. 18 Moody's political career was launched through Vancouver's Local Council of Women before World War One. She was born in St. Thomas, Ontario, educated at Alma College, as well as the Boston School of Expression, held an associateship at the Boston School and was awarded a fellowship of the Royal Society of Arts for her four volumes of poetry. Moody founded a Vancouver branch of the Poetry Society of London, England, during her later life and was an active member of the Canadian Authors' Association. 19 However, it was only after the death of her first husband, Dr. William Moody, a dentist, that her political career began in earnest.

Moody's initial declaration in January, 1916, as a school trustee candidate for a vacant one year position was designed as a test by the Local Council of Women of their new-found electoral strength. Women had first gained the municipal vote in Vancouver in 1910 after the successful lobbying effort of Mrs. Janet Kemp of the Local Council of Women. Municipal referenda on female suffrage were held province wide until the Liberal premier, Harlan Cary Brewster, granted women the provincial franchise on April 23, 1917, which earned his administration the label "petticoat government". 20 The federal franchise for women was only conditionally granted in the summer of 1917 with the Wartime Election Act which extended the vote to women who were married to soldiers, widows of soldiers, their female children or any female relatives of living or deceased soldiers. 21 The first political race that could be contested in Vancouver was the vacant School Board seat. Moody filed her nomination papers for the election on Friday, January 7, 1916, but was disqualified because she was not a resident of Vancouver as was required by the 1914 Amendment to the Education Act. An article in The Daily Province suggested Moody was misled by city officials. R.F. Gallagher, Moody's business agent, declared that "the question of Mrs.
Moody’s qualification had been taken up with Mr. Jones, City Solicitor, and that it was perfectly all right for Mrs. Moody to live out of the city". To save face with the public over discrimination against Moody’s candidacy, she was allowed to stand for election after filing a declaration of Vancouver residency with the city clerk. The press reported that Moody "is being supported by the Women’s forum and other women’s organizations". The results of the election were startling as Moody polled a total of 7,308 votes while her male rival, J.J. Dougan, received only 2,448 votes. The press announced that a "new epoch in the affairs of the executive of Vancouver schools is marked by the coming of Mrs. Irene H. Moody" who possesses the "keenest interest in matters pertaining to the training of the young". Once in office, Moody proved a capable School Trustee but paid little attention to budgetary matters in a time of financial restraint due to wartime austerity.

In January, 1917, Moody, as well as her fellow School Trustees, were attacked by the business-oriented Mayor McBeth who had succeeded in trimming municipal expenditures and was running for re-election on that basis. Moody defended her work as a School Trustee by stating she had acted with "the welfare of the child" in mind and the concerns of the ratepayers who were also parents. She felt the Mayor’s attacks were quite "unfair". The municipal election returned both the Mayor and School Trustee Moody. The press reported that "in spite of his violent and unfair attacks on Trustee Mrs. Moody, repeated in various parts of the city, they [the electorate] placed her at the head of the poll". At the inaugural meeting of the Vancouver School Board for 1917, Moody was "unanimously chosen chairman of the Board for the ensuing year". Moody was also strategically placed on the powerful Management Committee which would oversee all structural changes to the city’s public school system in the coming year. Moody was now in a pivotal position to create change within the school system and alter its administrative direction towards the humane as well as progressive goals
Moody was greatly affected by Miss Josephine Dauphinee and her concept of educational efficiency through mental hygiene. In turn Dauphinee took her ideas about the curriculum of the special classes and the role of the school psychologist from her 1911 visit to the Seattle special classes at Cascade elementary school. Miss Dauphinee alerted Mrs. Moody to the progressive nature of the Seattle public schools. She encouraged her to make several trips south to inspect the scientific educational methods being used to segregate and then train feeble-minded pupils. In March, 1917, Mrs. Moody, along with Trustees Welch and Seymour, offered their report to the Vancouver School Board "on a recent visit to Seattle". However, it would be in the early winter of 1917 that Mrs. Moody made her most important fact-finding trip to Seattle concerning the testing and education of feeble-minded children. She later wrote that: "Returning from Seattle and reporting on their school system, I urged the consideration, with a view to adoption, of their plan for special classes, child laboratory and child observation work". What was it that Mrs. Moody found in Seattle's schools that made such an impression on her? A special class system that had evolved from its beginning in 1910 with two classrooms under Miss Nellie Goodhue at Cascade School to a city-wide special class system with an Observation Class for pupil referrals operating in conjunction with a Psychological Clinic under the University of Washington's Dr. Stevenson Smith. Before September, 1914, referrals of children to the special classes had been based upon "a recommendation by the Principal of such children ...(who)... were making little progress in the regular grade". The Observation Class was created to systematically observe each child and do preliminary testing before referring the case on to the Child Study Laboratory under Dr. Stevenson Smith. In 1914-1915 the Observation Class handled 189 cases "under controlled conditions before making a diagnosis", while over 268 children were tested in the laboratory. There
were between 20.4 and 18.9 pupils in the Observation Class at any one time. 31

When Mrs. Moody made her fact-finding visit in 1917 the Observation Class, thirteen special classes, four speech classes for stutterers, two restoration classes for mentally normal pupils with weak work habits, several industrial training classes for older pupils and the Child Study Laboratory had been united under the direction of the new Child Study Department. Social workers often worked with juveniles referred to them by the courts because of suspected mental defects. Children could be referred to deaf classes, sight-saving classes and industrial skill classes as required. Each pupil was a subject of a conference in "which all facts of inheritance, personal and school history, medical, and psychological examinations are taken into consideration, and a diagnosis and recommendation made". 32 The forces of mental hygiene were actively at work in the Seattle school system to deal with problem children of various types. The first steps were being taken to conduct mass intelligence screenings as "each year a special study is made by the Child Study Laboratory of all children who are eligible for promotion to the junior high school". Group intelligence tests became the favoured method to select those children who needed intensive study. The staff of the laboratory began to send reports back to the schools about specific remedial measures for each pupil examined. 33 By 1914 the Seattle School District even had a girls' parental or court-ordered detention school (Ravenna Training School) and a boys' equivalent (Mercer Island). 34 If all else failed and the child could be deemed at Dr. Stevenson Smith's clinic to be untrainable, then a referral was made to the State Institution for the Feeble Minded at Medical Lake near Spokane in eastern Washington. Dr. Smith examined "a great many defectives in the counties contiguous to the university" and had them committed to Medical Lake. The special classes "make a good clearing house for the common schools", stated S.C. Woodruff, Director
The reformist members of the Vancouver School Board and their Chairman, Mrs. Irene H. Moody. It was in December 1917 that Mrs. Moody went to Seattle to observe the special classes and met Martha Lindley. In February 1918 the School Board approved the creation of a Psychological Clinic and engaged Miss Martha Lindley as School Psychologist.

of the State Institution at Medical Lake. Mrs. Moody saw a well-organized bureaucratic system within the Seattle public school system that was fully attuned to the principles of mental hygiene.

At the Vancouver School Board meeting of May 7, 1918, Mrs. Moody put forward a rather broad conclusion about the state of Canadian public education. The minutes record: "She said that the educational system of the United States was greatly in advance of that of the Dominion, and that she would be very glad to tell the Board about the most interesting features she had observed". Supporting Mrs. Moody's contention was Miss Dauphinee who had visited "various schools in the East" and specifically "asked for the appointment of a psychologist to our staff". In fact Mrs. Moody recalled that it was the "urgent request of Miss Dauphinee...to secure, if possible, Miss Martha Lindley as school psychologist". The Vancouver School Board's decision to open a Psychological Clinic, Observation Class and expand the special classes from two to six classrooms in February, 1918, was at a considerable cost to school finances. It seems the desire for educational modernity and progressive measures to educate the feebleminded took precedence over economy. Efficiencies gained in regular classrooms by the removal of subnormal children were seen as worth the initial start-up expenses. It was Mrs. Moody and Josephine Dauphinee who together advanced the cause of mental hygiene in the public schools of Vancouver. The two women continued to be united by this cause during the 1920s through their shared membership on the "Mental Hygiene Committee" of the Local Council of Women and would remain so until the passage of the 1933 Sterilization Bill for the feebleminded by the provincial legislature.

iii. Miss Martha Lindley and the "Vineland Spirit" in Vancouver Schools:

Martha Lindley wrote in 1919 that she attempts "to infuse into my work the 'Vineland spirit', and because I have such responsive and enthusiastic assistants, this has been easy". Lindley was referring to her assistant in the Psychological Clinic, Ruby Kerr, and the
Supervisor of Special Classes, Josephine Dauphinee. It had been through Nellie Goodhue, Supervisor of Seattle's special classes, that Dauphinee first met Lindley when she came to work in the Child Study Laboratory of Seattle Public Schools under the supervision of Dr. Stevenson Smith. Lindley had trained as an assistant in the Research Department of the Vineland Training School when it was directed by Henry Herbert Goddard. Her career there is well represented by the numerous articles she published in the Training School Bulletin and other professional journals; Lindley also acted as a research assistant on many projects. In a 1917 article on the high incidence of mental defects among juvenile delinquents by L.W. Crafts and E.A. Doll, the authors acknowledge they "are indebted to Miss Martha Lindley of the Research staff for painstaking assistance". 40 As Diane B. Paul points out, eugenic field workers were 90% female as women could more readily develop "sympathetic relationships" during interviews than male scientists. Goddard, Charles Davenport, Harry H. Laughlin and even Karl Pearson all employed female researchers. Goddard was noted for his collaborative research with female trainees and his first assistant, Miss Kite, had been a public school teacher. 41 Lindley wrote that the field worker "must be sympathetic and tactful, and at the same time a keen observer". However, the main "object of the field worker should be to secure information". Lindley reminds her readers that "Dr. Goddard with his broad experience" points out "we need to know the ancestry of the people we are trying to help". Lindley posits that if a field worker found "insanity on both sides of the child's family" then the child should be protected from "over-work" that could cause a nervous breakdown. However, the field worker also "realizes that the complexities of our modern life are not best met by those who, physically and mentally come of weak 'stock'". 42 Lindley's eugenic convictions from Vineland are confirmed by her use of the word "stock" to signify that such children were poor breeding material for the race.
When Lindley left Vineland in the fall of 1917 to take up her post in Seattle she wrote an article about a case she had diagnosed while at Vineland, "Frank F - A Case Study". Lindley relays that Frank had hidden his mental disability because he was "good looking" and "carries himself well", as when he is smiling he is "very attractive". At first glance he was a "bashful type" that could be "quite backward but possibly not defective". During testing with the Binet-Simon (Vineland Revision) "he broke down entirely". However, despite numerous re-examinations, Lindley had to conclude that Frank was between mental ages nine and ten despite his appearance as a healthy fifteen-year-old adolescent. The conclusion states chillingly: "According to our best judgement, Frank is a feeble-minded boy who will have probably one more year of development". 43 This should provide some insight into Lindley's commitment to the principles of mental hygiene which she would then bring to bear upon the school children of Vancouver. In fact the Child Study Laboratory under Dr. Stevenson Smith at the University of Washington became a centre for the transplantation of mental hygiene throughout the Pacific Northwest and British Columbia. Funded by the Bailey and Babette Gatzert Foundation of Seattle it was a joint effort of the university's Departments of Education and Psychology when it began in 1909. Its mandate from the very onset was to "counsel...local school authorities in establishing and conducting work for defective children in their schools". Vineland's Training School Bulletin of 1911 proclaimed that the clinical laboratory was creating a wider acceptance of mental hygiene. It stated:

The Pacific Coast is awakening to the needs of the mentally defective. Vancouver, B.C.; Tacoma, Wash.; Everett, Wash.; have opened special classes and Bellingham, Wash. expects to in September. 44

Martha Lindley was one of Smith's messengers sent to awaken Vancouver to the importance of mental hygiene. Lindley confirmed that when she "came to work in the Child Study Laboratory in Seattle" she first became aware that "Seattle and Vancouver are in a way sister cities". 45 In early
1918, Lindley moved north from Seattle to take up the cause of mental hygiene in the schools of Vancouver and infuse its teaching personnel with the Vineland spirit she knew so well.

The first fact she noticed about Vancouver was that its "population is cosmopolitan" as you could "count a dozen nationalities" on the city's streets. "Orientals and Hindoos [sic] receive a warmer welcome here", she wrote, but this "foreign problem" made the school situation "quite complicated". The warm welcome she received from Miss Dauphinee, who had engineered her move north, and Miss Kerr, prompted Lindley to describe them as "women of vision". Following the Seattle plan, by June, 1919, there were fourteen special class teachers, two manual training teachers for "wayward boys", a special class supervisor, a clinical assistant, a field worker and Lindley herself as the clinical psychologist. (See Appendix I, 1919-1920). Referrals were being made to the clinic from the Juvenile Courts Detention Home but the majority of special class children were composed of a "foreign element". In considering her first eighteen months' work, Lindley wrote:

> Looking to the future, we expect to enlarge our scheme to include all kinds of deviate children.... We hope to permanently segregate those who are a menace to society, and provide more specific training for those who will be able to live in the world.... 46

Writing for the Training School Bulletin, Lindley seemed completely uninhibited about her eugenic convictions. In her reports to the Vancouver School Board Lindley was more guarded in her use of language but her overall goals remained the same.

In her first departmental report of January 8, 1919, Lindley detailed the efforts she had made to organize the Psychological Clinic and begin a survey of a number of Vancouver elementary schools. Lindley helped Dauphinee to disband the old Central School auxiliary classes as the "children were too old to warrant the schools caring for them longer". Lindley acknowledged the "excellent assistance" of Dr. Brydone-Jack of the medical department. Miss Kerr had proved to be an able
clinical assistant with "an analytical mind", well suited to "psychological work". Miss Dauphinee, as Special Class Supervisor, "has worked indefatigably" to organize the training programs for "retarded children". However, after her initial testing surveys, Lindley proclaimed more special classes would have to be opened. She stated that: "For a city of this size the present number is but a beginning, a mere drop in the bucket compared with the need". There would be a need for at least ten more special classes in the coming year. In an April, 1918, article Lindley wrote for the Western Women's Weekly she describes how these children were selected. The most obviously feebleminded of the idiot or low-grade imbecile categories are not the ones that educators should be overly concerned about. They are recognizable on sight but "there is a type that 'gets by' in the world and yet is much more dangerous to society". These are the morons who by "means of psychological examination...may be detected quite early". They can never be educated for reason and judgement but can be trained for unskilled labour. Segregated special classes can be created to train but not educate these children. Lindley wrote that: "Their specific abilities, if they have any, are capitalized, their difficulties bridged over so far as is possible".

In a profile of both Lindley and Dauphinee for the Western Women's Weekly of December, 1918, it was stated that since the Psychological Clinic had opened in February, 1918, over 400 psychological examinations had been conducted. In reference to Miss Lindley, the article points out that "principals work hand in hand with her, and whenever they discover a backward or abnormal child in their schools, they send him to her for examination". Lindley had at her disposal a vast array of testing devices including the Healy (juvenile delinquency), Porteus (following directions), Goddard Adaptation (adapting to new social situations), and the Binet-Simon Tests (Goddard revision). Lindley conducted the mental examinations of selected children who were
referred to Miss Kerr for work and play trials along with a physical examination by a school doctor. Some children are "sent back to their classes with special instructions as to how to deal with them". If the defects are physical such as eyesight or hearing, then it is a medical matter. However if "a child shows that he cannot keep up with the regular classes, he is put into a special class". There were various types of classes depending on the child's mental ability. When the child is not defective "but he is too slow for the pace demanded of him", a class at Central School is reserved for those of mental ages five to six who can learn "a little school work" but also "a great deal of handwork". Those of mental ages two to four are "cottage cases" for a future training institute for the feebleminded but are in the interim kept happy at school and taught good habits. Miss Lindley was proud of her work and extensive record keeping on all children tested. The article clearly portrayed Lindley, as well as Dauphinee, in the very forefront of educational reform and a "new era in the welfare of children". 49 Lindley's psychological testing was described in the text of the article as a humanitarian act because segregation would be the means of saving Vancouver's feeble-minded school children.

The Vancouver School Board Chairman's address for 1919 complimented several of the special class teachers, as well as Miss Kerr and Miss Dauphinee, for their "endeavours to increase their efficiency by a Summer School course at Berkeley, Cal.". The courses the Vancouver teachers enrolled in at Berkeley were offered in Educational Psychology by Berchard W. De Busk of the University of Oregon. Berkeley had just opened a new Psychological Laboratory which was equipped with the most up-to-date "materials for conducting mental tests with children". De Busk's course on the "Hygiene of Learning" could not have failed to make a lasting impression on the visiting British Columbia teachers. 50 Lindley was undoubtedly supportive of encouraging the importation of American mental hygiene from the University of California. In 1914 a
Miss Bertha Winn, who had graduated from Columbia University in New York, was engaged by the Victoria school district to start a class for subnormal children. In the early 1920s a New Westminster teacher, Miss Helen P. Davidson, went to Stanford to complete her doctorate in educational psychology under Lewis Terman. The early influences on the growth of special education and mental hygiene in Vancouver’s schools as well as other systems in the province were definitely American in origin. It was not until the mid-1920s with the arrival of Dr. Peter Sandiford from the University of Toronto that eastern Canadian and British forms of mental hygiene began to predominate. The Vancouver School Board Chairman, Mrs. Irene H. Moody, noted in her report of 1919 that the visit of the CNCMH under Dr. C.K. Clarke of Toronto had resulted in a "letter of commendation for the work of the Board" in the segregation of feeble-minded children. The educational measures Clarke and his team of eastern Canadian psychiatrists admired were the product of the deliberate emulation of American mental hygiene practices, borrowed from the West Coast of the United States. In her report Moody wrote of the "progress" that had been made in the Psychological Department during 1919 particularly the segregation of mentally retarded children:

These little unfortunates were a constant drawback to the normal children in the various classes, as their very limited ability was a source of trouble and hinderance in every abstract subject on the curriculum. These schools were surveyed by our clinician, Miss Lindley, and the children found to be retarded beyond reason, were then brought to the Observation Class, and it was ascertained to just what degree of development their mentality could be trained...

School Board members such as Moody could hardly contain their enthusiasm for the mental hygiene measures then being implemented.

Martha Lindley wrote in her report of January 7th, 1920, that the visit of Dr. C.K. Clarke and Dr. C.M. Hincks had made her "feel less isolated" in her endeavours. She took strength from the "satisfaction of knowing that we are linked up with a Dominion wide movement".
A photographic study of the Vancouver special class system in early 1920. The Observation Class is shown in the upper left photograph. The boy sitting at the table is doing a puzzle test and the writing on the chalk board reads: "Every child has a right to an education fitted to his own capacity and his need." The other photographs show the special classes and children engaged in various forms of project work.

Source: Canadian Journal of Mental Hygiene, Vol. 2 (April-October 1920), pp. v-vi (face plates)
studies of children were now being done by a newly-hired social worker so that it would be possible to gauge all "conditions responsible for their retardation". Over 700 children were tested in 1919 and Lindley was beginning to introduce standardized group tests into regular classrooms. The report notes that Miss Kerr was so enthused after her summer course at Berkeley that she applied and was "accepted as a research student in the Bureau of Juvenile Research of Ohio" under the famous psychologist H.H. Goddard. She would return after a year of study and be "able to render even greater service than in the past". Lindley clearly encouraged Kerr to work with her old mentor, Goddard, even though by this time his eugenic views were being challenged and he had left Vineland. Upon entering her third year of work Lindley was encouraged by the wide interest being taken in scientific methods of education. In October, 1919, Lindley demonstrated mental testing methods to the convention of Provincial School Trustees and received a positive response. 54 Lindley's role as an agent in bringing mental hygiene to the schools of the province cannot be underrated. In December, 1918, Lindley addressed the first convention of the Child Welfare Association of British Columbia. She spoke about the topic of "Community Control of the Feebleminded" and provided "expert evidence" that segregation measures adopted thus far were inefficient. Only an institution for the feebleminded could assure "that there would be no possibility of their producing more of their kind". 55 Lindley's speech was so well received that in 1919 the second convention of the Child Welfare Association scheduled a number of speakers about the problem of feeble-minded children, including Seattle Juvenile Court Judge King Dykeman, Miss Bertha Winn (Victoria Special Class Supervisor) and Lindley herself (Psychological Clinician, Vancouver City Schools). 56

The actual title of Lindley's address was "Modern Methods of Dealing with the Defective Child" and the follow-up discussion was chaired by Bertha Winn, who was described as a "specialist in charge of
Second Annual Convention
of the
Child Welfare Association
of B. C.
to be held in the
Elks’ Hall, Vancouver, Oct. 29, 30, 31
and also in the Hotel Vancouver.
The sessions will cover every phase of child life,
including the following:

- Defective and Feeble-Minded Children
- Parental Responsibility
- Vocational Training
- Physical Wellbeing of the Child
- Educational Reform
- Government Responsibility Towards the Child
- Juvenile Offenders, or Delinquent Children

Experts and Specialists will deal with these and other
Child Welfare problems. Prominent speakers will be present,
including Attorney-General W. deB. Farris; Mrs.
Ralph Smith, M.A.; Brigadier-General Victor Odum,
K.C.M.G., D.S.O.; Judge King Dykeman, Seattle; Mrs.
Irene H. Moody, Chairman Vancouver School Board; Rev.
A. H. Sovereign; John Kyle, Esq., Superintendent of Technical Education for B.C.; Miss Martha Lindley, Psychological Clinician, Vancouver City Schools; H. W. Collier, Esq., Chief Probation Officer, Vancouver; His Honor, H. C. Shaw, Judge Juvenile Court, Vancouver; Rev. R. C. Shaw, Judge Juvenile Court, Vancouver; Rev. O. MacBeth, M.
A., Dr. Ernest Hall; Mrs. J. A. Weir, President—Parents’ Federation; Miss Bertha Winn, Supt. Special Classes, Victoria; Mr. A. M. Stephen, B.Sc.; Dr. T.
Proctor Hall, M.A.; Garfield A. King, Esq.; Dr. Steven
Smith, Physiological Clinic, Seattle; Mrs. H. Gregory Mac-
Gill, M.A., M.B.E.

Anyone who is interested in Child Welfare cannot afford
to miss this important convention. Local artists—who have
kindly promised their assistance, will be mentioned later.

Delegates are expected from various parts of the pro-
vince. The public are invited to attend all the sessions.
A special edition of the Western Woman’s Weekly will be
issued next week, dealing with the convention and various
articles will be contributed by those intimately connected
with Child Welfare.

An advertisement for the Second Annual Convention of the Child Welfare Society of B.C. held during October 1919. Miss Martha Lindley (Psychological Clinician, Vancouver schools), Miss Bertha Winn (Special Class Supervisor, Victoria schools) and Judge King Dykeman (Juvenile Court, Seattle, Washington) spoke on the convention topic "Defective and Feeble-Minded Children".

subnormal classes" in Victoria, British Columbia. Lindley's address began with a historical sketch of how "savages" left their feebleminded to die, while even at the beginning of the twentieth century they were still allowed to roam free on the streets until they were often put in jail for criminal acts. Science has altered this process as today, Lindley proclaimed, "it is now possible to make a diagnosis of the feeble-minded child" before "he has socially run amuck". Crime is clearly rooted in mental defects, Lindley told her audience and while "Vancouver is doing something...the rest of the province is doing nothing". Lindley wanted a "general scheme" and despaired as some "people talk to us in terms of dollar and cents" concerning the detection, as well as treatment, of the feeble-minded child. They do not realize that the feeble-minded child has the "power to affect every normal child with whom he comes in contact". Miss Winn supported all of Lindley's contention that school segregation of the moron should be paralleled by institutional segregation for chronic cases of the imbecile type. When Judge Dykeman spoke of Seattle's juvenile system, he outlined how the courts committed children to the parental schools which were described earlier. Dykeman stated: "I understand you have no institution here that corresponds to our parental school". He advised: "You ought to have one for boys and girls" in order to properly segregate the school population. He was told funds had been approved for such an institution but clearly the schools had to be in the vanguard of mental hygiene. 57

In the fall of 1919 Lindley addressed the University Women's Club as part of their seasonal speaker series. She gave "a paper full of information as to the provision made for defective and backward children in different countries" which "opened the eyes of a great many club members to a very urgent need in our own land". 58 In many ways that is exactly what Martha Lindley did in a very effective manner, bring the social agenda of American mental hygiene to the people of Vancouver and the entire province.
In early 1920 all the supposed progress Lindley had made in the field of mental hygiene within Vancouver’s schools suddenly seemed threatened. Irene Moody reported in her 1920 chairman’s address that the year had begun "with what seemed a catastrophe in the loss of our Psychologist". It seemed Miss Lindley surprised everyone in abandoning her dedication to duty in order to become Mrs. Lashley Hall which meant she would have to resign since married women, with the exception of widows, could not hold teaching positions. Fortunately "the return of Miss Ruby Kerr from her seven months study under Dr. Goddard" provided a natural replacement for Mrs. Lashley Hall. The process of mental hygiene in the school system seemed unaffected by personnel changes once the logic of segregation had been accepted. Four new special classes were opened, making a total of fifteen. (See Appendix I, 1920-1921) Testing continued under Miss Kerr and children were taken out of regular classrooms where they were "proving a constant drag upon the ...normal children". 59 The social worker who was only recently appointed, Miss Edna Clark, was already on a leave of absence taking "a special course in [sic] the University of California" and her work was being done by Miss Jean Cantelon. The new assistant to Miss Kerr in the Psychological Department was Miss M. Amos, an elementary school teacher interested in special class work. In very real terms the institutional stability of mental hygiene in the Vancouver school system was now firmly established. Mrs. Moody stated confidently: "The Psychological Department of our school system is of wonderful economic value to the City of Vancouver, and that will be demonstrated more fully every year of its existence". 60 Martha Lindley, along with Miss Kerr and Miss Dauphinee, established the educational logic of mental hygiene measures which were not brought from eastern Canada but from the western United States. The arrival of Peter Sandiford in the Fall of 1924 to test the school children of Vancouver was not greeted as an educational innovation but rather the extension of a process that had been started during World War One.
iv. Miss Ruby Kerr: The last Director of the Psychological Department:

In an interview conducted with Dr. Norman Ellis, a Vancouver school psychologist from the early 1950s to 1970s, Miss Kerr was described as a "very modest, self-effacing woman". "Just a little bit of a thing", Ellis added. In an interview with Miss Grace Jamieson, Miss Kerr’s successor as a school psychologist, Kerr was described as a "frank little lady" who told Miss Jamieson over tea that she could be her replacement. 61 The yearly reports of Miss Kerr lacked the fervour of Miss Lindley and, for that matter, Miss Dauphinee. It is difficult to establish what Miss Kerr’s personal beliefs about her work were as her reports are brief, factual and lack personal candour. However, she continued on the same path established by Lindley, expanding and making routine mental testing through school-wide surveys and individual intelligence testing. With the assistance of Miss Amos "group intelligence tests were given to entire classes at one time". Miss Kerr wrote that "individual tests were given those whose performance on the group test indicated the need of an individual examination". An appraisal of each special class student was also carried out every year to reaffirm their IQ scores and show any positive developments or continuing weaknesses. Four new special classes were opened during 1920 using testing data to "select the children" from the surveys of Grandview, Florence Nightingale and Henry Hudson schools. 62 In late 1920 Miss Kerr was asked to speak along with school district personnel to student nurses at the University of British Columbia’s Public Health program. She gave two lectures on "The Psychological Work in the Schools". 63 Kerr’s interest in lecturing about her "psychological work" continued during the early 1920s. The report of J.W. Gibson about the Summer School for Teachers held at Victoria’s old high school from July 9 to August 10, 1923, reveals that Miss Ruby Kerr (Vancouver) gave a series of "Special Lectures on the Psychology of Manual Training". 64 However, in the early 1920s Kerr was largely preoccupied with presiding
over, along with Miss Josephine Dauphinee, an ever-expanding special class system. The two women appeared to work harmoniously but several notations in the School Board minutes for September, 1920, imply there was a salary dispute. On September 9, 1920, Miss Kerr's salary as psychologist was raised from $1,732.80 to $1,800.00 per year, pursuant to a motion by School Trustee Mrs. Macaulay. A special School Board meeting was held September 20, 1920 and a motion was put forward by Mrs. Moody to the effect that:

That Miss Ruby A. Kerr's salary as Psychologist be $1,732.80, the same as Miss Dauphinee's, and that the two ladies be put on an equal footing as joint heads of the Department. 65

The Board moved to end any management disputes with this resolution which placed the two women on an equal footing.

Miss Kerr was content to follow in the pattern set by Martha Lindley. She tested children en masse in school surveys and selected candidates for the special classes through intensive examinations in the Psychological Clinic's Observation Class. In 1921 she wrote that the "greatest need for more classes is in the congested neighbourhoods such as Mount Pleasant and Lord Roberts". As more children underwent mental tests, the more special students were then selected for segregated instruction. However, Kerr was interested in promoting educational services to a broader category of children with "special disabilities", as opposed to just the feebleminded. Classes for "superior children" attached to the proposed pedagogical department at the University of British Columbia and a "permanent speech class" for those children suffering from "speech defects" were two ways Kerr believed educational services could be expanded. She also wanted special classes for subnormal students to be included in the curriculum of any future junior high school planned for the Vancouver school system. Kerr was proud of the fact that Vancouver had hired a permanent social service worker to investigate the family circumstances of special class students and assist in "finding suitable work for special class pupils leaving school". The
home visits and employment placements of Miss Cantelon were characterized as being unique as no other special class systems in Canada or the United States had made provision for a social worker. Kerr reported "that Seattle has now a follow-up worker" like Miss Cantelon. It was a source of pride to Kerr that Vancouver was now forging ahead with its own educational innovations in mental hygiene.

In her 1922 report Kerr notes that "group tests were used to a greater extent than previously" for the "selection of pupils for special classes". The value of the tests in sorting school children received great interest from teachers and "proved very satisfactory for our purpose", Kerr proclaimed confidently. The tests not only detected feeble-minded underachievers but also "brought to the attention of the teacher a clever child hitherto underrated". Gifted education remained a concern of Kerr who may have been responding to the new work of Lewis Terman on gifted children and their need for segregated classes. The lack of "a curriculum less academic and abstract" at the high school level was a problem that would soon have to be addressed. Yet Kerr believed the special class work had made great strides in turning around "chronic truants" and helped in the "development of character". The Observation Class of the Psychological Clinic tested 110 pupils in 1922, of which the usual sex differentiation for a learning-disabled population was found, 66 males and 44 females. Games and toys were given in between the standardized tests for the "further observation of the reaction of the child to difficulties", according to Miss Kerr's clinical assistant, Miss Maude A. Amos. In her capacity as social worker Miss Cantelon reported placing 58 elementary special class graduates (33 males, 25 females) in positions ranging from farm, store and factory work to the merchant marine, domestic help, newsboys, as well as one boy in a logging camp. Also Miss Cantelon expressed the need for trade school training beyond the elementary school level for special class students.

Ruby Kerr also continued the tradition of Martha Lindley to
publicly promote the benefits of mental hygiene. In the summer of 1922 Kerr and Miss Dauphinee, the Special Class Supervisor, spoke to the Child Welfare Association about the need for an institution or training school for the feebleminded and a provincially-funded "travelling psychological clinic". Also appearing in support of this measure was Miss Cantelon who "spoke briefly". The meeting urged the province to adopt wider measures to classify and control the feebleminded. 70 The Child Welfare Association had already passed a series of resolutions that called for a provincial psychological clinic, a custodial cottage facility for imbeciles at Essondale Mental Hospital and a special industrial training school for feeble-minded children of both sexes. 71 In the spring of 1923 the Mental Hygiene Committee of the Vancouver Local Council of Women convened their first meeting on March 5, 1923. A special sub-committee was created under Mrs. Carson of the New Westminster Local Council of Women to deal with the need for a "Travelling Psychiatric Clinic". The meeting declared that such psychological services must be considered in the upcoming Provincial Education Survey which the government "is being requested to conduct". 72 Mental hygiene was becoming a popular concept among the various women's groups that were served by the Western Women's Weekly magazine in the early 1920s. Reports on the Mental Hygiene Committee and resolutions for action by the Child Welfare Association were supplemented by informative articles such as one by V. May Macdonald, R.N., of the Canadian Red Cross on "Mental Hygiene and the Public Health Nurse". Women readers were urged to support mental hygiene measures for children because such behaviours as inattentiveness could have dire consequences. Macdonald wrote: "Bad mental habits allowed to persist unchecked through childhood and early youth are potent factors leading to mental derangement later". 73 All troubled children required psychological attention and if this were not carried out at an early age then feeblemindedness could result.

Miss Kerr became an important member of Mrs. Moody's "Mental
Hygiene Committee", along with Miss Dauphinee. As the 1920s progressed, the committee's focus changed from institutional care and educational psychology to the sterilization of the feebleminded as a more permanent solution to the social problems they supposedly caused. Sterilization resolutions of the committee were very broad in their references to the feeble-minded population and never distinguished between the sterilization of adults as opposed to adolescents. The feeble-minded children which the committee professed to want to care for in a training school would also be made the eventual target of sterilization measures. Contemporary studies of the Local Council of Women and various women's clubs in Vancouver during the early twentieth century devote varying degrees of attention to this issue. Gillian Weiss in her thesis about clubwomen of Vancouver from 1910-1928 has a small page note that in "the 1920s many clubwomen were discussing the pros and cons of eugenics". According to Angus McLaren, the sterilization of the feebleminded was a dominant issue among the Local Councils of Women in British Columbia from the early 1920s to the 1933 passage of the Sterilization Bill. 74 As early as 1924 Mrs. Moody created a public display on mental hygiene for the Vancouver Exhibition, including educational films from England. 75 In 1925 the first working copy of a sterilization resolution was drafted by the South Vancouver Women's Institute. 76 On April 6, 1925, Dr. Clarence Hincks of the CNCMH addressed a meeting of local women at the Wesley Church schoolroom about the sterilization issue. 77 In July, 1925, the New Westminster Local Council of Women passed a resolution in favour of the "sterilization for both sexes of the mentally deficient" be made "lawful under the jurisdiction" of an appropriate "board of examiners". 78 In April, 1926, the New Westminster resolution was adopted by the Vancouver Council. Community support was immediately sought from such groups as the Y.M.C.A., the Vancouver Nurses Association and the Canadian Daughters League. 79 Dr. J. G. McKay of the Hollywood Sanatorium in New Westminster spoke to a meeting of the Vancouver Local
Council of Women in August, 1926, about mental hygiene and in January, 1927, Miss Dauphinee had Dr. D.M. LeBourdais, a birth control advocate within the CNMHC, speak on the "Social Control of Mental Defect". 80

In 1929 Mrs. Moody, Miss Dauphinee, Mrs. Jane Steeves, Mrs. J.H. Kirk and Miss Ruby Kerr sent a strongly-worded statement to the Honourable S.L. Howe, Provincial Secretary. Once again the government was urged to create a psychological clinic, more special classes, a provincial training school for children with mental defects and to follow the recommendations of the Royal Commission on Mental Hygiene which had submitted its report to the province in 1927. The report made recommendations for a training school for defective children (Appendix D) and sterilization measures (Appendix E). The Mental Hygiene Committee had an impressive list of societies, community groups and religious organizations endorsing its resolutions. 81 In 1930 no reply was forthcoming from the government and Mrs. Moody wrote to the Provincial Secretary that groups of "eighteen or twenty thousand in membership...supported the Mental Hygiene Committee". 82 In response the Provincial Secretary wrote to Mrs. Moody in May, 1930, that the problem of educating and hospitalizing the feeble-minded population was a question "full of difficulty" that required more study. 83 However, the pressure for both sterilization measures and a training school for subnormal children continued in 1930 from the Local Councils of Women. 84 Finally in 1933 the government, with the approval of the opposition, passed a Sexual Sterilization Act which authorized vasectomies as well as tubal ligations to be performed upon any discharged or current inmates of provincial institutions such as prisons, the Industrial Homes for both sexes and the Public Hospital for the Insane. 85 McLaren makes it clear that women's groups were in the forefront of the demand for compulsory sterilization measures. Miss Kerr and her colleagues on the Mental Hygiene Committee combined compassionate notions of education and custodial care with such negative eugenic policies as sterilization.
Kerr's actions followed in the path of her predecessor, Martha Lindley, for her efforts went well beyond the bounds of being a school psychologist. As a concerned citizen she actively furthered the cause of mental hygiene in British Columbia.

The mid-1920s saw Ruby Kerr's work as psychologist fall into a predictable pattern of testing ever greater numbers of school children and in consequence finding a greater population of mentally-defective students. As early as 1922 the School Board voiced their concern about cost overruns in the special classes to their supervisor, Miss Dauphinee. However, Miss Kerr continued to press for the extension of special class work and notes in her 1923 report that three divisions were reduced by the opening up of a special class at Grenfell School. She commented that when the special classes were first created they were seen as "more or less experimental" but had now become an integral part of Vancouver schools which supports subnormal children being "discovered early in their school career". The new clinical assistant to Miss Kerr, Miss L.E. Frith, reported that 96 pupils (52 females, 44 males) were tested in the Observation Class of the Psychological Clinic. When not in the clinic, Miss Frith reported that her "time was spent in schools giving individual and group tests". Miss Cantelon conducted a long-term study of 44 special class students who had left school in the previous year. Most were "in good lines of trade and doing well". She looked forward to the advent of trades classes in the junior high schools for special students. In the fall of 1924 Miss Kerr was fully occupied with the testing program of the educational psychologist, Dr. Peter Sandiford, who was brought to Vancouver by the Department of Education to conduct a survey of the pupil population's academic and mental fitness as a part of the Putman/Weir survey of the schools. This testing project continued through January, 1925 and was published in the Putman/Weir Survey as a separate appendix when presented to the provincial government in May of that year. Many of the progressive educational reforms that Putman/Weir
recommended were based upon Sandiford's findings.

Kerr's report of 1925 highlights the work she did with Dr. Sandiford on the testing of Oriental (Chinese and Japanese) students. In June, 1925, Kerr was given a new task, helping with a study of all overaged students in each grade level to determine the retardation rate. In 1925 Miss Frith tested 75 children (43 males, 32 females) in the Observation Class and Miss Cantelon continued to track all graduates of the special classes. She noted that four students, two boys and two girls, 'failed to make good' as they now resided in their respective Industrial Schools. In April, 1926, Miss Kerr gave a "Demonstration and Explanation of Educational Tests Suitable for Grades I, II, III" at the B.C. Teacher Federation's convention. She reported to the School Board in 1926 that an expansion of the testing program was carried out which targeted non-English-speaking elementary children, utilizing a device called the I 6 test. The tone of her report was very positive about the progress made during the past year but hesitant about the future. Miss Kerr wrote that:

Miss Cantelon's report tells of her year's work, which was continued along the line of former years. Miss Frith's work was that of assisting in the clinical studies and examining in the schools. For the splendid work and loyal support of these two members of the Department during the years we have worked together I have the most sincere respect and gratitude. I know their work will be carried on with the same fidelity by the larger department of which we are to become members. 92

In addition Kerr thanked Miss Dauphinee for her work in directing the special classes composed of the most "unfortunate children". This was the last report of the Psychological Department and in line with the recommendations of the Putman/Weir Survey, a new statistical agency was created to conduct regular standardized testing on a city-wide basis. The Bureau of Measurements would be a scientific agency examining both mental as well as academic performance. Its director, Robert Straight, would not act as a moral crusader for mental hygiene and champion eugenic measures but rather function as a statistician. Straight was a man who
believed in educational science, not the social threat of the feebleminded to society. Martha Lindley, Ruby Kerr and Dr. Peter Sandiford all believed passionately in the social crusade to stem the threat of the feebleminded. Sandiford's testing program contained the last overt eugenic references raised by an educational psychologist working in the schools of Vancouver. The Putman/Weir Survey would alter the role played by the psychologist from a social crusader agitating against the scourge of feeble-minded children in the public schools to that of a gatherer of statistics.

v. Peter Sandiford's Testing Program and the Putman/Weir Survey's Recommendation for a Bureau of Measurements:

As early as 1923 the Provincial Parent-Teacher Association and the British Columbia Teachers' Federation were urging the provincial government to conduct an American-style educational survey of the school system. This survey would be "a scientific study" of the educational system by "mature educationist" of "unassailable prestige". It would examine school finances, organization and leadership. It would look at the present state of school facilities and suggest expansion based upon curricular reforms. The survey would involve the "measurement of the products of classroom instruction" which would be conducted "in a scientific way" so that the "efficiency of the system" could be accurately gauged. 94 The survey would follow the pattern already established by the National Society for the Study of Education, Ellwood P. Cubberley of Stanford University and Franklin Bobbitt of the University of Chicago in the United States. 95 It would involve the latest progressive methods of intelligence and academic testing which necessitated engaging the services of an educational psychologist or psychometrician.

Dr. Peter Sandiford of the University of Toronto arrived in British Columbia during the spring of 1924. He brought with him a well-established record of advocating the segregation of feeble-minded children and the differential education of the general pupil population
based upon intellectual endowment as linked to social class background. Sandiford was born in Great Britain and educated at Manchester University. He had taken his doctorate at Columbia University's Teachers College under the supervision of Edward L. Thorndike, one of the leading psychologists in the United States. Sandiford's racial and social class biases in favour of the superiority of western European Caucasians of the professional classes was more the norm, as opposed to the exception, among professional educators of his time. A confirmed hereditarian and eugenicist, Sandiford was a prominent member of the CNCMH. In June, 1924, Sandiford conducted preliminary testing, with a rigorous course of standardized and academic content tests following in the fall. The June testing was in the areas of arithmetic and spelling. Nearly 1,100 pupils were tested in British Columbia and this was compared to data from 2,000 pupils in Ontario. British Columbia students had an advantage in arithmetic in grades four and eight, while Ontario students "were superior in spelling in all classes". It began a pattern of comparing educational achievement levels between provinces that continues to the present day.

The actual survey work itself was done by J. Harold Putman, an Ottawa School Inspector, and George M. Weir, a recently appointed Professor of Education at the University of British Columbia. They would make reference to Sandiford's data but the testing program was profiled in a separate appendix at the survey's end. When Sandiford got down to the business of testing in the fall he had the assistance of Vancouver's school psychologist, Miss Ruby Kerr. By the time he was finished approximately 17,000 pupils had been examined from elementary school to first year university and Normal School. Standardized tests were used to measure general intelligence and widely-used achievement tests were used for "fundamental subjects" such as arithmetic, reading, writing, spelling, Latin, algebra and French. History and geography presented particular problems as all the achievement tests were based upon the
American curriculum. The use of these tests was "inadvisable" and two non-standardized measures were developed by Sandiford, called the "B.C. Tests". Sandiford acknowledged that their non-standardization could be problematic but he insisted that reliable inter-provincial comparisons could be made. His testing program was not merely driven by the need to gather accurate educational data, although that is how he presented his testing results. The two aspects that cast doubt on his scientific neutrality were his racial and social class biases. To be sure, much of the data concerned the achievement of the pupil population in basic skills such as reading, writing and arithmetic. It also dealt with high school achievement in subjects like general science, Latin, French, algebra, history and geography. The data on rural school performance was indicative of the poor conditions within the rural school system as highlighted by Putman/Weir in their survey. However, Sandiford's study of parental occupation and pupil's mental capacity seemed to serve his eugenic convictions about the relative intelligence of social classes. Using an adapted scale from the American Army tests as well as the Stanford Revision of the Binet-Simon tests, Sandiford converted the scores he obtained from subjects on his own "B.C. Intelligence Test" to a mental age of years and months. The lowest mental age possible was 2 years 6 months and the highest was 19 years 6 months. All parental occupations of each student in high school were reported on the test.

The results "confirm Haggerty's findings" that there "is a distinctive change of intelligence level with parental occupational grouping". During the summer session of 1925 at the University of British Columbia, M.E. Haggerty, then Dean at the University of Minnesota, gave a course in education that undoubtedly dealt with his theory of natural intelligence and social class status. Sandiford assumed it was a matter of pure heredity rather than environmental factors which caused the children of unskilled workers to have lower IQs than the offspring of professional parents. However, if one examines his
1. Unskilled workers:
   Miner, labourer, lumberman, teamster, logger.
2. Farmers:
   Farmer, gardener, rancher, fruit-grower, etc.
3. Semi-skilled workers:
   Brakeman, policeman, barber, soldier, sailor, fisherman, mail-carrier, truck-driver, chauffeur, motorman, factory-hand, janitor.
4. Skilled workers:
   Mason, stone-cutter, stone-worker, printer, cheesemaker, metal-worker, inspector, plumber, shoemaker, baker, cook, painter, machinist, cooper, tailor, mechanic, engineer, electrician, blacksmith, engraver, and unclassified skilled workers.
5. Business and clerical workers:
   Mill-owner, railway-conductor, foreman, office-work, salesman, contractor, clerk, agents (express and station), retail merchant, real estate, insurance, manufacturer, civil servant, book-keeper.
6. Professional workers:
   Civil engineer, architect, accountant, editor, author, publisher, druggist, broker, lawyer, teacher, banker, minister, dentist, assayer, musician, and unclassified professions.

The findings for the whole high school, normal school, and university populations are given in Table VIII. and Diagram 5.

### Table VIII.

<table>
<thead>
<tr>
<th>Group</th>
<th>No.</th>
<th>Q.</th>
<th>Median Q.</th>
<th>Q.</th>
<th>Q.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Unskilled, Females</td>
<td>256</td>
<td>94.09</td>
<td>99.50</td>
<td>104.48</td>
<td>6.20</td>
</tr>
<tr>
<td>1. Unskilled, Males</td>
<td>200</td>
<td>96.10</td>
<td>102.50</td>
<td>110.50</td>
<td>7.20</td>
</tr>
<tr>
<td>1. Unskilled, F. and M.</td>
<td>456</td>
<td>96.65</td>
<td>100.77</td>
<td>107.82</td>
<td>6.58</td>
</tr>
<tr>
<td>2. Farmers, Females</td>
<td>380</td>
<td>96.12</td>
<td>102.37</td>
<td>107.41</td>
<td>5.94</td>
</tr>
<tr>
<td>2. Farmers, Males</td>
<td>193</td>
<td>94.25</td>
<td>102.35</td>
<td>108.23</td>
<td>6.99</td>
</tr>
<tr>
<td>2. Farmers, F. and M.</td>
<td>573</td>
<td>95.36</td>
<td>102.37</td>
<td>107.70</td>
<td>6.17</td>
</tr>
<tr>
<td>3. Semi-skilled, Females</td>
<td>246</td>
<td>93.93</td>
<td>101.67</td>
<td>107.07</td>
<td>6.57</td>
</tr>
<tr>
<td>3. Semi-skilled, Males</td>
<td>183</td>
<td>94.77</td>
<td>101.64</td>
<td>107.33</td>
<td>6.28</td>
</tr>
<tr>
<td>4. Skilled, Females</td>
<td>826</td>
<td>95.28</td>
<td>102.38</td>
<td>108.09</td>
<td>6.43</td>
</tr>
<tr>
<td>4. Skilled, Males</td>
<td>555</td>
<td>95.26</td>
<td>102.23</td>
<td>108.92</td>
<td>6.83</td>
</tr>
<tr>
<td>4. Skilled, F. and M.</td>
<td>1384</td>
<td>95.24</td>
<td>102.46</td>
<td>108.42</td>
<td>6.59</td>
</tr>
<tr>
<td>5. Clerical, Females</td>
<td>879</td>
<td>96.66</td>
<td>103.71</td>
<td>109.59</td>
<td>6.46</td>
</tr>
<tr>
<td>5. Clerical, Males</td>
<td>672</td>
<td>96.00</td>
<td>103.02</td>
<td>109.95</td>
<td>6.97</td>
</tr>
<tr>
<td>5. Clerical, F. and M.</td>
<td>1,551</td>
<td>96.34</td>
<td>103.41</td>
<td>109.71</td>
<td>6.98</td>
</tr>
<tr>
<td>6. Professional, Females</td>
<td>387</td>
<td>97.24</td>
<td>104.36</td>
<td>110.78</td>
<td>6.77</td>
</tr>
<tr>
<td>6. Professional, Males</td>
<td>272</td>
<td>98.62</td>
<td>106.29</td>
<td>113.40</td>
<td>7.39</td>
</tr>
<tr>
<td>6. Professional, F. and M.</td>
<td>659</td>
<td>97.53</td>
<td>105.11</td>
<td>112.23</td>
<td>7.20</td>
</tr>
</tbody>
</table>

The classification scheme that Dr. Peter Sandiford used to define the parental occupations of his test subjects. Below that is the cumulative data on IQs of all subjects tested according to parental occupation and social class background.

**Source:** J. H. Putman & G. M. Weir, *Survey of the School System* (Victoria: King's Printer, 1925), Appendix I-The Testing Programme, p. 455
data on the following page it becomes quite apparent that IQs did not differ as dramatically as Sandiford claimed. In fact all subjects were well within the normal range. The class divisions he delineated in testing had to fit a pattern of inherited intellectual capacity even if the quartile values were all well within the normal range. The 1961 Stanford-Binet scale rates 88-112 as normal and 112-123 as superior intelligence, while very superior intelligence begins at 124. The Weschler scale of 1961 has an average range of between 90-109. Sandiford’s quartile ranges (Q1 low, Q2 medium, Q3 high) for each population grouping tested (high school, Normal School, university) never showed the children of unskilled labourers, farmers and semi-skilled workers to fall below the normal range of intelligence. Brighter working-class children seemed to be found in Normal School and university but that is of little surprise. In fact Sandiford remarked that intellectual differences were "not quite so marked as those found in the State of New York" by Haggerty and Nash in their study. At one point, in a detailed analysis of the high school population, he noted that children of unskilled workers in municipalities "appeared to be remarkably intelligent" as they out-scored the children of professionals. Despite such ambiguous results, Sandiford confidently concluded the children of professionals were more intelligent due to their heredity "and, eugenically, this is the group in which large families should be encouraged". It was a forced analysis of natural social differentiation that was not borne out by the testing data collected.

When Sandiford linked intelligence testing data to the national origin and racial category of the subjects, his eugenic rationale became much clearer. Sandiford had always encouraged an immigration policy that favoured the more intelligent races of western Europe and in his later career he made this most explicit. Among the province’s high school, Normal School and university students, the Scotch ranked highest (Median Q2 IQ 103.88). The English followed (Median Q2
IQ 103.59), then the Irish (Median Q2 IQ 103.51) and below them a diverse group called "Rest of the World" (Median Q2 IQ 100.00), while the lowest group was the Scandinavians (Median Q2 IQ 96.94). Sandiford proclaimed it was important for the people of British Columbia to know which "racial stock is likely to exhibit higher mental capacity". However, if Sandiford had known which racial stock was to prove the highest in mental capacity, he might not have even approached Ruby Kerr in the fall of 1924 to work on a special project. Sandiford asked her to test the mental capacity of Oriental school children of Chinese and Japanese national origins. In both the journal article of 1926 about the testing and Miss Kerr's report for 1925, a sample size of 500 children is cited. The testing appendix of the Putman/Weir Survey notes problems in the actual conduct of administering the tests so the sample size was "curtailed" to 155 Chinese and 150 Japanese pupils. The Pintner-Paterson Performance Tests were chosen and because "the scale is most reliable below twelve years" of age. The pupils ranged in age "from seven to eleven years, eleven months". The Pintner-Paterson Scale was well suited for "examining the Orientals in the Vancouver schools" as they "are non-language tests designed to estimate the mental development of subjects independent of language ability".

The data that Miss Kerr collected was sent to Dr. Sandiford who must have been shocked to find the rather high intellectual ability of the Chinese and Japanese students because the mental inferiority of Orientals to Caucasians was an accepted fact at that time. In Kerr's own report of 1926 the Chinese group had an IQ range of 98-117, while the Japanese IQ range was 102-125. A test of the Pintner-Paterson Scale was conducted on 40 non-Oriental students at Cecil Rhodes school along with the Stanford Revision of the Binet-Simon to check the validity of median mental age scoring. Obviously Kerr was concerned about a mistake but the data showed a similarity of results between the tests. In their article Kerr and Sandiford gave the median IQ for all Japanese as 114.2
and for all Chinese 107.4. The fact that 66 Japanese scored in the 110-119 range and 62 scored in the 120-129 range was stunning. Equally, 65 Chinese scored in the 100-109 range and 55 in the 110-119 range. An elite of Japanese students scored as follows: 28 (IQ 130-139), 7 (IQ 140-149), 1 (IQ 150-159), 2 (IQ 160-169), and 1 (IQ 170-179). An elite of Chinese scored as follows: 22 (IQ 120-129), 7 (IQ 130-139), 10 (IQ 140-149) and 1 (IQ 150-159). 110 This data is reproduced on the following page. A large number of Chinese and Japanese students fell in the 124-147 range of IQ which in the 1961 Stanford-Binet is given the "very superior intelligence" designation and is found in only 6.5 per cent of any given population of individuals. 111

Sandiford in his own testing appendix had to admit that three-quarters of the Japanese pupils exceeded a score of 100, "while only one-half the white exceed this score". Over one-half the Chinese pupils achieved an IQ score that "is only reached by one-quarter of the whites". These facts are of "great importance to B.C." as "an alien group" has a mental capacity that "is greatly superior to that of native stock". Sandiford had to construct an explanation for this fact or his entire racial hierarchy of the intellectual superiority of the Caucasian race would fall apart. The children of the Chinese and Japanese in British Columbia are the best of their races "who possess the qualities of cleverness, resourcefulness, and courage". To Sandiford it was a clear case of the "superiority of an emigrant stock" as the "dullards and less enterprising are left behind". The explanation was instilled with an eugenic logic. 112 In their journal article, Kerr and Sandiford also attributed the results of the test to "selection". Many immigrants are of better stock as were the British who settled America and those Americans who travelled west to the Pacific. However, "the presence of an industrious, clever and frugal alien group...constitutes a problem". In fact Sandiford and Kerr called the Japanese "the cleverest racial group resident in British Columbia". 113 Although Sandiford's testing
Table 6:

**Table I.—Distribution of the IQ’s of Japanese and Chinese Pupils in Vancouver Public Schools According to Race and Sex**

<table>
<thead>
<tr>
<th>IQ</th>
<th>Japanese Males</th>
<th>Japanese Females</th>
<th>Japanese Total</th>
<th>Chinese Males</th>
<th>Chinese Females</th>
<th>Chinese Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-49</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>50-59</td>
<td>...</td>
<td>1</td>
<td>1</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>60-69</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>70-79</td>
<td>11</td>
<td>8</td>
<td>19</td>
<td>9</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>80-89</td>
<td>12</td>
<td>21</td>
<td>33</td>
<td>24</td>
<td>14</td>
<td>38</td>
</tr>
<tr>
<td>90-99</td>
<td>28</td>
<td>26</td>
<td>54</td>
<td>37</td>
<td>28</td>
<td>65</td>
</tr>
<tr>
<td>100-109</td>
<td>37</td>
<td>29</td>
<td>66</td>
<td>33</td>
<td>22</td>
<td>55</td>
</tr>
<tr>
<td>110-119</td>
<td>38</td>
<td>24</td>
<td>62</td>
<td>13</td>
<td>9</td>
<td>22</td>
</tr>
<tr>
<td>120-129</td>
<td>18</td>
<td>13</td>
<td>28</td>
<td>5</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>130-139</td>
<td>1</td>
<td>6</td>
<td>7</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>140-149</td>
<td>...</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>150-159</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>160-169</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>170-179</td>
<td>1</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>Total</td>
<td>144</td>
<td>132</td>
<td>276</td>
<td>131</td>
<td>93</td>
<td>224</td>
</tr>
</tbody>
</table>

| Q1     | 104.3          | 100.4            | 102.4         | 98.2         | 97.3           | 98.0          |
| Q2     | 115.4          | 112.8            | 114.2         | 107.7        | 107.0          | 107.4         |
| Median | 125.0          | 125.0            | 125.0         | 117.4        | 116.7          | 117.1         |
| QD     | 10.4           | 12.3             | 11.3          | 9.6          | 9.7            | 9.6           |

**Diagram 1.—Showing the range of the middle half of the IQ’s of Japanese and Chinese pupils in the Vancouver Public Schools.**

Table 1 shows the IQ data for all male and female subjects of Chinese as well as Japanese descent tested by Miss Ruby Kerr during the winter of 1924-1925. The Median IQ values were used by Dr. Peter Sandiford to reach the conclusion that "Orientals" had a greater mental ability than "Whites". Diagram I shows the "Median White" IQ value of 100 as compared to the achievement of Chinese and Japanese students.

**Source:** Peter Sandiford and Ruby Kerr, "Intelligence of Chinese and Japanese Children", The Journal of Educational Psychology, Vol. 17, No. 6 (September 1926), pp. 362-363
program did point out the many flaws in the province's school system such as poorly trained teachers and rural educational disparity, these side trips into the intelligence of social classes, as well as racial groups, point to the deeper social convictions of the examiner. In 1927 Sandiford told the teachers of British Columbia that gifted children needed a segregated and accelerated form of education apart from that of other students. These gifted students had parents of the "predominately professional and semi-professional" type whose families were "comfortable but not especially wealthy". To not educate these naturally gifted social leaders was "a grievous waste of talent". It was clear that Sandiford wanted differential education based upon the mental ability of a student. During the summer session of 1923 at the University of British Columbia from July 9 to August 17, Sandiford offered a course on "Psychology and Teaching Method". 114 The course syllabus suggests that the teaching methods being used had to be based upon the mental capacities of the students being taught.

It should never be assumed that Putman/Weir were not in sympathy with Sandiford's eugenic views on mental hygiene and race. They bluntly declared that "All children who are clearly subnormal should be segregated". Their presence in a regular classroom "retards the progress of other pupils" and their education must be "radically different" from normal children. 115 In several assisted or rural schools they found that "nearly fifty per cent of the pupils were of subnormal intelligence". The "evidences of racial degeneracy were manifest in these schools". Testing revealed most of the pupils to be "of less than average mentality". 116 It can only be assumed that a rural school which fell victim to "racial degeneracy" contained students of mixed aboriginal and Caucasian blood. Like Sandiford, Putman/Weir seem content to throw out provocative statements but leave their implication open to speculation. However, when it came to the school psychologist, Putman/Weir were very specific in their criticisms. While they regarded
a school psychologist as "necessary" and a social service worker to be of "great assistance", they found Miss Kerr's attitude to be less than helpful. They believed that the psychologist should train teachers to administer intelligence tests and save the high cost of one person conducting a limited number of mental examinations per year. The teachers in the special class system were "spoon-fed" and not judged "competent to observe and report upon a pupil who has been given the Binet-Simon tests". The process of mental testing was jealously guarded by the supervisors of the Psychological and Special Class Departments as "mysterious secrets". Putman/Weir stated that: "As soon as the chief psychologist conceives her main work to lie in selecting and training teachers, these teachers will not only direct their own classes but will be able to give assistance in the examination of pupils more than sufficient to compensate the chief psychologist for the time spent upon their training". Obviously Miss Kerr had proved resistant to the suggestion that she should share her expert knowledge of mental hygiene with ordinary teachers. This stance could only imply that Kerr, like Lindley and Sandiford, regarded herself as a scientific expert and to share such knowledge with others who were not as expert would be highly problematic. What Putman/Weir wanted was "a trained psychologist of university standing" to become the head of a new agency which would conduct city-wide school survey testing and gather statistics. This agency would be called the Bureau of Measurements.

In their concluding comments about Vancouver's schools, Putman/Weir made two crucial recommendations that recast the delivery of psychological services to the city's pupils. The first was to create a Bureau of Measurements "under the direction of an expert educationist" and the second was that the "present psychological department in Vancouver should be placed under the control and direction of the proposed Bureau of Measurements". Miss Kerr closed her final departmental report in 1926 with thanks to her colleagues Miss Frith,
Miss Cantelon and Miss Dauphinee. She thanked all those "who have understood its difficulties...its shortcomings and encouraged its aspirations". Thus Kerr wrote: "This Department closes its final report". 119 However, when Kerr became a clinician in the Bureau of Measurements in 1927 she found a person not totally unsympathetic to the certain aspects of mental hygiene in Robert Straight. Straight was an advocate of intelligence testing and in fact promoted the extension of the special classes to the junior high school level. 120 However, Straight was not a eugenicist and did not see the feebleminded as a social menace. Also, he did not link together social-class standing, IQ measures and racial group origin in his statistical analyses. Straight was a bureaucrat and statistician, he did not have to justify the role of mental hygiene in public education. It was the end of a highly political period of psychological work in the schools of Vancouver.

vi. Conclusion:

In the Report of the Public Schools for 1926-1927 it was announced by J.S. Gordon, Vancouver's Municipal School Inspector, that in January, 1927, a Bureau of Measurements was opened under the directorship of Robert Straight, B.A. Straight had been an elementary school principal for twenty years but had recently completed graduate course work at the University of Washington. He had been given a leave of absence before starting his new position to visit other large cities in North America to study how they conducted such work. Gordon looked forward to Straight providing "valuable assistance" to the city's principals, "particularly of junior high schools and high schools, in grouping their new students according to mental strength". 121 There was to be a new form of mental hygiene, not one that was overly concerned with finding the feeble-minded or subnormal pupils but one that tried to scientifically sort all pupils according to their natural levels of intelligence. It was no longer a moral crusade to save society from the feebleminded, the excessive fertility of the labouring classes and the
threats of specific racial groups. It was a new management system intent upon creating a modern and progressive school system. Vancouver’s new Bureau of Measurements would not be involved in using lobbying groups such as the Local Council of Women to press for educational and medical solutions to the feebleminded problem. Mental hygiene would now be an institutional strategy for educational reorganization.

Notes:


2. Ibid., p. 19


6. Ibid., pp. 280-281


8. Ibid., p. 211

9. Ibid., p. 217

10. Thomas F. Kane, "The University of British Columbia and the University of Washington", in James M. Sandison (ed.), Schools of Old Vancouver, (Vancouver Historical Society: Occasional Paper No. 2, 1971), p. 44; originally published in Man to Man, Vol. 6 (September 1910), pp. 659-660; it is noted in The B.C. Teacher, (September 1926), p. 31 under the heading "The University of Washington" that: "Fully twenty B.C. teachers attended one session or the two into which the summer quarter is divided and thoroughly appreciated the friendly spirit shown by both university authorities and students to their visitors from across the
12. Ibid., p. 216
13. Ibid., p. 223
16. See such works as: Carol Gossage, A Question of Privilege: Canada's Independent Schools, (Toronto: Peter Martin Press, 1977); Jean Barman, Growing up British in British Columbia: Boys Private School, (Vancouver: University of British Columbia Press, 1984). Eventually, by the late 1930s, the two most prominent private schools in Vancouver were Crofton House for girls and St. George's for boys. For a discussion of educational opportunities and class divisions in Vancouver, see Jean Barman, "Youth Class and Opportunity in Vancouver, 1921-1931", Canadian Historical Association Paper, 1983.
17. K.A. Waites, The First Fifty Years: Vancouver High Schools, 1890-1940, (Vancouver: Vancouver School Board, 1940), pp. 146-147, data on all elected officials from 1886-1940
18. Letter of June 21, 1929, from Local Council of Women (Vancouver) to Hon. S.L. Howe, Provincial Secretary, Victoria, B.C. The letter was from the Mental Hygiene Committee of the Local Council of Women (Mrs. T.H. Kirke, Mrs. I.H. Moody, Miss June Stevens, Miss Ruby Kerr, and Miss Josephine Dauphinee) to the Provincial Secretary concerning four resolutions to expand custodial care as well as education for "Cases of Mental Defect". Source: Fonds of the Local Council of Women, U.B.C. Archives
19. "Here For 50 Years: Well-known City Poet, Mrs. Irene Lewis dies", Province, Monday, April 7, 1958, p. 2. Some of Irene Helen Moody's (Hawkins) poetry includes: "Always the Bubbles Break" (1947), "Lava" (1940), "Attar of Song and Other Poems" (1936), "Wraiths" (1934) and "Delphine of the 'Eighties" (1931).
22. "Misinformed As To Residence in City: Mrs. Moody Regrets Inability to Qualify as School Board Candidate", Daily Province, January 7, 1916, p. 15
24. "Complete Results of Yesterday's Voting", Daily Province, January 14,


28. "Mrs. Moody, Head of School Board", Daily Province, January 18, 1917, p. 4

29. Vancouver School Board (Hereafter V.S.B.) Minutes, March 27, 1917, p. 340

30. Mrs. I.H. Moody, "Chairman's Address, January 9, 1918", Vancouver Board of School Trustees (Hereafter Vancouver B.S.T.) Annual Report for 1917, p. 11


34. Ibid., p. 240; p. 246


36. V.S.B. Minutes, May 7, 1918, p. 103

37. Mrs. I.H. Moody - "Chairman's Address, January 9, 1918, Vancouver B.S.T. Annual Report for 1917, p. 11


45. Martha Lindley (Psycho-clinician), "Psychological Department of Vancouver, B.C.", The Training School Bulletin, Vol. 16 (September 1919), p. 83

46. Ibid., p. 85

47. Martha Lindley - "Psychological Department", Vancouver B.S.T. Annual Report for 1918, p. 46


53. Ibid., p. 10

54. Ibid., Martha Lindley - "Psychological Department", pp. 45-47


58. Alice B. Stewart, "University Women's Club", Western Women's Weekly,

60. Ibid., p. 14

61. Interview with Dr. Norman Ellis, January 25, 1997; interview with Miss Grace Jamieson, February 27, 1997


63. Ibid., Dr. Robert Wightman - "Report of Medical Department", p. 38

64. J.W. Gibson - "Summer School for Teachers" (1923), Fifty-second Annual Report of the Public Schools of British Columbia (1922-1923), p. 71

65. V.S.B. Minutes, September 9, 1920, p. 115; V.S.B. Minutes, September, 20, 1920, p. 124

66. Vancouver B.S.T. Annual Report for 1921, pp. 47-49

67. Vancouver B.S.T. Annual Report for 1922, pp. 51-52

68. Ibid., p. 53

69. Ibid., pp. 54-56


72. Mrs. G.O. Fallis and Mrs. Margaret Sutherland (eds.), "Local Council of Women", Western Women's Weekly, Vol. 6, No. 14 (March 10, 1923), p. 2

73. V. May Macdonald (R.N. Canadian Red Cross), "Mental Hygiene and the Public Health Nurse", Western Women's Weekly, Vol. 6, No. 23 (July 7, 1923), p. 9


75. Letter of April 4, 1924 from Mrs. Irene H. Moody concerning a booth in the Vancouver Exhibition's Women's Building and display for the 1924 Fair in August. (Fonds of the Local Council of Women, U.B.C. Special Collections)

76. Letter of January, 1925, from J. Baker (Secretary/Treasurer, South Vancouver Women's Institute) to Mrs. C. Labsik (Secretary, Local Council of Women, Vancouver) on the matter of the "Resolution on Sterilization". (Ibid.)

77. Letter of March 30, 1925 to Dr. Clarence Hincks (President C.N.C.M.H.) from Mrs. C. Labsik (Secretary, Local Council of Women, Vancouver) about addressing a meeting at Wesley Church School on the afternoon of Monday, April 6, 1925. (Ibid.)
78. July, 1925, Memo from the Local Council of Women, Vancouver, to all presidents of affiliated societies re the Sterilization Resolution of the New Westminster Local Council. (Ibid.)

79. Letter of April 1, 1926, from Mrs. C. Labsik to Miss Mabel Gray (Committee of Public Health) re the adoption of the New Westminster Sterilization Resolution by the Vancouver Local Council; letter of April 13, 1926 from Dr. J. Carson of the Vancouver Y.M.C.A. to the Vancouver Local Council supporting their "resolution regarding the Mentally Deficient"; letter of May 14, 1926, from Miss Munslow, R.N., Secretary of the Vancouver Nurses Association to the Vancouver Local Council supporting the "resolution regarding sterilization of the mentally deficient"; letter of May 18, 1926 from Gladys E. Simms of the Canadian Daughters League to the Vancouver Local Council "supporting the Resolution re Sterilization for the Sexes of the mentally deficient". (Ibid.)

80. Letter of August 7, 1926 from Dr. J. G. McKay (Hollywood Sanatorium, New Westminster) concerning his agreement to speak to the Local Council of Women, Vancouver. Follow-up letter of July 28, 1926, confirms Dr. McKay will speak on Tuesday afternoon, September 7, 1926, on "Sterilization". (Ibid.)

81. Letter of June 21, 1929 from Mrs. J.H. Kirk, Mrs. Irene H. Moody, Mrs. Jane Steeves, Miss Ruby Kerr and Miss Josephine Dauphinee of the "Mental Hygiene Committee" to the Honourable S.L. Howe, Provincial Secretary re four resolutions on mental hygiene and list of societies/churches endorsing those resolutions. (Ibid.); The Report of the Royal Commission on Mental Hygiene, (Victoria: King's Printer, 1927); Appendix D "Care and Treatment of Subnormal Children", pp. 21-23; Appendix E "Sterilization", pp. 25-27

82. Letter of April 30, 1930, from Mrs. Irene Moody of the Mental Hygiene Committee to the Honourable S.L. Howe, Provincial Secretary, re the lack of response over the June, 1929, submission of the committee. (Ibid.)

83. Letter of May 6, 1930, from the Honourable S.L. Howe, Provincial Secretary, to Mrs. Irene Moody of the Mental Hygiene Committee through the office of Mrs. C. Labsik, Local Council of Women, Vancouver. (Ibid.)

84. Letter of January 9, 1931, from the Correspondence Secretary, Local Council of Women, Vancouver, to the Provincial Secretary, S.L. Howe, "re care of the Feeble-minded"; letter of October 8, 1930, from Mrs. C. Labsik to Mrs. C.D. Peele, Correspondence Secretary, New Westminster Local Council of Women, about the final adoption of resolution demanding the government introduce the conclusions of the 1927 Mental Hygiene Commission Report. (Ibid.)

85. Angus McLaren (1990), op. cit., pp. 103-105

86. V.S.B. Minutes, Memo to the Management Committee re Certain Difficulties of the Past Year from J.S. Gordon, May 4, 1922, Item No. 4, Retrenchment measures for the special classes.


88. Ibid., p. 49

89. Ibid., pp. 50-52

90. Vancouver B.S.T. Annual Report for 1925, pp. 47-48
91. Ibid., Frith, p. 49; Cantelon pp. 50-51; The B.C. Teacher, Vol. 5, No. 7 (March 1926), p. 149

92. Vancouver B.S.T. Annual Report for 1926, p. 51

93. Dr. Peter Sandiford and Miss Ruby Kerr, "The Intelligence of Chinese and Japanese Children", The Journal of Educational Psychology, Vol. 17, No. 6 (September 1926), pp. 361-367


97. Angus McLaren (1990), op. cit., pp. 61-62, p. 110


99. Ibid., pp. 355-356


103. Putman/Weir (1925), op. cit., p. 455

104. Ibid., p. 458


106. Putman/Weir (1925), op. cit., pp. 460-461

107. See Dr. Peter Sandiford and Miss Ruby Kerr (1926), op. cit., p. 361; Ruby Kerr - "Psychological Department", Vancouver B.S.T. Annual Report for 1925, p. 47; Putman/Weir (1925), op. cit., p. 506


109. Ruby Kerr - "Psychological Department", Vancouver B.S.T. Annual
110. Dr. Peter Sandiford and Miss Ruby Kerr (1926), op. cit., p. 363

111. George P. Robb, et al. (1972), op. cit., p. 205

112. Putman/Weir (1925), op. cit., p. 508

113. Dr. Peter Sandiford and Miss Ruby Kerr (1926), op. cit., p. 367


115. Putman/Weir (1925), op. cit., p. 121

116. Ibid., p. 348 "Racial degeneracy" or mixed-blood children were largely a product of the fur trading era with its lack of European women for marriage. Mixed-blood children declined in the settler period but remain a feature of British Columbia’s rural population. See Robin Fisher, Contact and Conflict (1977), p. 93 and pp. 208-209

117. Ibid., p. 393

118. Ibid., p. 434 No. 2, No. 7

119. Miss Ruby Kerr - "Psychological Department", Vancouver B.S.T. Annual Report for 1926, pp. 51-52


i. Introduction:

Robert Straight represented a new philosophy of educational reform in the Vancouver school system when he assumed the directorship of the Bureau of Measurements in 1927. It was Straight's long-standing membership within a triad of Vancouver school principals, active in promoting school reform since before World War One, that helped him to advance his career. Robert Sparling of Aberdeen School, Herbert Baxter King of General Gordon School and Robert Straight of Lord Tennyson School had met as a group since 1912. The three men were "among the most active proponents of an up-to-date curriculum and the application of new scientific methods in education". What is more remarkable is the fact that all three men attended some of the same undergraduate as well as graduate courses in education and psychology at the University of Washington in Seattle from 1919 through the early 1920s into the 1930s. Robert Straight took courses each summer from 1919 to 1931, of which his later courses were graduate work. Robert Sparling attended from 1919 to 1924 and in 1925 converted to graduate status but died before he could complete his Master's degree. Herbert Baxter King began at the University of Washington in 1919 and returned in 1924 to begin his graduate work towards a doctoral dissertation in education, which he eventually attained in 1936. Straight never did complete a Master's degree but was appointed head of the Bureau of Measurements because of his course work in educational psychology. His son, Lee Straight, remembers that for one year in the 1920s the entire family lived in Seattle while his father attended university on a full-time basis. What Robert Straight, along with Sparling and King, brought to the Vancouver school system was a new method of quantifying the pupil population through mass intelligence testing or grade-wide achievement
screenings. It was an innovative means to organize the school system on the basis of educational streams or tracks, usually divided between an academic, commercial and manual training focus. The Bureau of Measurements represented the direct importation of educational efficiency and progressive school management methods which had developed in the United States since 1911 to scientifically manage a diverse urban school population. At the University of Washington the young Canadian principals were exposed to new currents of thought in educational administration and psychology. Franklin Bobbitt (Chicago), Ellwood P. Cubberley (Stanford) and Frank N. Freeman (Chicago) were major influences on how these Canadian principals came to regard school administration. Lewis Terman (Stanford), Edward L. Thorndike (Columbia) and Henry Herbert Goddard (Vineland Training School, New Jersey/Ohio State) were required reading in their courses on intelligence testing. It was the Putman/Weir Survey of the School System (1925) that essentially signalled the beginning of Vancouver’s adoption of American progressive school methods. Putman/Weir’s references to Thorndike, Cubberley and Freeman attest to their preference for modern, progressive, efficient and ultimately American methods of education. By the late 1920s Straight and King had the necessary university credentials, as well as positions of authority, to oversee the progressive educational program suggested by the Putman/Weir survey. They would manage the pupil population of Vancouver’s schools in an entirely new manner, by quantifying educational performance in order to sort the students according to the latest scientific methods of educational management.

ii. American Educational Progressivism and the Influence of the University of Washington upon the Schools of Vancouver:

Seattle, Washington, is only 200 kilometres south of Vancouver, British Columbia. The early history of both cities and the reciprocity of goods as well as people has been well documented in the work of historian Norbert Macdonald. However, the research conducted for this body of work indicates there was an intellectual exchange of
ideas and management methods which directly affected the operations of Vancouver city schools. The first visits to Seattle by Josephine Dauphinee, head of Vancouver school's special classes for subnormal children, occurred before World War One. Several Vancouver School Board members also visited Seattle's public schools on fact-finding tours before, as well as during, the 1914-1918 war. There was a direct relationship between the segregated methods of educating subnormal children and the eventual testing of the general pupil population with intelligence tests. The creation in 1918 by the Vancouver School Board of a Psychological Clinic under an American psychometrician, Martha Lindley, to find subnormal children began the process of introducing testing into the school system. Lindley was trained at the Vineland Training School in New Jersey under Dr. Henry Herbert Goddard, a leader in the American eugenics movement. Lindley first met Miss Dauphinee at the Child Study Laboratory of the Seattle public schools, which was under the directorship of Dr. Stevenson Smith, while Dauphinee was on one of her numerous visits to the city's school system. It was Dauphinee who informed School Board Chairman Moody that Lindley's talents as a mental hygienist could be effectively utilized in Vancouver schools. The spread of the American mental hygiene movement from Seattle to Vancouver was first highlighted by historian Angus McLaren. His work formed the basis for the wider picture of intellectual exchange between the two cities which this study attempts to prove in more detail.

In probing the educational career of Robert Straight, along with those of Robert Sparling and Herbert Baxter King, an even firmer connection has emerged between the course of progressive educational reform in Vancouver's schools and the University of Washington. Straight, Sparling and King all attended the university beginning in 1919. Sparling died in 1925 after he had obtained a Bachelor of Education in 1924. Straight took undergraduate and graduate courses until 1931, obtaining a Bachelor of Education and a Certificate of
Professional Training in Education. King was more industrious as he first took courses in 1919 but left to complete a Master’s degree in philosophy at the new University of British Columbia in 1923. King returned to Washington in 1924 and registered in succeeding summer sessions until obtaining a doctorate degree in 1936. It should be remembered from the introduction that these three principals were described as "the most active proponents of an up-to-date curriculum" with an appreciation of "new scientific methods in education". It was the courses they took at the University of Washington in the new progressive methods of managing school children according to modern scientific methods of education which would have a profound impact on the Vancouver school system.

Robert Sparling was born on August 8, 1862 near Seaforth, Ontario. He attended Seaforth Collegiate Institute and trained as a teacher at the Model School. He came to British Columbia from Ontario in 1893 and taught in Vernon for five years. In 1898 he moved to Vancouver where he taught and later was appointed principal at Aberdeen Elementary School when it opened in 1908. He remained there until becoming ill in late 1924. Aberdeen Elementary was located on the corner of Barclay and Burrard Streets on the border between the city’s upper-class west end and the warehouse district with working-class homes. In his obituary in The B.C. Teacher Sparling was called "a most remarkable example of 'The New Teacher'" who was fully conversant "on such subjects as modern methods of teaching". It also noted that since obtaining his B.A. Sparling had been preparing to "write for his M.A." the next summer at the University of Washington. He had been a member of the B.C. Teachers Federation Executive during 1920/1921 and had represented Vancouver teachers at the Winnipeg National Conference on Education in 1919. Another event that Sparling attended was the founding convention of the Child Welfare Association of British Columbia held at Vancouver in December, 1918. At this convention he heard a number of
modern perspectives dealing with children such as Vancouver school psychologist Martha Lindley's talk on "Community Control of the Feebleminded" and a Dr. Ernest Hall of Victoria who claimed that parents with venereal diseases was the chief cause of infant mortality. The first Child Welfare Conference in the province brought forth the virtues of a progressive social policy aimed at the institutional control of the feebleminded, delinquent children and juvenile criminals. It also came under the sway of the eugenic philosophy as Resolution 14 advised "lectures in Eugenics should be afforded pupils of rural schools" as, I assume, there was too much racial intermingling. 13 It is noted in the minutes that "Mr. Robert Sparling, Principal of the Aberdeen School" was urging greater "vocational guidance" for school children and their parents. This would be by way of "enabling them to do the things in life, for which nature has best fitted them". 14 The working-class children to the east side of Aberdeen School provided Sparling with the opportunity to vocationally guide these students in the way that nature supposedly intended. I do not believe he was encouraging them to enter the skilled professions.

In 1919 Sparling would have his firmly-held convictions about the value of the public school system to sort children for what "nature has best fitted them" confirmed when he enrolled in his first summer session at the University of Washington. Along with fellow Vancouver principal Herbert Baxter King, Sparling took an education course entitled "Educational Measurements". King took section 187, while Sparling took 186, but both were taught by Assistant Professor Hines (Los Angeles). Robert Straight would later take section 187 of the same course with Hines during the 1921 summer session. The course was "designed to familiarize the student with the standard scales and tests" being used by progressive American educators to sort their school populations by supposed natural ability and educate them as befitted their natural skill levels. The course promised to present a "critical evaluation of such
tests as Thorndike Reading, Ayres Writing and Spelling, Courtis Arithmetic, Woody Arithmetic, Nassau County Composition Scale, etc.". The students registered in this course had to pay a laboratory fee as they would be handling and practising the administration of the tests. The course was "primarily intended for superintendents, principals and supervisors". 15 Sparling, King and Straight would not have found such progressive educational methods at the University of British Columbia as it had not yet formed a Department of Education and the Provincial Normal School would not have offered courses of study at this advanced level. The University of Washington began to attract British Columbia teachers soon after the First World War as it was the most accessible site for the training of potential school administrators who required graduate or advanced undergraduate training. The President of the University of Washington, Henry Suzzallo, became familiar to British Columbia teachers as he spoke at several B.C. Teacher Federation Conventions in the 1920s about the values of progress and scientific educational reforms. 16 In fact The B.C. Teacher began to promote the University of Washington by publishing advertisements for upcoming summer sessions such as one for 1923 on the following page. Teachers could get the "benefits of a metropolitan city" and it was a "good time for teachers to meet superintendents and board members", the advertisement proclaimed. 17 However, in practice that would mean a few British Columbia teachers would meet American school officials and hear of the latest scientific methods to manage the pupil population.

Sparling continued to take courses that emphasized new methods of scientifically managing school children. In the summer of 1920 he took his first course on the psychology of learning, "Advanced Educational Psychology" with Professor Clement which stressed the "application of psychology to educational problems...especially the learning process and habit formation". Sparling must have had his opinions about the nature and educational destiny of children affirmed
An advertisement in The B.C. Teacher magazine of April 1923 for the Summer Quarter at the University of Washington. Notice that teachers are told attendance in the Summer Quarter is "a good time ... to meet superintendents and board members". For Canadian teachers it was opportunity to absorb American methods of education.

as the course focused on how educational psychology could help "in vocational guidance and adjustment". In the summer of 1921 Sparling took his next group of courses including one entitled "Child Accounting and School Adjustment" along with Robert Straight as taught by Assistant Professor Williams. The course offered a demonstration of "methods of determining various ability-levels" as it was a laboratory course. There was to be "special reference to differential teaching in normal and special classes". The course was obviously emphasizing the sorting of school children into educational tracks or ability levels with radically different education methods. It exposed the Canadian principals to a system of differential education that had its origins in the development of the urban American high school.

In 1922 Straight and Sparling took courses together towards their administrative training such as "The School Principal" and "The Elementary School Curriculum". In his last summer session at the University of Washington in 1924 Sparling took "Educational Sociology" with Straight and a course on "Silent Reading". This must have been the last of his academic preparation work as his death notice in The B.C. Teacher stated it was his "intention" to write his Master's thesis in the next summer session.

However, on March 28, 1925, Sparling died at his home having spent the last thirty years of his teaching career in the Vancouver school system.

Robert Straight was born on December 25, 1885, in East Florenceville, New Brunswick. He graduated from the Provincial Normal School in 1904 and taught in a rural school along the St. John River where he met his future wife. Her family decided to move west to Vancouver but the only western position Straight could secure was in Saskatchewan. According to Lee Straight, one of his sons, he got off the train in Saskatchewan in August and decided the place was definitely too hot in the summer and probably would be too cold in winter, which would not suit him. He continued on the train to Vancouver where he got a job
as a trolley car motorman in order to get married. In the fall of 1907 he secured a teaching position at Kitsilano Elementary. He later moved to Central School in 1909. Due to his teaching performance at Central, he was made a principal in 1911 upon the recommendation of Principal Dobson and was posted to Grandview Elementary. In 1914 he was moved to Lord Tennyson Elementary where he would remain as principal until he was promoted to the Directorship of the new Bureau of Measurements in 1927.

Straight, like Sparling and King, was first attracted to the University of Washington by the need to secure better qualifications for his administrative position, as a Bachelor’s degree was the preferred credential for principals. As Lee Straight relayed: "It was ordained or made a rule that administrators or principals had to have a B.A., or preferably an M.A., but a B.A. at least". 23 King, Sparling and Straight all attended the summer session of the University of Washington in 1919. Sparling and King took "Educational Measurement" with Professor Hines, while Straight did the same course in the 1921 session. Hine’s seminar served to introduce its students to standardized testing instruments. 24

In 1921 Straight took a far more significant course with Sparling, entitled "Child Accounting and School Adjustment", which also included a laboratory period to use the new standardized tests. The course would focus upon "methods of determining various ability-levels" and the use of those results to develop "differential teaching in normal and special classes". 25 Also in 1921 Straight took his first psychology course entitled "General Psychology" which would begin a life-long interest in the subject. In 1922 Straight and Sparling both enrolled in "The School Principal" and "The Elementary School Curriculum" in order to obtain their administrative credentials. In 1923 Straight alone enrolled in "School Surveys", a course with Professor Pittenger of Texas for students "interested in the survey movement" of educational accounting. During 1924 Straight continued his academic career at the university’s summer sessions and took the "Psychology of Exceptional
Children" in the Psychology Department with the head of the Seattle school's Child Study Laboratory, Dr. Stevenson Smith. The course would focus upon the "nature and cause of mental defects and peculiarities of children with special reference to methods of diagnosis and physical pathology". Along with King in 1925, Straight enrolled in another psychology course, "Abnormal Psychology", which would supposedly supply general explanations "of unusual behaviour and the influence of the subconscious mind upon conduct". In 1926 Straight registered in a course to prepare him for the role as director of the Bureau of Measurements in the Vancouver school system, "Educational Statistics". King also took this course as a part of his graduate work.

In the 1927 summer session Straight changed status to a graduate student after receiving his Bachelor of Education. Straight's graduate work in education was composed of the usual array of survey courses such as "Education and Vocational Guidance", "Survey of Recent Educational Literature", "Secondary Education" and even a course on "Physics for Teachers" as he simply liked studying physics, according to Lee Straight. Also he took a number of graduate courses in psychology that would provide him with the scientific uses of efficiency in education. In "Applied Psychology" with Assistant Professor Wilson the course would supposedly show the student how psychology could be applied to the "problems of personal efficiency, vocational guidance, and personality". It would also demonstrate how psychology could provide "an understanding of race, sex and individual differences" and how it could be applied in such fields as "mental hygiene". The "Psychology of Learning" with Assistant Professor Renshaw promised to show students how "efficiency in learning" could be achieved and "how habits are formed". In 1928 Straight took five courses and only one was in education, "Teaching Social Ethics in the High School". In 1929 he took no education or psychology courses but rather English Literature. In 1931 he resumed his graduate studies and this break could only be due to the
demands of his new position in the Vancouver school system. Most of the courses were in psychology as he only took one education course. None were significant except "Race Differences in Mentality" with Dr. Stevenson Smith. The course was described in a 1924 description in the university calendar as a "consideration of methods of investigation, results, and their bearings upon problems of education, immigration, and social levels". This would be Straight's last course work at the University of Washington as he never returned nor did he complete his Master's degree. His son believes his work load became so great that pursuing a doctorate was less of a priority as the Great Depression worsened. However, his education at the University of Washington directly influenced what he did in the Vancouver school system in terms of bringing the concept of educational efficiency to its full realization.

Herbert Baxter King was born in Perth County, Ontario, on January 15, 1879. He was educated in the Walkerton/Bruce County public schools and graduated with Honours Matriculation. He entered the University of Toronto and attended during the 1897-1898 academic year. King's first teaching appointment was during 1898/1899 in the elementary schools of his native Walkerton/Bruce County where he continued to teach until 1903 when he left for Vancouver. In 1904 King began teaching at the school he would eventually be appointed principal of, General Gordon Elementary. King's academic training was much more extensive than Straight's or Sparling's as he earned a B.A. from Queen's University in 1913 and his M.A. in Philosophy from the University of British Columbia (U.B.C.) in 1924. When he attended the University of Washington in the summer of 1919 it was probably to obtain transfer credit for his Master's degree. There were no graduate courses in education at U.B.C. as the department was not even created until the early 1920s. The first course King took was "Educational Measurements" with Sparling. Obviously he felt educational testing was an important topic to begin his graduate
studies. He also took a "Secondary School Curricula" course with Sparling. King's absence from the University of Washington until the summer session of 1924 was due to the completion of his M.A. at U.B.C. on the topic of "Modern Theories of Instinct". It is unclear from King's transcript if courses he took at the University of Washington after 1924 were entirely related to his eventual Ph.D. in 1936 on the state of educational financing in British Columbia or if some were utilized as transfer credit for a Bachelor of Pedagogy he received at the University of Toronto in 1929. King's early course work in 1924 was entirely in education as in one summer and a full winter term, he completed seven courses while on a leave of absence from teaching. This course work ranged from one in "Latin" to "School Supervision", "Problems in Modern Methods", "High School Organization and Administration", "Methods of Educational Research" and "A Survey of Recent Educational Literature".

In 1925 his summer course work began to take a different direction when, together with Robert Straight, he took "Abnormal Psychology" in the Psychology Department. Lee Straight remembers that his father and King "were a little competitive with each other when they were down there". In fact psychology seemed to become the focus of his studies as all the graduate course work in education he needed for his administrative career was largely completed. He enrolled in "Educational Psychology" with Professor Bolton of the Education Department which concerned a student's "native endowment as the basis for learning" and the "individual differences" among students. In the Psychology Department King also took a course that would reinforce the concept of native mental endowment as the primary determinant of an individual's path in life. King took Dr. Stevenson Smith's seminars on "Recent Research in Human Behaviour"; this was the same Smith who was head of the Child Study Laboratory for the Seattle public school system. Stevenson Smith's influence on both Straight and King is difficult to ascertain but
should not be discounted as his psychology texts are highly eugenic in their content. In Smith's *General Psychology in Terms of Behaviour* (1921), one of the course's textbooks, it states that "some men are gifted with brains, and some are handicapped by a natural inferiority for which no amount of training will compensate". It is a general rule that "bright parents have bright children, mediocre parents have mediocre children, and dull parents have dull children". Any "striking exceptions to this rule should not be given undue weight". Training or education could never change the inborn individual differences among children. In this highly deterministic view of psychology a differential education system seemed quite natural.

King continued his graduate work during the summer session of 1926 when he took several education courses including "Educational Statistics" with Straight, a "Seminar in Secondary Education" and a record-keeping course for administrators called "Child Accounting". However, his fascination with psychology and mental testing was furthered by a course offered by Professors Dvorak and Van Wagenen, entitled "Seminar in Educational Measurements". The student was expected to become familiar with "methods of test construction" and could also work in the laboratory on the "critical evaluation of new test material". King had increasingly become committed to the study of psychology and in his last full summer of graduate course work he took four seminars. He enrolled in such courses as "Folk Psychology" and a reading course, "Contemporary Psychological Literature". However, two graduate seminars with Professor Gibler visiting from Tufts University concerning "Mental Hygiene" and "Applied Psychology" stand out from the other seminars King attended. In the "Mental Hygiene" course King would learn about "Mental abnormalities in the general population" and "methods" of "prevention and cure". In the course on "Applied Psychology" Gibler lectured on how psychological methods could be "applied to such fields as personal efficiency, vocational guidance, scientific management, social work" and
The imposing portraits of Robert Straight and Major Herbert Baxter King. The photographs are probably from the early 1930's as the likeness of Straight corresponds to photographs of him that preceded his annual reports in the Vancouver Board of School Trustee's Annual Reports of the same period.

Source: K. A. Waites, Vancouver High Schools: The First Fifty Years, 1890-1940, (Vancouver School Board, 1940), King: p. 65; Straight: p. 64
other areas involving public services. Students could focus "around a problem of personal interest". At the end of the 1926 session King had taken virtually all the course work he needed for his doctorate degree which has no fixed start date noted on his transcript. He must have attended the University of Toronto to obtain his Bachelor of Pedagogy in 1929 but he could have easily used some of the undergraduate courses he had taken since 1924 as transfer credit; what he did is not readily apparent. In the summer of 1929 he returned to the University of Washington and took a thesis writing course in the Department of Education and a course on vocational guidance as well as one on administering the junior high school. It is clear from King’s dissertation on school financing in British Columbia in 1936 that as the head of one of the province’s first urban junior high schools (Kitsilano), as well as an instructor of various undergraduate education courses at U.B.C. during the summer sessions (1927-1932), he was actively applying the pedagogical concepts he had learned at the University of Washington. Efficiency in education through intelligence testing, sorting students into educational tracks for high school and a very firm belief in the unalterable individual differences of human mental capacity were but a few of the notions that he had acquired as a summer student. In September, 1937, King became Chief Inspector of Schools for the province and his very American view of progressive education would always be reflected in the actions he took to centralize the school system in order to make it seemingly more efficient.

The consequence of Sparling, Straight and King attending the University of Washington from 1919 onwards was to import certain aspects of American progressive education directly into the schools of Vancouver. Straight would have the longest influence on the Vancouver school system as for 24 years he would head the agency specifically created to implement this progressive philosophy of educational efficiency, the Bureau of Measurements. King, his life-long friend as well as
competitive rival, created the first junior high schools in Vancouver and organized the curriculum along educational tracks geared to the supposed mental ability of each individual student. Sparling died before he could have any long-lasting structural effect on the Vancouver school system but he always actively promoted social efficiency in education. While attending the B.C. Child Welfare Convention of 1919, he promoted a vocational education for working-class children because it was "as nature best fitted them". The courses he took at the University of Washington only acted to give academic credence to his social point of view.

The B.C. Teacher in the September, 1926, issue reported that the "summer quarter" at the University of Washington had "fully twenty B.C. teachers" who "attended one session or the two into which the summer quarter is divided". The "School of Education" provided "many course offerings". These "courses in Educational Measurements, Educational Psychology and Philosophy of Education were well attended". 34 As early as 1920-1921 J.T. Pollock, the Provincial Inspector of Public Schools, reported that Vancouver teachers, in "a spirit of greater service" along with "a desire to increase their own efficiency", were "attending summer schools and taking special courses during the summer vacations in Washington and in California". Pollock also noted the amount of reading teachers were doing in the works of educational theorists such as: Ellwood Cubberley, George Strayer, Guy Montrose Whipple, Alfred Binet, Lewis Terman, Arthur Otis, Leonard Ayres and even Henry Suzzallo himself, the President of the University of Washington. The infiltration of these American educational ideas, although Binet was French, into the schools of Vancouver was regarded as a "decided forward movement in the educational world", although some found this change "disquieting". Pollock warned these "earnest and conscientious teachers who believe in rapid and radical" methods should be wary as the "royal road to learning has not yet been discovered". 36 However, Pollock was only acknowledging that the royal road, in fact, led south to Seattle and the University of
Washington. It was already being well travelled by many young teachers and administrators of the Vancouver school system.

iii. The Growing Appeal of Educational Testing in the Vancouver School System in the 1920s:

Jean Mann, in commenting upon the changes made to the education system of British Columbia through the J.H. Putman/G.M. Weir Survey of the School System (1925), put forward an interesting observation about the acceptance of intelligence testing. The new junior high schools were created based upon Putman/Weir's recommendation to lower grade repetition rates ("retardation") and provide vocational schooling for non-academic students who left school after the elementary grades. Mann wrote that the "open sesame of the new smoothly running system was seen as testing and measurement". In fact "individual differences was the rationale...to the system" because the new breed of "schoolmen were clearly looking to the United States" where high schools were filled to capacity rather than populated by a small elite of matriculation students. 37 Mann regards this change as being one brought on by official sanction from above in the form of the Putman/Weir survey and the efforts of such zealous administrative reformers as Herbert Baxter King. However, Mann seemed unaware that the logic of mass educational testing had travelled north from Seattle with principals like King as well as Robert Straight. It was an educational trend that was at first resisted at the provincial level, as seen in the already quoted remarks of J.T. Pollock, but soon became a necessary part of school reform after the Putman/Weir survey.

The B.C. Teacher magazine actually documents the discussion that took place among teachers themselves about the benefits of educational testing in Vancouver schools during the early to late 1920s. This advocacy of mental testing largely originated from the United States as can be seen by the visit in April, 1923, of Dr. Suzzallo, President of the University of Washington, whose address to the annual Spring Teachers' Convention made a great impact. In its report on the address
The B.C. Teacher states: "Dr. Suzzallo encouraged the idea of an intelligence survey of British Columbia schools by outside experts". Suzzallo was suggesting that the province include a mental survey within its proposed general school survey. This followed the model for public school surveys as pioneered by George Strayer of the American National Education Association. Surveys could include the use of mass intelligence tests to gauge student achievement levels in order to point out areas of educational inefficiency. In fact mental testing became a progressive, efficient means not only to measure a pupil's supposed natural mental ability also but the efficiency of a school system in educating its pupils to a level of performance set by scientific experts.

When the parameters of the Putman/Weir survey were first announced in The B.C. Teacher of June, 1924, the sixth point was to assess the "value and use of achievement and intelligence tests" as possible replacements for "departmental examinations". As early as 1923 the summer session at the University of British Columbia was offering a course on "Psychology and Teaching Method" with Professor Peter Sandiford of the University of Toronto. Sandiford was Canada's foremost advocate of educational testing and had studied under Edward Thorndike at Columbia University's Teachers College before coming to Toronto. He returned to British Columbia in 1924 to conduct the testing program for the Putman/Weir survey. Sandiford's coming to U.B.C. was at the personal urging of George M. Weir who was appointed the university's first Professor of Education in late 1923. The effect of the very public presence of important American educators such as Suzzallo was to link mental tests with modern methods of education in the minds of many ordinary Vancouver teachers who read their professional association's publication.

In March, 1923, a major article appeared in The B.C. Teacher by W.T. Tait of McGill University on the "Educational and Social Bearings of Mental Tests". In Tait's opinion the tests were an objective means to select "those who are not fit for higher education", however they
"should be thoroughly trained in the line for which they may be specially fitted". Education, in order "to solve many industrial and social problems" had to "do so by a scientific process of selection and elimination". Mental tests were the preferred instruments of rationally sorting students for the new progressive education, the teachers of the province were told. It had been announced only a year earlier in the March, 1922, *The B.C. Teacher* that a lecture was to be given by Major Herbert Baxter King at the annual B.C. Teachers Federation Convention on the topic of "An Analysis of Recent Education Surveys". The follow-up discussion for teachers was to be led by, among others, Robert Straight. It was clear that Straight and King were bringing the progressive American concepts about the value of intelligence testing and school surveys directly to the teachers of Vancouver. Many articles that were in favour of testing continued to appear in *The B.C. Teacher* during 1924, such as one by Stephen Colvin of Columbia University's Teachers College entitled "Systematic Attempts to Measure Mentality". Colvin told the teachers of the province that mental tests have, through painstaking scientific development, "become a more perfect instrument for the guidance of teachers and school administrators".

In 1925 the Putman/Weir survey was published and its text explicitly sanctioned mental testing as a modern educational reform. Vancouver's teachers were soon to feel the effects of its recommendation to create a permanent body for survey testing, the Bureau of Measurements. However, in 1926 a Vancouver Normal School faculty member openly attacked this trend towards the use of mental tests. A.R. Lord believed that in the rush to use mental tests unqualified people would become over zealous as "testing for mere sake of testing is valueless". This was definitely a minority view expressed by a self-admitted member of the old guard as Lord stated he "had more years of experience than we care to acknowledge" in the opening lines of his article. In 1927 Peter Sandiford had an article published in *The B.C. Teacher* called "The
Talented Child" which advocated mental testing as a means to define a population of gifted school children, or the "supranormal". In fact the progressive forces promoting mental testing in Vancouver received a large boost of publicity from the visit of Stanford University's Dr. Ellwood P. Cubberley as guest speaker at the B.C. Teachers Convention. Cubberley, one of the founders of the modern progressive school administration movement, had himself conducted some of the most influential general surveys of the American school system such as Butte (1914), Portland (1913), Salt Lake City (1915) and Oakland (1915). In 1928 a major two-part article by V.Z. Manning of Cranbrook appeared in The B.C. Teacher which provided a listing of the most useful tests for specific educational purposes. "Which Test Shall I Use?" became an ironic title for Manning's articles as it was very apparent the number of tests had grown to bewildering proportions. By the end of the 1920s it was obvious that mental testing had become an accepted means to rationally organize educational programs for school children. Institutional statistical gathering through these tests and the streaming of school children into ability tracks was firmly entrenched in the Vancouver school system by the late 1920s. However, the tests were not simply brought forward by the Putman/Weir survey of 1925 with its extensive testing program by Dr. Peter Sandiford. Instead it was the slow infiltration of American progressive educational notions from people like Straight, King and even Suzzallo who brought concepts like mental testing as well as educational surveys directly to Vancouver's teachers. This process began before Weir was first appointed at U.B.C. and the Putman/Weir survey commenced in 1924. By 1929 Robert Straight, along with his departmental social worker, Jean Cantelon, offered a session for Vancouver teachers at the annual B.C. Teachers Convention on "Primary Intelligence Tests". Secure in his new position as head of the Vancouver school system's Bureau of Measurements, Straight was at the height of his success.
It had been difficult to convince the older members of the provincial bureaucracy involved with the public schools about the worth of mental testing over traditional matriculation. Writing in his 1924-1925 report on Vancouver schools, Inspector J.S. Gordon noted a "tide of interest in intelligence testing" that "has been rising somewhat in the past year". Many teachers put "faith in their value" but Gordon objected to the use of testing as "a passport into high school". It should be what a student "actually achieved" which determined his promotion.

In a very different 1925-1926 report by Inspector J.T. Pollock whose region included a number of Vancouver elementary schools and the North Shore, mental tests were praised for their utility. In North Vancouver and "adjoining municipalities Standardized Tests and Intelligence Tests were used extensively during the year". In a reference to Vancouver schools, Pollock stated: "A series of lectures dealing with psychology and Standardized Tests and Measurements which were given by two of the Vancouver principals were much appreciated by the city staff and many teachers from adjoining municipalities". The teachers of North and West Vancouver united "for the purpose of securing a course on Mental Measurement and Standardized Tests".

It was in the spring of 1925 that the Putman/Weir survey was made public and the official stamp of approval was thereby given to mental tests in the public schools of the province, including Vancouver. However, it is very clear that the ground work for the acceptance of these tests was laid by teachers themselves and particularly a few young principals who spent their summers at the University of Washington. The very basis for the Bureau of Measurements, the need for the scientific appraisal of pupils, had thus already been fixed in the minds of ordinary Vancouver teachers well before its creation in 1927.

iv. Robert Straight and the Platoonining of Vancouver Schools:

It was through platooning that Robert Straight became noticed by school officials in Vancouver as one of the leaders of the progressive
education movement in the city. Platooning was a phenomenon in educational history which offered an expedient solution to a pressing problem in many growing urban centers, namely too many pupils and too few classrooms for them to occupy. It was devised by William A. Wirt, Superintendent of the Bluffton, Indiana school system in 1906 but was only fully implemented after 1908 when Wirt was placed in charge of the schools of Gary, Indiana. It became known as the "Gary Plan" but was later called platooning. The platoon system was simply a means to decrease or stabilize the number of teachers required while increasing the overall number of students taught without constructing more classrooms. Instead of students being taught all subjects by one teacher all day in a single classroom, each teacher would be a subject specialist repeating the same or similar lessons to groups of rotating students. We would recognize it as the rotational schedule of any contemporary high school but it was applied to all school grades beginning in elementary. Wirt described the platoon system as an "improved school machine" which utilized the existing teachers but increased the pupil population. Wirt stated that in one instance a principal reported that using the same teaching personnel "the number of pupils in one of his eight-room schools had been doubled". 52 Wirt platooned Gary's schools from grades 1 to 12 and even had many new schools built in a rectangular fashion to allow for continuous circular student movement. Educational leaders interested in school efficiency, such as John Bobbitt of the University of Chicago, hailed platooning as the "elimination of waste in education". 53 Platooning became linked to educational efficiency and by testing the students, separate subject classes for ability levels could be created to further refine the school's operation. The school was supposed to run like a well-oiled machine. However, close examination by Stuart Courtis in 1919 of student test scores and teaching methods found the platoon system's "final levels of achievement...are comparatively low". 54 It was clearly a case of lower cost and not an improved education.
Straight would have been exposed to the influence of platooning at the University of Washington. As an elementary school principal during the early 1920s Straight saw an opportunity to put into practice this progressive means of education and prove its worth. In the 1924-1925 school year Straight oversaw the implementation of the platoon system at his school, Lord Tennyson Elementary, "the first school of the kind in Western Canada". Specific "structural changes" were made to the school at a cost of $3,380 to create "a sixteen-room building with a small gymnasium" which, if run on a conventional basis, would be overcrowded. However, "given a principal with a genius for organization and a clear understanding of platoon-school methods" this type of school "will render splendid service". Inspector J.S. Gordon concluded that based on this example, "the three schools we are now enlarging are planned for work on platoon lines". Gordon admired the "good year's work" done at Tennyson but what he probably valued more were the cost savings. Fewer teachers, more students and no need to build new schools. The statistics for Tennyson in 1923-1924 are revealing as before platooning there were 643 pupils and 16 teachers for a pupil/teacher ratio of 40 to 1. After platooning there were 776 pupils and 20 teachers for a pupil/teacher ratio of 39 to 1. There were 133 more pupils, 4 more teachers, the class sizes had remained the same but the school did not have to build a costly addition. In his 1925-1926 report Gordon found the school atmosphere was like that of an "ordinary school" but he believed the platoon method was better suited to the new junior high schools then being planned. Younger children were "probably as well or better off when taught entirely...by the same teacher". He was apologetic for his views when he stated: "One may be pardoned for not being overzealous in the organization of elementary schools along platoon lines". The success of Straight's Tennyson experiment was why he became noticed by Vancouver school officials as a teacher in touch with the latest progressive educational methods. In a
1933 newspaper profile of Straight's penchant for "suggesting new ideas from his extensive reading" had the effect "that Lord Tennyson was long considered a year or so ahead of other city schools in methods". By the late 1920s platooning had spread beyond the Lower Mainland and the rhetoric of efficiency along with it. For example, Principal Colin Lees of Kelowna wrote in 1927 that his school had been able to "use our plant to 100% capacity" through platooning, saving the need to build two new classrooms. Platooning at Tennyson had the effect of creating Straight's reputation as an advocate of educational efficiency.

If the platoon school at Tennyson can be said to have made Straight's reputation then the creation of the junior high school did the same for Major King. King had served in World War One and liked to be called by his military title. In many ways Lee Straight's comments on the friendly rivalry between his father and King were rather kind as most impressions of King were quite harsh. Lee himself had King as his principal at General Gordon when he first attended grade 1 in 1921 and when he graduated in 1927, Lee was sent to the new Kitsilano Junior High School that Major King had opened. Historian A.H. Child states rather bluntly that "few people who remember King speak favourably of him, usually stressing his vanity, arrogance, and intolerance". King seemed to have trouble relating to people who were not his intellectual equals. Lee remembers him striding the hallways in a commanding manner but yet he also seemed quite concerned that the students of the school felt a part of the place itself. King mirrored the dichotomy of progressive education; the creation of an efficient educational machine combined with an intense concern over the need for the general social preparation of the individual as a functioning part of society. In many ways what King would create at Kitsilano Junior High was a prototype of the progressive social ideal, a school society clearly divided between those of differing intellects and yet united through school activities.
such as sports, student government and social activities. King’s experiment at Kitsilano was to show how the new junior high schools could educate a mass of pupils on the basis of individual differences but yet create a cohesive social unit. The success of the junior high proved King’s worth as an educational leader in the province.

The title of "Major" was earned by King on the Western Front in the First World War. The 1913-1914 report of the Municipal Inspector records that "Mr. H.B. King, Principal of General Gordon granted leave and $50 a month for war duty". King returned to General Gordon in 1917, a Major in the Canadian Army and thereafter preferred the title of "Major". Once the war was over King began his studies at the University of Washington with Robert Straight and Robert Sparling, as has been outlined previously. King’s interest in the junior high school was supported by his academic work, first in 1919 with a course on "Secondary School Curricula" and then in 1924 when he took a course on "High School Organization and Administration". He retained this interest as late as 1929 when he audited a course entitled "Administration and Supervision of Junior High Schools". The idea of piloting the creation of a junior high school within the Vancouver school system seemed to have interested King during the early 1920s and he felt the first barrier to this goal would be demolishing the tradition of the high school entrance examination which had the effect of creating an elite form of higher education. King became chairman of a B.C. Teachers Federation subcommittee on the issue of the high school entrance exams. In 1924 he delivered his report and in "tool subjects" such as mathematics, as well as English grammar, King declared "that the pupil’s achievement in these be measured by standardized tests". A.H. Child also notes that King "favoured the use of standardized tests and inventories, and deplored the use of unscientific terminal examinations". As early as 1922 King presented a talk on "An Analysis of Recent Education Surveys" to fellow teachers at the annual B.C. Teachers Federation Convention, along with
Robert Straight. The presentation praised the utility of standardized testing to assess large student populations as they had been taught in their graduate seminars at the University of Washington. In the fall of 1927 the first two junior high schools in all of Canada were opened in the Vancouver school system. King wrote that:

In the Templeton Drive School there will be about 950 students; in the Kitsilano School, about 800, and in addition about 500 High School students. The elementary schools contributing to these two Junior High schools will hereafter consist of pupils from Grades I to VI.

What King's rather dry description of the high school system failed to include was the fact that mental tests were used to organize the pupil population.

Lee Straight, a charter student at Kitsilano, stated bluntly: "King was in charge of the whole deal". They "graded all the classes by their IQs". It was "King and my dad" who "started the system of grading them by their intelligence quotient and staying in [one] class so they could work at the same speed". Girls were graded in class by grades from A to E and boys went from F to H. There was even a dropout class created with the letters Q or Z. Children knew what class they were being placed in and what the system believed their ability potential to be.

In a thesis written in 1961 by John Henry Wormsbecker, Jr. on the "Development of Secondary Education in Vancouver" much of what Lee Straight relayed is confirmed. Wormsbecker states: "Provision for individual differences among pupils was a basic aim of the junior high school". There were "groupings into classes according to...two broad categories", those who took French and those who did not. Clearly this means all students were divided between an academic stream that took French and a vocational or general stream that didn't. Wormsbecker also notes that "homogeneous grouping within the grade according to ability was an additional step" undertaken at the junior high school level. The key to grouping the students was "Robert Straight's original testing program". Elementary principals used three tests "in making their pupil
assessments for the junior high. The National Intelligence Test, the Woody-McCall Test of Mixed Fundamentals in Arithmetic and the Monroe Reasoning Test in Arithmetic. Elementary principals used these test results, as well as teacher reports, to group pupils entering the junior high school. The system was based on the 6-3-3 model of grades 1-6 for elementary, grades 7-9 for junior high and grades 10-12 for high school. It should be noted that much of Vancouver still operated on the 8-4 plan, 8 years elementary and 4 years of high school.

However, if the students were so fractured how could there be any sense of community within the school itself? King stated in the first issue of the school paper, *Kitsilano High School Life* (November, 1928), that he wanted to develop a "corporate feeling" in the school. Therefore he began such innovative programs as the school newspaper, club activity programs, a house system of sports competition and a school-wide student council. There was also a large emphasis on school sports programs which, along with these other measures, "contributed to breaking down the barriers between...divisions of the school". At the end of the 1934 school year King declared that "greater strides than ever before in the direction of student participation and in the promotion of democratic school citizenship" had been made. In 1935 King left Kitsilano to become Chief Inspector of Schools for the Department of Education but the pattern he had set continued.

What Lee Straight and Wormsbecker describe is a high school system based on the educational efficiency of ability testing, sorting pupils into streams or educational tracks and education according to the homogeneous ability level of each group. To keep this fractured system unified, the deals of citizenship development through clubs, sports and extra curricular activities were used to cover over the basic inequalities of this form of education.

Major King’s views on the proper function of education in an industrial democratic society were made quite clear in his report on *School Finance in British Columbia* (1935) which was commissioned by the
new Education Minister, Dr. George Weir. The same material was also presented in 1936 as his doctoral dissertation at the University of Washington with no alterations. The modern school provides not just academic education for an elite but vocational as well as professional training for careers. Education in "the progressive state is...interested in the production of citizens" who can contribute to social progress. Thus the "school must provide for individual differences arising from differences in ability". 71 A system of selection by attrition with pupils dropping out or abandoning school was, to King, "wasteful and disheartening". This must be replaced by "a more scientific system for the classification of students...into those subjects for which their interests and capacities fit them". In an argument that bore a close resemblance to human capital theory, King decried the waste and inefficiency of the old system and extolled the economic logic of training pupils according to their natural abilities, as determined by mental testing. King included a graph in his report on the theoretical distribution of mental abilities in any given population, the normal or bell curve. There was such a thing as "general mental ability" and "there are degrees of general ability". There was "no reason why the school should not cater to the interests and needs of pupils of this kind". 72 In King's mind it was all a matter of promoting social efficiency; the schools had to educate all students according to their natural ability levels. A.H. Child has pointed out that King's belief in his progressive ideals extended to being a member of the Board of Directors of the Progressive Education Association. 73 However, the 1926-1927 report of J.S. Gordon on "Organization for Junior High Schools" notes only the high start-up costs as well as the lack of qualified special instructors in subject areas such as art, music and the household arts. "One may be pardoned for entertaining fears", Gordon wrote, that the supply of trained high school teachers would get too thin as demand rose. 74 Gordon seemed unsure about the whole project but if anyone was
more sure about the role of educational science as a means to organize
the social preparation of the young it was Major King, along with Robert
Straight.

vi. Robert Straight as Head of the Bureau of Measurements: 1927 through
the Great Depression:

After his success in the mid-1920s at Tennyson School with the
platoon system, Robert Straight had clearly become identified in the
minds of school trustees and provincial school officials as that
"principal with a genius for organization". It was little wonder that
Straight was considered as the first choice for the position of director
of the new Bureau of Measurements within the Vancouver school system
which began formal operations in the spring of 1927. Historian Henry F.
Johnson relates that the Bureau was "established in 1934...under the
direction of Inspector Straight" which is inaccurate as the Bureau had
already been in operation for seven years. 75 It had been the
Putman/Weir survey of 1925 that brought the concept of the Bureau to the
forefront as its creation was one of the survey’s specific
recommendations to reform the Vancouver school system. Recommendation
number two in the conclusion to the survey’s section on "The Vancouver
School Problem" stated that "A bureau of measurements in Vancouver should
be established under the direction of an expert educationist who shall
be subject to the authority of the superintendent of schools". In the
survey a more detailed mandate had been outlined for the bureau whose
director would be assisted by "an able psychologist and one secretary".
The main function of the Bureau would be to establish "norms or standards
of achievement in the various subjects to be obtained by pupils as a
prerequisite to promotions" which "could be scientifically determined and
applied in all schools of the city". Putman/Weir quoted from M.E.
Haggerty's massive Rural School Survey of New York State (1921) to
provide more specific details about what the bureau would do with
Vancouver’s pupil population. Other than the creation of testing
standards for pupils the Bureau was to facilitate "the better grouping
of pupils for instructional purposes". 76 The historian Raymond Callahan has pointed out that as early as 1916 Ellwood Cubberley was urging the creation of "efficiency bureaus" in most large urban school systems. In fact, by 1916 such bureaus had already been established in Boston, New York, New Orleans, Detroit, Kansas City, Rochester and Oakland. Their main function was "to test the product [pupils] at different stages of manufacture [education]". 77 It appears that educational surveys preceded many of these bureaus and they implemented the measures recommended for greater educational efficiency. Such measures always included testing large numbers of pupils and then using this data for the purpose of educational placement in ability tracks. From the Putman/Weir survey of 1925 Vancouver would receive its "efficiency bureau" in 1927 under the directorship of the young Robert Straight.

To prepare for his new role, Straight was given a "leave to visit other cities and make a careful study of such problems as he would have to deal with in his new sphere of work". 78 During his interview Lee Straight remembered that his father was "gone quite a long time, several weeks, maybe months". Lee knew that "one of the stops was the Ford factory in Detroit" as his father "brought back samples of...the new safety glass and other stuff". It was more likely that Straight was in Detroit to look at the bureau operating within its school system as this was the example cited in the Putman/Weir survey of a well-run bureau. However, a Ford factory tour was highly symbolic. It was indicative of an often-used analogy in American progressive education: the school as a manufactory. 79 Straight went busily to work after he arrived back in Vancouver and his first task was to begin running mass screening tests on the students who were entering the general high school program, as well as the new junior high schools, in the fall of 1927. The first full year of junior high school in Vancouver was 1927-1928 at the Templeton site and the partially-completed buildings on the Kitsilano site. All students promoted to junior high school were given the following tests.
in June, 1927: National Intelligence Test, Woody-McCall Mixed Fundamentals in Arithmetic and Monroe Reasoning Test in Arithmetic. Students promoted to senior high school were given the same array of tests except for a specially-prepared English test devised by Straight with Inspector Borough, as well as the Terman Intelligence Test. Straight wrote that by having these test scores "Principals were enabled to group their pupils according to ability". The results of the grade 8 examinations on those students not involved in the new junior high school system, using the Terman Group Test-Form A can be seen on the next page and reveal that those receiving recommendations to high school were strongly associated with average to above average IQ ratings. The median IQs for each curricular group were: General Course (110.7), Technical (105.8), Home Economics (105.5), Commercial (104.5), Leaving School (102.3), Pupils under 15 Not Promoted (100.6), Pupils 15 to 16 Years Not Promoted (92.4), Not Recommended Over 16 Years (86.4). On the contemporary IQ scale of the Stanford-Binet IQs 88-112 are of "normal or average" intelligence while IQ 76-87 are rated as "dull". Only those in the Not Recommended Over 16 Years category would be considered as having a below-normal IQ. The students over 16 years with IQs below quotient 95 should be sent to "prevocational classes" at Fairview or the Technical High School.

It was all a matter of natural ability levels, those with supposedly less mental ability left school and the remainder sorted themselves into their proper educational stream. Of course, as Straight openly admitted, each principal was now in a "better position to give advice concerning such pupils' future education". Testing became linked to educational guidance as the scores themselves are what actually placed the student in a program. Younger children were monitored with such tests as the Detroit First-Grade Intelligence Test, Thorndike-McCall Reading Test and the Haggerty Reading Test. Straight found that "reading in the Vancouver schools is in a very satisfactory condition".
Table 5

DISTRIBUTION OF INTELLIGENCE QUOTIENTS (Terman Group Test—Form A) OF GRADE 8 PUPILS—JUNE, 1927

<table>
<thead>
<tr>
<th>I. Q.</th>
<th>Pupils Choosing General Course</th>
<th>Pupils Choosing Boys Technical</th>
<th>Pupils Choosing Home Economics</th>
<th>Pupils Choosing Commercial Course</th>
<th>Leaving School</th>
<th>Pupils Under 16 Years Age Not Promoted</th>
<th>Pupils 15 to 16 Years Age Not Promoted</th>
<th>Pupils Over 16 Years Age Not Promoted</th>
</tr>
</thead>
<tbody>
<tr>
<td>60-64</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>65-69</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>70-74</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

| 75-79 | 1                              | 1                             | 2                             | 3                               | 4             | 1                                    | 2                                      | 5                                     |
| 80-84 | 1                              | 1                             | 2                             | 3                               | 4             | 1                                    | 2                                      | 5                                     |
| 85-89 | 1                              | 1                             | 2                             | 3                               | 4             | 1                                    | 2                                      | 5                                     |
| 90-94 | 1                              | 1                             | 2                             | 3                               | 4             | 1                                    | 2                                      | 5                                     |
| 95-99 | 1                              | 1                             | 2                             | 3                               | 4             | 1                                    | 2                                      | 5                                     |

| 100-104 | 1                              | 1                             | 2                             | 3                               | 4             | 1                                    | 2                                      | 5                                     |
| 105-109 | 1                              | 1                             | 2                             | 3                               | 4             | 1                                    | 2                                      | 5                                     |
| 110-114 | 1                              | 1                             | 2                             | 3                               | 4             | 1                                    | 2                                      | 5                                     |
| 115-119 | 1                              | 1                             | 2                             | 3                               | 4             | 1                                    | 2                                      | 5                                     |
| 120-124 | 1                              | 1                             | 2                             | 3                               | 4             | 1                                    | 2                                      | 5                                     |
| 125-129 | 1                              | 1                             | 2                             | 3                               | 4             | 1                                    | 2                                      | 5                                     |
| 130-134 | 1                              | 1                             | 2                             | 3                               | 4             | 1                                    | 2                                      | 5                                     |
| 135-139 | 1                              | 1                             | 2                             | 3                               | 4             | 1                                    | 2                                      | 5                                     |
| 140-144 | 1                              | 1                             | 2                             | 3                               | 4             | 1                                    | 2                                      | 5                                     |
| 145-149 | 1                              | 1                             | 2                             | 3                               | 4             | 1                                    | 2                                      | 5                                     |
| 150-154 | 1                              | 1                             | 2                             | 3                               | 4             | 1                                    | 2                                      | 5                                     |
| 155-159 | 1                              | 1                             | 2                             | 3                               | 4             | 1                                    | 2                                      | 5                                     |
| 160-164 | 1                              | 1                             | 2                             | 3                               | 4             | 1                                    | 2                                      | 5                                     |

Total 591 228 39 340 49 172 87 26
Median 110.7 105.8 105.5 104.5 102.3 100.6 92.4 86.4
Range 78-153 78-137 87-137 82-148 85-122 80-132 73-112 70-107
Below 95 50 25 5 64 9 37 58 24
% Below 95 8.4 10.9 12.8 18.8 18.3 21.5 66.6 92.3

Results of the Terman Group Test of Grade 8 pupils during June 1927. Straight's data only seemed to prove the genetic theory of intellectual endowment, those of superior mental ability were destined to progress in the education system and those of lesser mental ability had to settle for what opportunities they could find after leaving school. Notice the lowest IQs are in the oldest groups who were not recommended to High School.

However, the largest statistical project that Straight undertook was the creation of the annual "Age-Grade Table" which estimated the rate of overaged or retarded pupils at the end of September. The Putman/Weir survey had been preoccupied with the high rate of grade retention and the resulting population of pupils overage for their grade level. This created a high "retardation rate". Straight was charged with the task of gathering pupil age data each year and tracking the under age, normal age, overage and accelerated pupils from grades 1 to 12. As can be seen in his first Age-Grade Table for 1927 on the next page, the largest retained or overage group of pupils was in grade 7 (1161) and grade 8 (1164). 84 When the junior high schools with their vocational programs began in the late 1920s this high retardation rate in grades 7 and 8 declined as the students were moved into the new shop classes. The major flaw in Straight's Age-Grade Tables was the fact the pupils were not divided by sex as a high population of boys in the retardation rate would suggest the well-documented modern phenomenon of male learning disabilities. 85

The first official comments on Straight's work at the bureau were highly enthusiastic and positive. J.S. Gordon stated that the "reliable diagnoses of the mental capacity of pupils, obtained through scientifically conducted tests, at these critical periods, ensures better classification for teaching purposes". The Bureau was a help to school counsellors so that they could "direct aright students in the choice of secondary school courses". Gordon stated that he "felt that too many students start on high school courses for which they are not naturally fitted". Straight's testing and achievement data was in effect the guiding force behind programming pupils for their high school courses. It was a very direct example of mental hygiene at work within the Vancouver school system and administrators like Gordon could not have been more pleased. 86 In his provincial report on the Bureau to the Department of Education, Gordon wrote that even though the Bureau had
Table 8

AGE-GRADE TABLE, Vancouver Schools. Ages Computed as at September 1st, 1927.

<table>
<thead>
<tr>
<th>AGE</th>
<th>NORMAL AGE LIMITS FOR ENTRANCE INTO EACH GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FIRST GRADE</td>
</tr>
<tr>
<td></td>
<td>Under 6 yrs</td>
</tr>
<tr>
<td>5 yrs</td>
<td>6 mos. to 7 yrs</td>
</tr>
<tr>
<td>4 yrs</td>
<td>6 mos. to 7 yrs</td>
</tr>
<tr>
<td>3 yrs</td>
<td>6 mos. to 7 yrs</td>
</tr>
<tr>
<td>2 yrs</td>
<td>6 mos. to 7 yrs</td>
</tr>
<tr>
<td>1 yr</td>
<td>6 mos. to 7 yrs</td>
</tr>
</tbody>
</table>

The Age-Grade Table for September 1st, 1927 to track the retardation rate or the number of overage pupils in each grade level.

Source: Vancouver Board of School Trustees Report for 1927, pp. 73-76
only been in operation for six months, its work was already "giving promise of abundantly warranting its existence". 87 Straight could rest assured the progressive philosophy of scientific educational methods he had first acquired at the University of Washington was being well received by his superiors.

In the years before the Great Depression Straight's Bureau of Measurements began to fall into a seasonal pattern of testing. In the fall the grade 8's were tested for their IQ ratings with the Terman Group Test and the elementary grades were screened with achievement tests in skills such as reading. Throughout the spring grade-wide screens were conducted using achievement tests and low-scoring students were referred to the school psychologist, Miss Ruby Kerr, for in-depth diagnostic study. In March of 1928 data was published on the Briggs English Form Test for grades 6 to 8 from across the entire city. The Willing Composition Scale was used on writing samples of 590 pupils from grades 6 to 8. Straight also tested all junior and senior matriculation classes with the Otis Mental Ability Test. In June, 1928, the largest mass screening occurred, the testing of all grade 7B and 6A pupils exiting the elementary schools for junior high or high schools using the Terman Group Test as well as assorted achievement tests. In 1928 Miss Kerr tested 481 pupils with the Stanford-Binet test in individual examination sessions. Many of these students would be assigned to the special class population if found to be subnormal. In closing his 1928 report, Straight remarked that the "greatest task confronting us to-day is the problem of adapting instruction to meet the needs and capacities of individual pupils". 88 Indeed, it was one thing to test and classify pupils but quite another to construct a meaningful curriculum at various levels of instruction.

In 1929 Straight continued this testing regime and Ruby Kerr examined 500 pupils for mental defects. Most of the testing program remained the same except for a new city-wide study of grades 3 to 9 students for reading ability with the Thorndike-McCall Reading Test.
Over 22,400 pupils were tested by Straight’s team and the results were graphed by city sections: 1. Point Grey; 2, South Vancouver; 3, Former Vancouver (Old City). The graph is reproduced on the next page. The highest scores were in Point Grey, then South Vancouver and the lowest in Old Vancouver, which would take in the working-class east end of the city. The testing program of the Bureau as the Great Depression began was an example of how progressive, scientific methods could reshape the public education system. In 1929 specific achievement tests were selected for the city-wide standardization of high school subjects such as French, general science, Latin and algebra. Straight prepared the algebra test himself, while Inspector Borough wrote the Latin test. The grade 9 level was selected for the new high school tests because comparisons could then be made between junior high students and those in the regular academic high school as well as technical school. The technical school students scored low in French but little other significant differences were found. Straight’s testing data was appreciated by principals but classroom teachers seemed unable to use the test results for guiding their remedial teaching. 89 The advent of the Great Depression initially made little impact upon Straight’s Bureau.

In the late 1920s Straight had begun to spread the gospel of mental measurement in a very specific way, by teaching a course in elementary methods at U.B.C.’s new Department of Education. The head of the department from 1924 until he became Minister of Education in 1933 was George M. Weir, co-author of the 1925 Putman/Weir survey. The course Straight taught on "Elementary School Methods" in the fall of 1926 to student teachers along with practising Vancouver teachers must have been offered, as today, in the late afternoons after school hours. 90 In the 1927-1928 session Straight again lectured in the fall on "Elementary Methods" and the department created a new course on "Educational Tests, Measurement and Statistics" which became "obligatory for all students". 91 In 1929-1930 Straight continued to lecture at U.B.C. in the fall
The Thorndike-McCall Reading Test results for all grade 3 pupils in the Vancouver school system as of January 1929. Notice the wealthy Point Grey area schools score the highest, the lower middle-class area of South Vancouver has a much reduced score while the inclusion of working class East Vancouver brings the level down substantially for the mean.

Source: Vancouver Board of School Trustees Annual Report for 1929, p. 55
session and in 1930-1931 he was joined by Herbert Baxter King who offered a specific course on "Junior High School Organization and Administration". Another course was created on "Elementary Education Psychology", using Peter Sandiford's *Educational Psychology* (1928) as the textbook. Sandiford had assisted Putman/Weir with the 1925 survey by conducting a large-scale testing program of Vancouver's schools. In 1931-1932 King and Straight were both lecturing at U.B.C. but neither is listed in the 1932-1933 calendar. King was probably preoccupied with his finance commission and Ph.D. work, while Straight had suffered a major setback in his career.

The Great Depression seemed almost not to touch Robert Straight and the Bureau of Measurements but that would change. In 1930 there were 479 individual tests administered by Ruby Kerr and group tests were given to 182 classes at the elementary as well as secondary level for a total of 1,337 pupils. The usual "Age-Grade Table" was created at the end of September and "many tests have been supplied to principals" such as Mr. Finlayson of Quilchena School who used Battery "A" of the Public School Achievement Test on all pupils from grades 3 to 6. In 1931 the Director of Vocational Guidance, R.H. Bennett, praised the assistance the testing program of the Bureau had given his department in its work with students. Straight was extremely proud of an 11.5% drop in the rate of overage students from 1930 to 1931, calling it "a very satisfactory downward tendency". However, his yearly report and charts were significantly reduced from the previous year. The downward trend in overage older male students could have been due to the fact many young men adopted a drifter's life as their families could not provide for them at home. In 1932 the axe fell and Straight was demoted to a half-time position as Bureau director but given a half-time school inspector's position to make up for the loss. The real effect was to downgrade the role of the Bureau of Measurements to a level from which it would never recover. Straight, unlike his counterpart Josephine
Dauphinee of the special classes for subnormal students, made no comments on the matter. Dauphinee wrote that the "financial situation" and resulting cutbacks were a "hardship on subnormal children". Straight's report was brief and filled with statistical data on the over 16,701 pupils tested in 1932-1933. Lee Straight remembers it was actually a "doubling up" as his father's reclassification as School Inspector may have been only one job but it encompassed the work of two. "We all knew that at home" but when there "were people all around us in rags", and "all my chums' dads were out of work", it didn't seem such a hardship. Eventually, Lee recalls, the Board made his father Senior Inspector of Schools but only because he was turned down for the position of Superintendent of Schools. It is clear that the effect of the Depression cutbacks in the Bureau was to curtail its testing program and in the long term marginalize its importance.

In the midst of the Great Depression, Straight's career was profiled in an article for The Sunday Province magazine section of January 22, 1933. The article reported that Straight was "a happy man" who sat at his office desk "and ponder[s] his curves and straight lines". He was described as having "grey hair slicked back", being "slightly pudgy", and prone "to wave a small silver pencil about" when he spoke. He was fond of golf and tennis. Lee Straight stated his father had won several competitions when he was younger. While principal at Tennyson, Robert Straight's fondness for sports inspired him to build a tennis court on the playground for the children in the spring/summer and create ice rinks in the winter. After the pleasantries the article noted that Straight "went wholeheartedly into mental measurements" after attending the University of Washington. Since becoming head of the Bureau of Measurements, the article reported, "his own importance in school affairs is growing fast". In reaching a conclusion about Straight, the writer, George Shem, stated: "He is that curious anomaly a man who is fond of charts and of children. He studies both". Along with the article
there was a cartoon, shown on the next page, of Straight sitting at his desk studying a chart or report. It was a very significant portrait of a school official who had altered the educational direction of Vancouver schools in a very fundamental way.

It must be remembered that Straight had personally promoted mental testing among his fellow teachers, for as early as 1922 he sat on a discussion panel at the B.C. Teachers Federation Convention concerning Major King's presentation on the utility of educational surveys. In 1929 Straight gave a demonstration of "Primary Intelligence Tests" to the B.C. Teachers Federation Convention of that year. In 1932 he wrote a full article for The B.C. Teacher about the new availability of British and Canadian tests which would negate the objections of some teachers who felt such tests were too American. Straight wrote that now there could be no complaints because "standardized tests are superior to the traditional or made-on-the-spur-of-the-moment tests". In 1934 Straight gave another talk to teachers at the B.C. Teachers Federation Convention: This time it was about "The Use and Abuse of Standardized Tests" and indeed as the Second War approached, debate raged among teachers in the pages of The B.C. Teacher concerning that exact point, as well as the finality of judgement these tests held over a child's future. Jay Ess wrote that testing was "not education", while Harry F. Johnston of the Fairview High School of Commerce retorted that poor test results indicated "better teaching" was required. In 1939, at the start of the war, Straight had to address the misuse of mental tests in a school system saturated with them.

vii. The Bureau of Measurements from the Second World War to Robert Straight's Retirement in 1951:

In 1940 Superintendent H.N. MacCorkindale wrote that although it was "impossible...to say which is the most important department" in the Vancouver school system, it was his "belief that the Bureau of Measurements is as important as any other". The testing program had moved beyond the school system into such areas as testing probationary
A pen and ink drawing that accompanied the *Sunday Province* article on Robert Straight in 1933. The writer, George Shem, described Straight as a "curious anomaly" in that he was "a man who is fond of charts and of children".

*Source:* George Shem, "City Schools Go Straight", *Sunday Province Magazine*, January 22, 1933, p. 8
candidates for the Vancouver Hospital Nursing School, testing pupils at the Provincial School for the Deaf and Blind, and class-by-class testing of pupils at the Provincial Vocational School for Girls. Statistics were being compiled on the median IQ of each city school, reading achievements for each grade across the city, the geographical origins of all new pupils enrolled in the city’s schools and the usual record of overage students, as well as the failure/withdrawal rates. Stenographic aptitude tests were being given to screen all female candidates for the secretarial program in high school and a Social Service Commission questionnaire was given to selected schools. American tests were utilized, when appropriate, for general skills as Straight administered the Los Angeles Diagnostic Tests to grades 6 and 8. Provincially-developed tests were given in specific subject areas such as arithmetic.

In 1934 Straight had been called upon to defend the budget of the Vancouver school system over an expenditure dispute with the city council. Straight had to amass historical data to show how “a smaller portion of the city’s revenue has been used for education in Vancouver than in other cities”. It was Straight’s data and graphs that won the arbitration ruling for the School Board. The role of the Bureau was expanding in a more utilitarian direction as the need for quantification extended beyond the pupils of the school system. In 1939 at the war’s outbreak, Senior Inspector Robert Straight directed a small but diligent Bureau dedicated to the scientific organization of pupils and their education in Vancouver’s schools. The Bureau had failed to become the focus of the school system as was intended in 1927. Instead it became just another bureaucratic apparatus of Vancouver’s public education system.

During the war Straight followed a practice started in the American Army during the First World War, the testing of selected military candidates. In 1941, 476 tests were administered for applicants to the Royal Canadian Air Force but this decreased after 1942 as the Air
Force created its own in-house testing program. Straight continued to test the nursing candidates at Vancouver General Hospital and pupils at the Provincial School for the Deaf and Blind. The testing he did for the school system itself of grades 1-8 was called "routine testing". A reading survey of grade 8 pupils was "part of a provincial testing program" which was conducted by the Department of Education on selected grade levels each year, focusing on such basic skills as reading, language usage and arithmetic. However, the role played by the Bureau in educational guidance had become quite overt in that each student in grade 8 under the 8-4 plan (8 years elementary, 4 high school) had a letter sent home advising parents of their child's test scores and which courses would best suit them in senior high school. In 1941 about "2,000 letters were sent" and in 1942 the total was 1,700 letters. Previously counsellors in each elementary school had carried out this task. In 1944 Straight took part in another provincial survey program for general science when he oversaw the administration of 1,172 curriculum tests for Dr. C.B. Conway of the Department of Education. Conway was hired in the late 1930s to head the provincial testing program after he had completed his doctorate at the University of Toronto under Peter Sandiford. The science test was being normed as a part of a province-wide standardization.

The ordinary business of the bureau continued in the war years as in 1943 there were 11,210 pupils tested with group tests and 673 pupils examined with individual intelligence tests. In 1944 the number decreased to 8,755 pupils tested with group tests and 833 pupils given individual intelligence tests. As the war came to a close Straight was still conducting his "routine testing" and, upon request, continued to do other testing as well. The Federal Department of Veterans Affairs asked the Bureau in 1945 and 1946 to test 297 adult army discharges for their vocational aptitudes. Dr. C.B. Conway renormed his General Science Test and Dr. H.B. King, Chief Inspector of Schools, requested the testing
of 2,282 grade 10 students in 1945 with the Progressive Achievement Test. One area that was not part of the Bureau’s usual testing function was a "School Health Survey" being conducted through the Canadian Public Health Association. Straight tracked "school absenteeism...in certain schools in the school year 1946-47" as a part of this study. 108 This was also the period in which Dr. C.H. Gundry, head of the Mental Hygiene Department of the Vancouver Metropolitan Health Services, returned to his position as head psychiatrist for Vancouver schools. Straight’s statistics on absenteeism were often used by Gundry to point out high levels of juvenile delinquency in particular city schools.

The war’s end did not alter the Bureau of Measurement’s role in the Vancouver school system which from its inception had followed a pattern of "routine testing", except during the cutbacks of the Great Depression. In October, 1948, Straight gave all grade 7 students the Pintner General Ability Test and the Metropolitan Achievement Test. This was "part of a continent-wide testing program for larger cities in Canada and the United States". The project only had one Canadian location, Vancouver, British Columbia, as all other sites were in American cities such as New York, Philadelphia, Detroit, Cleveland, Baltimore, Pittsburgh, San Francisco, Portland, Dallas and San Diego. It was sponsored by World Book company and the Provincial Department of Education piloted Vancouver’s involvement. The aim was to create "continent-wide standards" for each test. The effect was to overtly show how such testing practices linked Vancouver to the academic standards of American cities to the south. In 1947, 9,841 pupils had group tests, while 9,249 received them in 1948. In 1947, 720 pupils had individualized intelligence tests and in 1948, 795 pupils had the same. 109. The testing regime was much the same in 1949/1950 when 11,775 group tests were given and 980 individual intelligence tests were administrated. 110 In Dr. C.H. Gundry’s report on the activities of the Mental Hygiene Division for the same period, some indication is given as
to the use of Straight’s testing data. Gundry reported:

Practically all of the children seen in the Mental Hygiene Clinics were given intelligence tests by the psychologists. When there had been a recent examination by the Bureau of Measurements it was not necessary to re-test the child. 111

Straight’s data directly contributed to the mental diagnosis of mentally troubled students by Dr. Gundry. A very logical system of screening pupils with intelligence tests, selection by a psychiatrist and then the use of those test results to link learning problems with mental abnormalities helped to connect the Bureau with the practice of mental hygiene in the Vancouver school system after the war.

In 1951/1952 the Bureau tested over 16,000 pupils with group tests and about 1,000 pupils with individual intelligence tests. However, at the end of June, 1951, Robert Straight was forced to retire due to ill health and Dr. Selwyn Miller became head of the Bureau of Measurements. 112 Lee Straight recalls that his father was not a well man and a picture of him receiving his retirement farewell gift does show a dramatic alteration of his physical appearance. On Tuesday, January 31, 1956, Straight died in St. Paul’s Hospital at the age of 70. Next day The Province newspaper praised Straight in an obituary column as a “veteran educator” who was “an early enthusiast of progressive education”. 113 Straight had brought a certain aspect of progressive education to Vancouver’s schools, the notion of educational efficiency through the testing and classification of the pupil population. Straight would create an educational bureaucracy that survives to this day in the form of the Department of Student Services which continues to administer intelligence tests to the pupils of Vancouver’s schools.

viii. Conclusion:

In 1954 the School Board "changed the status" of the Bureau of Measurements and its name because of the "increased responsibilities" it had taken on in recent years. The Department of Research and Special Services under Dr. Selwyn Miller would subdivide the functions of the old
Bureau. The Research division would conduct testing and provide interpretation of those test scores. The Special Services division would, when required, test children who were "slow learners" and investigate cases of "truancy". The testing of individual students by "our psychologist" and their designation as a special class or slow-learner student parallels the functioning of any similar contemporary department. Officials of the division even "visited the parents to describe the educational programme for slow-learners and to obtain the parents' consent to the transfer". Dr. Miller transformed the Bureau by restructuring its functions and giving it a new title. In 1957 another psychologist, Dr. E.N. Ellis, was hired to develop standardized tests for secondary schools and address the needs of gifted children. In 1958 the staff was expanded further with the hiring of two part-time psychologists for a total of two full-time and two part-time psychologists. Also hired was a psychometrician or itinerant administrator of intelligence tests who moved from school to school as needed. Together they gave 2,766 individual tests in order to properly place children in the expanding array of special education programs.

The Bureau of Measurements under Robert Straight had not realized the high expectations set for it in the Putman/Weir *Survey of the Schools* in 1925. The Bureau was to have been the center of the public school system in Vancouver, making policy decisions based upon scientific considerations and careful study. Robert Straight's Bureau never achieved its authoritative role and became increasingly regarded as a mere statistical agency. The drastic cutbacks of the Great Depression showed its vulnerability. Straight's persona as a quietly-labouring bureaucrat failed to win him promotions for which he was amply qualified. He and the Bureau became marginalized together. After the Second World War the educational authority who had the attention of the School Board was the Mental Hygienist, Dr. C.H. Gundry. The role of mental hygiene in Vancouver's schools would reach a level of importance
that in over twenty-two years of testing Straight's Bureau never came close to equalling.

Notes:

1. K.A. Waites, The First Fifty Years: Vancouver High Schools 1890-1940, (Vancouver: Vancouver Board of School Trustees, 1941), p. 62

2. Interview with Lee Straight, son of Robert Straight, March 5, 1997


6. Vancouver School Board (Hereafter V.S.B.) Minutes, Management Committee Resolution, March 16, 1911, p. 1

7. V.S.B. Minutes, March 27, 1917, p. 340; Mrs. I.H. Moody, "Chairman's Address, January 9, 1918", Vancouver Board of School Trustees (Hereafter Vancouver B.S.T.) Annual Report for 1917, p. 11

8. Dr. Stevenson Smith was the head of a Child Study Laboratory funded by the Seattle School System. He also conducted research concerning feeble-minded children with a grant from the Bailey and Babette Dalzeil Foundation for Child Welfare at the University of Washington. His eugenic convictions were expressed in his first published book: A Summary of the Laws of Several States Governing the Feeble Minded (1914).


10. Angus McLaren, Our Own Master Race: Eugenics in Canada, 1885-1945, (Toronto: McClelland & Stewart Press, 1990), p. 92, pp. 94-95

11. Transcripts of the University of Washington: Robert Sparling, Robert Straight, and Herbert Baxter King. (Provided for research purposes only by the Registrar's Office of the University of Washington)


14. Ibid., p. 6


22. "Mr. Robert Sparling" (1925), op. cit., p. 179

23. Interview with Lee Straight, March 5, 1997; "Veteran Educator, Robert Straight, dies", Province, Wednesday, February 1, 1956, p. 42.


25. Ibid., Bulletin: University of Washington, Summer Quarter, 1921, "Child Accounting and School Adjustment" 201, p. 31; "General Psychology" 15a, p. 57


27. Ibid., Bulletin: University of Washington, Summer Quarter, 1925, "Abnormal Psychology" 126a, p. 45


29. Ibid., Bulletin: University of Washington, Summer Quarter, 1928, "Teaching Social Ethics in the High School" 171b, p. 34; Bulletin: University of Washington, Summer Quarter, 1924, "Race Differences in Mentality" 128b, p. 44 *1931 Bulletin unavailable for course description


31. Transcript of the University of Washington: Herbert Baxter King; Bulletin: University of Washington, Summer Quarter, 1924, "High School Organization and Administration" 156a, p. 28; "Latin" 160c, p. 28; "School Supervision" 195, p. 29; "Problems in Modern Methods" 201, p. 30; "Methods of Educational Research" 210, p.30; "A Survey of Recent Educational Literature" 235a & 235b, p. 30

32. Ibid., Bulletin: University of Washington, Summer Quarter, 1925, "Abnormal Psychology" 126a and 126b, p. 45; "Recent Research in Human Behaviour" 140a and 140b, p. 45; "Educational Psychology" 170b, p. 30; Stevenson Smith and Edwin Guthrie, General Psychology in Terms of Behaviour, (New York: D. Appleton Press, 1921), pp. 70-74

33. Ibid., Bulletin: University of Washington, Summer Quarter, 1926, "Child Accounting" 189, p. 32; "Educational Statistics" 206, p. 33; "Seminar in Secondary Education" 275, p. 33; "Seminar in Educational Measurements" 285, p. 33; "Contemporary Psychological Literature" 114a; "Folk Psychology" 118a; "Applied Psychology" 121b; "Mental Hygiene" 162b, all p. 48

34. Ibid., Bulletin: University of Washington, Summer Quarter, 1929, "Vocational Guidance" 180b, p. 37; "Administration and Supervision of Junior High School" 185b, p. 38; "Thesis Work" 300b, p. 40

35. "The University of Washington" The B.C. Teacher, Vol. 6, No. 1, (September 1926), pp. 31-32


44. Stephen Colvin, "Systematic Attempts to Measure Mentality", The B.C. Teacher, Vol. 3, No. 6 (February 1924), p. 126

45. A.R. Lord, "Tests: Their Use and Abuse", The B.C. Teacher, Vol. 6, No. 3 (March 1926), p. 15

47. "Dr. Ellwood P. Cubberley", The B.C. Teacher, Vol. 6, No. 7 (March 1927), p. 3


49. "Primary Grade Section", The B.C. Teacher, Vol. 3, No. 7 (March 1929), p. 8


52. Raymond Callahan (1962), op. cit., p. 130

53. Ibid., p. 131

54. Ibid., p. 145


63. Transcript of the University of Washington: Herbert Baxter King; Bulletins of the University of Washington, Summer Quarter 1929, "Secondary School Curricula" 168b p. 36; Summer Quarter 1924, "High School Organization and Administration" 156b, p. 28; Summer Quarter 1929, "Administration and Supervision of Junior High Schools" 185b, p. 38 1929, p. 38
64. H.B. King (Chairman of Sub-Committee), "The High School Examinations", The B.C. Teacher, Vol. 4, No. 4 (December 1924), p. 8


68. Interview with Lee Straight, March 5, 1997


70. Ibid., pp. 214-216


72. Ibid., pp. 142-143


77. Raymond Callahan (1962), op. cit., pp. 98-99


79. Survey of the School System (1925), op. cit., p. 426; Raymond Callahan (1962), op. cit., pp. 79-94 summarizes John Franklin Bobbitt’s article on "The Supervision of City Schools" (1913) which compares a school to a steel plant among other factory sites.


81. Ibid., p. 62

82. Ibid., p. 64; See for the Stanford-Binet Scale of 1961 George P. Robb et al., Assessment of Individual Mental Ability, (Scranton, Penn.: Intertext Press, 1972), p. 205

83. Ibid., p. 56
84. Ibid., Table 8, pp. 73-76

85. In the learning-disabled population the pupil is four to six times more likely to be male than female. Janet W. Lerner, Learning Disabilities: Theories, Diagnosis and Teaching Strategies, (Boston: Houghton Mifflin, 1981), p. 17


97. Interview with Lee Straight, March 5, 1997

98. George Shem, (1933), op. cit., p. 8

99. H.B. King, "Analysis of Recent Education Surveys"; Discussion: Mr. H.H. McKenzie (Inspector Vancouver), Mr. R. Straight (Vancouver) and Mr. H.C. Campbell (Prince Rupert), B.C. Teacher’s Federation Convention Schedule for April 20th, 1922, The B.C. Teacher, Vol. 1, No. 7 (March 1922), p. 12

100. Mr. Robert Straight, "Primary Intelligence Tests" and Miss Jean Cantelon, "Demonstration Class", The B.C. Teacher, Vol. 8, No. 7 (March 1929), p. 8


102. Mr. R. Straight, "The Use and Abuse of Standardized Tests and Objective Tests", B.C. Teacher’s Federation Convention Schedule for April 24th, 1934, The B.C. Teacher, Vol. 13, No. 7 (March 1934), p. 20


111. Dr. C.H. Gundry, "Mental Hygiene", Ibid., p. 122


113. Interview with Lee Straight, March 5, 1997; "Obituary Column: Veteran Educator, R. Straight, dies", Province, Wednesday, February 1, 1956, p. 42

114. Dr. Selwyn A. Miller, "Department of Research and Special Services", Vancouver B.S.T. Annual Report for 1954, p. 13, p. 15

115. Dr. Selwyn A. Miller, "Extension of Research", Vancouver B.S.T. Annual Report for 1956/1957, p. 15

CHAPTER EIGHT

"The Aim of Mental Hygiene is Not an Attempt to Coddle Children": Dr. C. H. Gundry and the Mental Hygiene Division of the Vancouver School Board, 1939-1969.

i. Introduction:

The origins of Canadian mental hygiene in the early twentieth century were not dissimilar to those of its American counterpart. In Canada and the United States a solid underpinning of eugenic ideas permeated the beginning of mental hygiene measures in such areas as health education in the public schools. This was not surprising as the same individuals who had first adopted eugenic viewpoints about such social problems as the threat of the feebleminded were, by World War One, leading figures in the mental hygiene movement. In Canada eugenics remained a powerful influence on the mental hygiene movement even during the interwar period. Charles Kirke Clarke, who helped to found the Canadian National Committee on Mental Hygiene (CNCMH) in 1918, was a firm eugenicist until he died in 1924. Fellow CNCMH colleagues like Clarence Hincks (psychiatrist), Peter Sandiford (educational psychologist) and Helen MacMurchy (child development expert) remained active adherents to such eugenic notions as race hygiene and sterilization. Influential politicians and business leaders counted themselves as members of the CNCMH during the period between the World Wars. 1 The term "mental hygiene" had been used in Canada to promote the strict hereditarianism of eugenic thought ever since the founding of the CNCMH in 1918. Also it was used as the title of the short-lived Canadian Journal of Mental Hygiene (1919 to 1922) which published articles with eugenic themes such as the threat to national intelligence posed by the feebleminded.

Angus McLaren writes that it was only "in the late 1920s" that Canadian professionals began "to turn away from the crude eugenics espoused in the early years by the CNCMH". Such people as W.E. Blatz and E.A. Blott, two of Canada's pioneering child psychologists, joined the CNCMH in the 1920s and introduced such environmentalist concepts as bad
parenting creating child delinquency. However, eugenic notions simply
did not fade away and McLaren comments that the distinction between the
two theories of human development, genetic and environmental, should not
be over emphasized. He writes:

It is important not to exaggerate the gap that
separated the eugenicists and environmentalists.
Although their methods differed, their goals of
efficient social management were similar. 2

In 1924, Dr. Charles Hastings, with the backing of the British Eugenics
Society, founded the Canadian Eugenics Society. It was an organization
in name only until 1930 when it finally became reconstituted as an active
lobby group. The Eugenics Society of Canada's greatest period of
influence was the decade of the 1930s and early 1940s. 3 One of Canada's
leading educational historians, George S. Tomkins, has stated that
"Mental Hygiene was associated with the eugenical movement". In contrast
to other groups in the public health movement of Canada "the mental
hygienists were frequently alarmist and even hysterical in tone" when
talking of the threat of the feebleminded. 4 Eugenics survived in Canada
and indeed prospered alongside, as well as within, the mental hygiene
movement.

An example of this intermingling of eugenic and mental hygiene
notions within such fields as health education was Arthur W. Beall's The
Living Temple: A Manual on Eugenics For Parents and Teachers (1933). The
book was a collection of school lectures that Beall gave in Canadian
schools during the 1930s. Tomkins points out "eugenic lectures" to
Ontario school children began in 1905 and were officially sanctioned in
1911 by the Department of Education. Beall "toured the province's
schools for a generation" giving his eugenic lectures to elementary
school children. Eugenic notions of strict heredity and good/bad racial
stock were expressed throughout Beall's book. In reference to the
American Army Tests of 1918 and the search for A-1 men of good
inheritance, Beall wrote:

Then if you love Canada, as I believe you do, and
want her with all your heart to be an A 1 country, what kind of children ought you to have when your time comes? A 1 children of course.

Behind Beall's talk to young girls about guarding their purity and to boys about not "bleeding away the Life Fluid" were deep-seated eugenic convictions about race degeneration as well as the struggle to keep Canada a Christian nation. From this example of mental hygiene material used in Canadian schools in the 1930s it can be concluded, as McLaren has done, that eugenics not only persisted but that the "average English Canadian was schooled to be...accepting of the notion of 'race improvement'" which was an overt eugenic concept. In reference to American mental hygiene after World War One, Sol Cohen states that "after a brief flirtation with eugenics, hygienists in the post-war period rejected the pessimistic hereditarianism of the eugenicists". Cohen believes that in the United States the "mental hygiene movement stepped forward as a competing manifestation of the same impulse" as eugenics through the "scientific control of behaviour". In Canada no such formal separation took place, eugenic ideas formed the basis of Canadian mental hygiene. Even though the pervasive power of eugenics was diminished in the 1920s by environmentalism, in Canada eugenic ideas remained strong. Canada, through its medical doctors, was heavily influenced by British eugenics which remained respectable until the Second World War. Eugenics in Canada was destroyed by a growing awareness of Nazi racial policy and public aversion to sterilization practices. However, the professional people who held these eugenic ideas in high regard for such a long period of time must have found it difficult to simply discard them.

This introduction has served to establish the Canadian context of mental hygiene and the fact it was not just a mirror of the American movement after World War One. In dealing with Dr. C.H. Gundry and the Mental Hygiene Division of the Vancouver school system, the blending of public health measures, both physical and mental, with eugenic ideas
about the natural mental inferiority of the labouring classes will become most apparent. Although Gundry called himself a mental hygienist when he assumed the directorship of the Mental Hygiene Division in 1939, many of his ideas were derived from his medical training by a prominent Canadian eugenicist. As his career progressed after the Second World War he began to adopt certain new mental health notions such as parental education and the training of school counsellors to be family therapists. However, Gundry maintained some hereditarian opinions until the late 1950s concerning the offspring of the labouring classes displaying mental abnormalities. The eugenic fear during the early twentieth century of a vast population of undetected feeble-minded children can readily be seen in Gundry's fears of a large, undiagnosed population of largely working-class school children suffering from mental illness. People do not simply discard long-accepted ideas because of a shift in the popular consensus. Gundry was trained as a psychiatrist in the early 1930s when eugenics was still widely accepted in Canada and when he became a mental hygienist in 1939. He represents the gradual transition from mental hygiene to mental health which occurred in the post-Second World War period.

ii. Mental Hygiene in British Columbia's Schools:

It is commonly assumed that mental hygiene emerged in the schools of Canada in the 1920s alongside similar efforts of the mental health movement in the United States. The fact that the CNCMH published a manual for teachers in 1937 about mental hygiene and directly lobbied for a change in curricular delivery models in the nation's schools shows the widespread influence of the mental hygiene movement on education. However, a casual examination of school health textbooks used in British Columbia reveals a very different story. Tomkins is correct to label the Canadian mental hygiene movement and its educational efforts as eugenic in outlook but even before their existence school children were already receiving the message of rigid hereditarianism. The W.J. Gage Press of
Toronto published its Health Series For Intermediate Classes: Part II in 1896. The text was "authorised for use in the Schools of British Columbia". Gage was one of Canada's leading educational publishers and the edition examined for this study was being used in 1905 by an R. Clark of Vancouver. The health advice in the book covers basic personal hygiene and the precautions children should take against contagious diseases such as tuberculosis. In a chapter on the "Effects of Alcohol in Life" the message is clearly eugenic when it states:

Over in the poorhouse, is a man who does not know so much as most children four years old. He cannot learn to read or to write; he is an idiot. And this is because he is the child of drinking parents whose poisoned lifeblood tainted his own. 10

The text continues by telling its readers that "many men and women are insane" due to the fact "they inherit disordered bodies and minds". Drunkards "and their children are likely to inherit a stronger appetite for narcotics". 11 Clearly the genetic inheritance of alcoholism and the socially inferior nature of such individuals was being communicated to the school children of British Columbia at the beginning of the twentieth century. Gage's 1911 volume on How to be Healthy by J. Halfpenny and Lillian B. Ireland was also used in the schools of British Columbia as well as other provinces. It contained a chapter on "Mental Hygiene" and told children to always be cheerful so as to not fall victim to the "Unhappy Disease". This disorder "like scarlet fever or any other deadly disease, leaves bad after-effects and makes us an easy prey to all other ills". The "germ of discontent" was "very contagious". 12 Mental problems were seemingly physically contagious and thus it was easy to see why children with mental abnormalities were being isolated in special classes at this time.

Building For Health (1936) by Ruby Simpson and Elizabeth Smith was also used in British Columbia's schools as well as in other Canadian provinces. Published by Ryerson Press the copy examined was used at West Bay School, West Vancouver, in a grade five class beginning in 1936.
Tomkins notes that British Columbia led all of Canada in the development of such "guidance curricula". It was during the 1936-1937 school year that the "Purposeful Living" program was launched in which mental health education was a major component. In a chapter of the Simpson/Smith book entitled "Keep Happy and Cheerful", students were told good companions "will bring happiness into your life". On the other hand people who "think wrong or evil thoughts" are not to be associated with. These:

Bad companions--those who do not have good mental habits--might be interesting at first, but after a time you will learn that they cause a lot of trouble and worry. If you wish to have a happy life, keep away from boys and girls and men and women who do not have right habits of living. 13

It is hard to discern who these bad companions were as the description is so broad as to single out anyone who deviates from normal behaviour as defined by the text. Someone who is cheerful, patient, confident, courteous, respectful, reads books and practices self-control is the ideal. Other children, due to their social circumstances, would be less than this ideal. Another book used in British Columbia's schools was J. Mace Andress and Elizabeth G. Breeze's Health Essentials for Canadian Schools (1938) published by the Toronto-based Ginn Press in its "Canadian Hygiene Series". As the head nurse in Vancouver's Public Health Department, Breeze had been the first school nurse hired in 1910 to assist the school medical inspector, Dr. F.W. Brydone-Jack. She had helped Brydone-Jack to separate and segregate into special classes the feeble-minded school children they diagnosed during classroom health screenings. In a chapter entitled "A Healthy Mind", Breeze and Andress give some surprising advice to children having mental problems. Just as one sees the doctor when physically ill, so should they when experiencing "mental tangles and difficulties". They bluntly told the children:

To have such difficulties does not mean that one is losing his mind or going insane. Troubles that one cannot solve himself should be taken to a family physician or to a specialist in mental troubles, a psychiatrist. Avoid quacks. 14

In 1939 the schools of Vancouver received just what Breeze and
Andress desired, a full-time school psychiatrist who would head the new Mental Hygiene Division of the recently established Metropolitan Health Services of Greater Vancouver. Thus Vancouver's school children could "avoid quacks" and find speedy remedies for their mental abnormalities. After treatment they would supposedly return to their peers as "good companions". It is to the career of Dr. Charles Hegler Gundry, British Columbia's first prominent mental hygienist, that I now turn.

iii. The Early Life and Career of Dr. Charles Hegler Gundry:

Dr. C.H. Gundry was born in Brantford, Ontario, on March 2, 1906, and spent his childhood, as well as adolescence, in Galt. He graduated with a medical degree from the University of Toronto in 1930. Immediately thereafter Gundry did postgraduate training at the Toronto Psychiatric Hospital, or TPH. One of the most prominent lecturers in psychology at the University of Toronto in the 1930s was T.R. Robinson, an active member of the Eugenics Society of Canada, or ESC. However, a more direct influence on Gundry was Clarence B. Farrar, the head of the TPH from 1925 to his retirement in 1947. Farrar was an American who came to the University of Toronto at the request of Dr. C.K. Clarke, head of the CNMH who died shortly after Farrar's arrival in Toronto. After Clarke's death Farrar assumed a leading role in the CNMH. Educated at Harvard and Johns Hopkins medical school, Farrar also edited one of the leading mental health journals of this century from 1925 to 1965, the American Journal of Psychiatry. Farrar would have been the principal lecturer Gundry had at TPH and, from the remembrances of a medical student who attended in 1925, Farrar was extremely popular and charismatic. The medical students skipped "other classes in order to hear him lecture". Farrar's views on mental disorders was "that heredity was the first cause of mental illness". There had to be genetic predisposition of some kind in the afflicted person's background and Farrar opposed such fashionable notions as "autointoxication" and nasal surgery to cure mental diseases. Just after Farrar arrived in Toronto
he spoke to the local Children's Aid Society and proclaimed that "the complete sterilization of mental deficients to prevent procreation of mental defectives" was a prudent social measure. 16 Angus McLaren cites Farrar as "a member of ESC and an active proponent of sterilization". The year after Gundry finished his residency at TPH Farrar published an article on "Sterilization and Mental Hygiene" in the Canadian Public Health Journal. It stated that economic grounds alone made sterilization of the mentally, as well as socially, unfit a viable option. To Farrar for the "impoverished parents of an already considerable family, particularly if of inferior stock, who must constantly depend upon charity, and with whom birth control techniques is impracticable" sterilization became the sensible solution. 17 McLaren notes that Farrar was involved in British Columbia's deliberations of the late 1920s over the proposed sterilization bill. Farrar gave evidence before a provincial Royal Commission along with Dr. C.M. Hincks of the CNCMH and Paul Popenhoe of the California-based Human Betterment Foundation. 18 As Gundry's main professor during his time at TPH, Farrar was an outspoken advocate of eugenics and the application of simplistic solutions to complex social problems.

In late 1930 Gundry left TPH to complete his postgraduate training at the Cleveland Child Guidance Clinic in Ohio. The purpose of this was to obtain his paediatric experience and become a mental clinician who could deal with both adults and children. In the history of the TPH it is noted that in the outpatient department during the late 1920s "special days were reserved for particular groups of referrals, for example, child behaviour problems, juvenile delinquents, unmarried mothers, and inmates of industrial schools". 19 This youth work had begun at the University of Toronto under Dr. C.K. Clarke before World War One. Gundry's experience at the Cleveland clinic must have paralleled the processes occurring at other such child guidance clinics in the United States. The organization of these clinics during the 1930s is
well documented by a noted psychiatrist of that time, William A. Bryan, who outlined how such clinics would function either within the public school system or work in close contact with it. Major university medical centers opened clinics specifically devoted to the "behaviour disorders of childhood and problems of adolescence" in the 1920s and 1930s. Upon returning to Canada in 1931 Gundry joined the medical staff of the Brockville Psychiatric Hospital where he remained from 1932 to 1934. In 1935 he moved to the Mental Health Clinic of the New Toronto Hospital until 1936. In 1937 he returned to Brockville where he stayed until 1939 when he applied for the position of school psychiatrist with the Metropolitan Health Services of Greater Vancouver. During the mid-to-late 1930s Gundry undertook "further postgraduate training in Cleveland, Ohio". There is no information on exactly what this entailed.

iv. The Creation of Vancouver's Metropolitan Health Services:

In 1939 Dr. C.H. Gundry was hired as Director of the Mental Hygiene Division of the Metropolitan Health Services of Greater Vancouver. The agency represented a new regional approach to public health services in the public schools, enforcement of public health standards and disease control. Planning for the Health Services began in 1932 among the local civic councils and school boards in Vancouver, Richmond, West Vancouver, North Vancouver and Burnaby. The new Metropolitan Health Board would provide more equitable service to the entire region and particularly where there had been "no attention paid to the development of such services". It was anticipated that in addition to provincial funds "the municipalities would receive an annual grant for a period of years from the Rockefeller Foundation" to help finance the scheme. Due to the past success of regionalized water and sewer services the idea of a health board seemed eminently practical. The only word of caution voiced was that the school health services "which the school board has so carefully built up" would now be placed in the hands of a metropolitan board on which Vancouver did not hold a
majority representation". Vancouver's school health services was not something to be simply abandoned.

The debate continued but by October of 1936 the Metropolitan Health Board became a reality. One newspaper reported that "Medical men feel that the new board will be a constant sentinel at the portal of public health". The main office would be located in Vancouver's new City Hall with different unit offices throughout the region. The first year's budget was set at $36,080 of which $13,309 was provided by the Rockefeller Foundation, $13,309 by the province and the remaining $9,462 by the municipal governments involved. Dr. J.W. McIntosh was appointed senior medical health officer. In 1937 the organizational plan of the metropolitan health system was unveiled. There would be a director of school medical services; however, two separate departments were specifically created for the school system. The "School Medical Service" would look after the physical needs of the pupils while a new "Child Welfare and Mental Hygiene" department would attend to the emotional, social and psychological needs of the region's school children. The plan is shown on the next page. The director of the new "Child Welfare and Mental Hygiene" department would be, according to the report of Dr. G.T. Amyot, "a physician trained in Paediatrics & Mental Hygiene" who could organize "the preparation of a program of Child Welfare and Mental Hygiene for the whole Metropolitan Area". However, the position of Mental Hygienist remained vacant throughout 1937 and into 1938. In the fall of 1938 the minutes of the Metropolitan Health Committee recorded that two finalists had been selected: Dr. A.G. McGugan of Edmonton and Dr. C.H. Gundry of the Ontario Hospital Service. Dr. Gundry was willing "to take a special combination course at the University of Toronto to further his qualifications". On December 21, 1938, the committee agreed "the position be offered to Dr. C.H. Gundry, who appears to be the best qualified at the present time". In early 1939 Dr. Gundry began his work as the first Mental Hygienist in the Vancouver school system.
The 1937 organizational plan of the Metropolitan Health Committee and its various divisions. Notice that the Mental Hygiene Division has been paired with Child Welfare. The operating budget came from local taxes, the provincial government, the University of British Columbia and the Rockefeller Foundation.

Source: Vancouver News-Herald, Saturday, April 24, 1937.
When Dr. Gundry arrived in Vancouver he brought a new prospective to the treatment of school children experiencing learning problems. Unlike some of his predecessors in the fields of special education and school psychology who held strict eugenic views that certain children were born genetically unfit, Gundry believed it was poor parenting that made children socially unfit. The new mental hygiene perspective was not a matter of strict biological determinism but rather a poor quality of human nurturing. However, the effect was much the same; social unfitness required intensive treatment which could result in the removal of children from the offensive environment. Similar to eugenics was the tendency of mental hygiene to blame such broad social problems such as juvenile crime on one cause, a bad childhood as opposed to the eugenic explanation of bad germ plasm. Gundry spoke in 1937 to a medical conference proclaiming:

Many of the adults who are unreliable and unstable, whose employment records are unsatisfactory, who are continually disappointing those who try to help them, and who are often malingerers, liars and swindlers, in short, the psychopathic personalities, have a history of a loveless childhood. They have never learned to respect the authority of a father they loved, and, consequently, always tend to resent authority. 26

McLaren’s remark regarding mental hygiene’s environmental explanation and eugenic’s biological determinism must be kept in mind. Although their explanations for anti-social behaviour differed "their goals of efficient social management were similar". 27 Complex issues of social deviancy in children were reduced by both mental hygiene and eugenics to rather simplistic explanations. In 1940 Gundry stated that a child’s bad behaviour "should be regarded as a symptom", while the causes could be sought "in his environmental and in his physical and mental make-up". "This is the viewpoint of mental hygiene" as all "mental illnesses of adult life can be traced back to...unwholesome compensations...in childhood". In 1939 Gundry told the Vancouver Daily Province that it was
not so much a matter of curing children but being "able to forestall a
great deal of neurotic disability". Childhood neuroses "are built up"
to create the mentally-troubled adult. 28

Gundry's first word to the general public of Vancouver about
the mental problems of school children was in a newspaper article in
which he declared that "Mental Diseases [are] Curable". Early
psychiatric treatment could, in mild cases, avert serious illness as
"mental ill-health is one of the greatest obstacles to happiness and
efficience". 29 The teachers of Vancouver first heard of Gundry's views
in The B.C. Teacher magazine of November, 1939, when he wrote an article
on "Our Bad Boys". Discounting the "dark days" of old, Gundry told
teachers that as scientists of the mind "we no longer believe that
children are born bad" and that punishment is the only solution. From
a detailed history of a boy's life it was possible to find the root cause
of the bad behaviour; this "is the method of mental hygiene". The facts
to be considered in this analysis "are individual differences in
temperament, intelligence and physique". In most instances a boy's
badness was simply caused by "emotional stresses" brought on by an
"insecurity" developed in infancy. However, some cases are "conflicts
between instinctive tendencies and social and moral forces". Gundry
believed it was social or family conflicts which accounted for most
problem children. The teacher is central to diagnosing such children as
they have the "data on which to base an understanding of a child's
behaviour". 30 In fact Gundry's innovative concept was to make teachers
the front-line soldiers in the new mental hygiene campaign he planned to
launch in Vancouver's schools. Early in 1940 Gundry proclaimed to a
meeting of the B.C. Parent-Teacher Federation that there was an urgent
"need for a programme of mental hygiene in the schools". 31

In 1941 Dr. Gundry left the Vancouver school system to
undertake wartime duty as an army psychiatrist. However, his pre-war
program can be construed from the 1939/1940 report of H.N. MacCorkindale,
Superintendent of Schools. Mental hygiene clinics were held at various school health units throughout the metropolitan health region. The "teachers in each school were asked to refer cases with poor personality adjustments to the attention of the principal". A complete history was assembled on each of these pupils including family history and health records. It was the school nurse who contacted the child's parents. MacCorkindale writes that in these interviews it was stressed "that the parents and the child look upon this conference as a medical examination inquiring into the health of the pupil rather than any mental irregularity". After the clinical assessment a "case conference" would be held with Dr. Gundry, the school principal, classroom teacher, school doctor and nurse in attendance. School officials and staff "have been enthusiastically interested in this stimulating approach to pupil adjustment". "Definite treatment" can be advised but in many cases the result is "a better understanding of the child's personality". 32

In 1939/1941 Gundry dealt with 127 cases in this manner, of which 47 required follow-up therapy. He made the only public comment on his therapy methods when he told a newspaper reporter that for younger children he relied on a life history to devise therapeutic measures. For "teens" he conducted an interview with the subject. "We just chat about things, and bye and bye we get important clues to the temperament" of the child, whether he is overly "restrained" or "emotionally undisciplined". Family or social conflicts cause children to develop "bad compensation habits". The Chairman of the School Board felt more attention needed to be paid to these "nervous children", while the "number of children of school age who show peculiar traits of personality cannot be estimated with any degree of accuracy". Some of these children are "intellectually dull" but not all. The Chairman believed a survey of the schools to gauge the population of problem-behaviour children would be in order. 33

In many ways this process resembled the initial surveys of the Vancouver school system by medical doctors before World War I to find the
Dr. C. H. Gundry examining a Vancouver elementary school pupil in 1939. The caption to the photograph reads: "We just chat about things".

Source: Margaret Ecker, "Children's Troubles Threshed Out in Vancouver Clinic", *Saturday Province Magazine*, November 25, 1939, p. 7
feebleminded. The population of feebleminded grew as a result of such sweeps through the schools and the same result would invariably occur with each mental hygiene clinic. Just as a population of feeble-minded children had been defined earlier, so would a new population of pupils with mental problems or peculiar personality traits. This first attempt to systematically apply the principles of mental hygiene to Vancouver's schools came to a sudden halt when Dr. Gundry left for his war service.

vi. Mental Hygiene in Vancouver Schools During World War II and Dr. Gundry's War Experiences:

Before Dr. Gundry assumed his wartime duties in 1941 he had laid the ground work for a continuation of mental hygiene practices in his absence. During the spring of 1941 he developed a series of lectures on the history of mental hygiene and definitions of mental hygiene terms for teachers in all four school districts of the metropolitan health area. Each teacher was given a "mimeographed copy" of the lectures to take back to his school. Gundry also lectured on mental hygiene at the Vancouver Normal School to teachers in training. There was an unsuccessful attempt by the Metropolitan Health Board to exempt him from military service "due to his specialized training in Mental Hygiene". However, by June, 1941, the Board had secured a replacement mental hygienist from Great Britain, Dr. Mary Luff. In September, 1941, Luff began to give a series of lectures to elementary school teachers on mental hygiene. It is noted that "teachers report that these lectures have been most interesting and extremely valuable". Dr. Luff was "following up exceptionally well the work of Mental Hygiene in the schools" begun by Dr. Gundry. However, in September, 1942, Dr. Luff returned to England to take up psychiatric duties in the British Army. It appears that no replacement psychiatrist was secured for the remainder of the war and there are no indications of how mental hygiene in the schools was being conducted during this period.

Dr. Gundry served overseas in the Canadian Army as a psychiatrist and rose to the rank of Major. The experimental practices
of the First World War of giving soldiers IQ/personality tests and treating them for mental problems brought on by battle experience were routine by the Second World War. Army life made a great impact upon Gundry, this military experience directly affected how he regarded school children upon his return to Vancouver in 1945. During the following year in a luncheon speech to the Lions Club, Gundry stated: "Army experience had shown that mental health and efficiency can be improved by careful selection and personnel management". In 1947 Gundry proclaimed to the Metropolitan Health Board that during the war a commission to investigate psychosis in the armed forces found "that one-third of all illness had a mental side". Mr. Cunningham, a board member, asked Gundry how "the principles of psychiatry" could be applied to "other walks of life besides the army". Gundry suggested the creation of child guidance clinics, closer work with Parent Teacher associations and the "great need for an institution for the care of seriously, disturbed children". Drawing again from his army work, Gundry said "that much difficulty in the British, U.S. and Canadian armies was forestalled by proper placement of the personnel" in positions in which "they could give their best service". Such a process of selection through mental examination "tended to reduce battle casualties from psychiatric causes". It was clear that Gundry's wartime experience made him admire a system of mental selection in which individuals with mental flaws were placed in positions of less strategic importance than combat or command duties. The process of selecting the mentally fit and providing treatment or less strenuous placements to the mentally unfit in the army appealed to Gundry as a sound mental hygiene practice.

By now the selection of school children by supposed genetic intellectual ability for specific educational tracks had been an established practice in Vancouver's schools for some decades. It had been started by teachers and psychometricians with decidedly eugenic leanings. Gundry's concept of a mentally efficient army run on the
principles of mental hygiene involved a seemingly similar selection. However, Gundry was not a eugenicist and the selection process he advocated had a therapeutic rationale that was decidedly lacking in the crude application of hereditarianism by eugenicists earlier in the century. In the end the mental hygiene strategy, whether in the army or the public school system, was about the scientific management of individuals for their mental improvement. Those judged mentally sound would excel academically, while those seen as less mentally able would be placed in less stressful educational programs if warranted. The army experience of Dr. Gundry provided him with new vigour about the social logic of mental hygiene and its wider application to fields like education.

vii. Mental Hygiene in Vancouver Schools from the Late 1940s Through the 1950s:

Upon Gundry's return from war the School Board chairman said "how pleased we are to have Dr. Gundry with us again". The Board looked forward to a continuation of his "fine work" in the field of mental hygiene for school children. During 1946, the first year of his return to active service in the Vancouver school system, Gundry planned to further refine the conference method of dealing with problem pupils. He stressed that parents had to understand that such behaviours as temper tantrums in children "may be the seed of future disability and lack of success". Each child seen by Gundry had undergone close scrutiny before the psychiatric consultation. The teacher referred the child to the school principal who then contacted the school nurse. The nurse made a visit to the child's parents "to obtain their consent and cooperation" in what was officially a matter of "the child's state of health" and then filled out a form on the child's family history and social background. Each child had to have an "individual intelligence test rating" before the appointment with the Mental Hygiene Clinic. The final conference on the child was among the relevant health professionals and school officials who, Gundry advised, "should cultivate...habitual self
restraint" when confining their comments to just the problems of the child being treated. Gundry was convinced that such early interventions in the mental lives of children would save society from future problems. Many of the "psychiatric casualties" that he saw in "adults during military service" mandated the "need for extensive and consistent attempts to improve the mental health of our children". As an example of this preventative intervention, Gundry spoke out publicly about an 18 year old youth who killed a North Vancouver man in 1945. The Russell murder trial proved the need for the mental hygiene treatment of youth "as Russell was alleged to have developed" a "condition" during "his childhood years". Gundry proclaimed it was simply the case that "an ounce of prevention is worth a pound of cure" when dealing with juvenile mental problems. 42 Gundry clearly saw all adult mental disorders as having a basis in a faulty childhood. The direct intervention of medical authorities and health officials in a child's life was not a matter for debate. The same high-handed manner was exercised by eugenicists during the early twentieth century in dealing with the feebleminded and their control through such public institutions as schools, insane asylums and prisons. Throughout the 1950s a pattern of applying the norms of middle-class life upon the children of the city's working-class districts through mental hygiene treatment would emerge in the growing bureaucracy under Gundry's directorship. Although a small number of middle-class children did receive psychiatric treatment, a staggering number of Gundry's young patients seemed to come from the working-class areas of the city.

In his 1947 report Gundry introduced the concept of "normal" children who existed in "large numbers" as opposed to the minority of "others whose progress and development" were "in some way abnormal". The "job at hand" for schools and health departments was to provide "general training" so such difficulties in this minority of children could be dealt with early. If not, "we might face a chaotic future". 43 The
first statistics from Gundry's department appear in this 1947 report and over 164 cases were dealt with in that year. The majority were for poor academic progress (60) and stealing (40), poor adjustment (41), truancy (24), sexual problems (7), as well as a myriad of other negative behaviours. Even a "reading disability" was the cause of eight pupil referrals. The main diagnoses given, when one could be reached, was not psychoses or the like but rather a "Dull normal and borderline intelligence" rating which accounted for 37 cases. Two children were placed in the "mental institution at New Westminster" and fifteen parents were referred to "psychiatric treatment". The fact that a child's parents could be forced by Gundry into treatment for their deviant child rearing did not change until the late 1950s. This showed Gundry's legal power over the children and parents he dealt with.

In 1948 Gundry began to offer factual evidence on where the cases he was dealing with originated. He provided case data for each school in Vancouver and it is possible to discern from what social class of children the majority of his cases originated. Vancouver has been traditionally divided between the mostly affluent west side and working-class east side along the north/south axis of Cambie and Main streets. Historian Robert A.J. McDonald (1996) in his history of Vancouver before World War One states that the east side "tended to be more working class and the west more middle and upper class". South Vancouver to the east of the divide was populated by the "industrial classes", while to the west it was "more uniformly white collar". The school map on the next page shows this east/west divide as of 1936. Of Gundry's 209 cases for 1948, 184 came directly from the Vancouver school system. Poor school progress was the leading cause of pupil referral (65) and 26 were diagnosed as simply being of dull/borderline intelligence. About 39 were sent for academic adjustment or remedial education, 38 for vocational training, 4 children were admitted to a mental institution and 5 parents were referred for psychiatric treatment. A closer examination of the
The Vancouver School System as of 1936. Source: Vancouver City Archives (103 B3 File 6)
school data reveals a marked bias towards schools in the east end and south Vancouver patronized by the children of working-class parents. Dawson near the C.P.R. yards in the downtown section referred 12 pupils, Franklin and McBride in the east end each referred 8 pupils, while Seymour in one of the poorest neighbourhoods of the east end also referred 8 students. Of the west side schools only Kerrisdale referred 8 pupils, although this particular area of the west side had more in common with the east side in terms of social class status. 46 The east end would prove fertile ground for Dr. Gundry and the other mental hygienists who worked in Vancouver's schools in the late 1940s and 1950s. Special counselling projects and psychiatric social work initiatives would be found only in the schools of east and south Vancouver. Mental hygiene became a treatment for the poor academic standards and behaviour problems of many of Vancouver's working-class school children.

In 1949/1950 Gundry expanded his staff in the Mental Hygiene Division. Dr. W.R.S. Wilson took a training program at Gundry's old alma mater, the TPH, "under the Professor of Psychiatry" which could have been C.B. Farrar. Miss Hall, a staff psychologist, went to Toronto's Hospital for Sick Children to obtain some experience in paediatric psychiatry with the help of the CNCMH. In her absence Ruby Kerr transferred from her position as school psychologist to become a psychologist in the Mental Hygiene Division. Kerr was one of Vancouver's first special education teachers, an advocate of eugenic sterilization for the feebleminded and had trained under Henry Herbert Goddard in Ohio during the 1920s. Gundry hoped both Hall and Kerr would be retained so that "more individual treatment" could be carried out than we "had previously been able to undertake". Also the first psychiatric social worker for school children, Harry Itzkow, was hired with financial help from the Vancouver Children's Aid Society. Later in Gundry's report to the School Board he revealed that the bulk of the salaries allotted to the assistant psychiatrist, two psychologists, social worker and stenographer were
"being paid from funds obtained under the Federal Health Grants". 47 There was a larger federal presence after World War II in the field of mental health in a way that was never even considered under the sponsorship of private charities such as the Rockefeller Foundation or through public lobby groups like the CNCMH. Perhaps this is why mental hygiene initiatives became more widespread than their eugenic predecessors.

However, one should not discount the influence of the CNCMH on Vancouver schools in the 1950s. Missing from Gundry's official report to the School Board for 1949/1950 is information found in his yearly department reports. Russell Mackenzie, a Vancouver teacher, had just "returned to the city teaching staff after a year's training in mental hygiene in Toronto, under a plan developed by the Canadian National Committee for Mental Hygiene". The role that Mackenzie would fill in the school system was not decided by the end of 1949. In 1950 Gundry revealed that Mackenzie was "continuing to work very successfully in Templeton Junior High School, and in the seven elementary schools that feed into Templeton Junior High". What Mackenzie was doing in an east end high school in the 1950s in terms of a mental hygiene program was outlined in his own report of April 26, 1950. He conducted 415 student interviews, 84 parent interviews, dealt with 247 "mental health problems in the classroom" brought to light by teachers and held 37 clinical conferences with school personnel about delinquent youth. He gave 59 talks on "human relations" in high school classrooms, showed "mental health films" on 22 occasions and did 48 "sociometric studies of class group relations". His work was "to augment and supplement" the counselling services of Templeton and its area elementary schools. Mackenzie appeared to do a great deal of work with the juvenile court system and probation officers. He also helped to organize diagnostic clinics which Dr. Gundry attended at Templeton and its feeder schools. Although Mackenzie was officially called a "Mental Health Co-ordinator", 
his April report does not specifically state what type of pupil problems he was dealing with. However, a letter of support for his Templeton program by Superintendent H.N. MacCorkindale dated June 30, 1950, clearly outlined that Mackenzie "in co-operation with Dr. Gundry" saw "several children who show signs of behaviour symptoms". The work he had done with these "behaviour cases" in Templeton and its feeder schools received high praise from school officials. MacCorkindale concluded: "I have every reason to believe that we are on the right track for relating the teacher problem of the classroom with the Mental Health problem of the physician and nurse". It should be stressed that Templeton Junior High and the feeder schools of Franklin, Begbie, Hastings, Nelson, Macdonald, Seymour and Woodland are in the geographic center of working-class East Vancouver.

If Mackenzie was working with children of the working class and concentrating on behaviour problems that often resulted in juvenile court involvement, it is logical to conclude that he was following a similar pattern of social control through education exhibited by eugenicists in their battle with lower-class feeblemindedness and its resulting criminality. The situations were more similar than dissimilar in social intent as well as effect. Gundry's own case data for schools shows that in 1949/1950 Templeton Junior High had 11 cases, Franklin 8, Begbie 17, Hastings 1, Nelson 9, Macdonald 5, Seymour 8, and Woodland 5 for a total of 64 cases. Only Strathcona in the heart of the east end's most impoverished neighbourhood had more individual cases at 20 than Templeton and its feeder schools. Moberly in working-class south Vancouver had 16 cases in 1949/1950. West side school totals were marginal as General Gordon had 7 cases, Bayview 7, Kitchener 7, Point Grey High School 7, Prince of Wales High 4, and only the lower-class anomaly of Kerrisdale provided an unusually high 17 cases. The norm on the west side was a small mental hygiene caseload. Moreover, Mackenzie and Gundry's efforts in the east side schools were supported
by another professional in the Mental Hygiene Division, namely the psychiatric social worker, Harry Itzkow, who will be discussed shortly.

In 1951 Dr. Gundry left for three months to work in Thailand under a World Health Organization grant to further mental health services in developing countries. Dr. Wilson resigned and left for Prince Rupert and Dr. Syd Kaplan took Gundry's place. The psychologists, Misses Hall and Kerr, began to use psychotherapy to deal with academic failure by children in such basic skills as reading. When children failed to learn to read it was considered that a "blocking or mental set against reading" had been formed and "teachers should consider" an "early referral to the mental hygiene clinic". In fact out of the 205 cases in 1951, over 131 were initiated due to "poor school progress". There were 8 cases of "arithmetic disability" dealt with and 16 cases of "reading disability". There were some 66 cases of "negativism", 35 parents were referred for psychiatric treatment and 7 pupils were certified to a mental institution. The majority of cases in 1951 were young boys ages 6-10 (129) and adolescent males (63). The school referring the most children to Gundry was Begbie in the east end which provided 16 cases.

Aside from applying the case history and interview method, there was a new initiative launched to reach an "assessment of social pathology".

In 1952 and 1953 the name of Harry Itzkow, the social worker, became more prominent in Gundry's reports. In 1952 Itzkow left Vancouver for a year to take his Master's of Social Work at Columbia University in New York. In the 1953 School Board report it is noted that the Mental Hygiene Division "assigned a psychiatric social worker to Lord Roberts, Dawson and Seymour elementary schools". The report stated that the "social worker assisted the teachers with pupils who showed evidence of an emotional problem". In Gundry's report for 1951 it is noted that: "Mr. Itzkow is confining his efforts to Unit 1, and devoting his chief efforts to three schools, spending one morning a week in each".
1 (See previous map) comprises the working-class east end in the Strathcona, Grandview/Woodland and Hastings areas, as well as the downtown/west end region. In 1954 the first report written by Itzkow himself is printed within Gundry’s report for that year. He had 104 case conferences and discussed 209 pupils from within Unit 1. He worked closely with 16 families in Unit 1 of which there "were boys from five families, living in the Lord Roberts school area". The group work resulted in "definite indications of attitude and behaviour change". At Dawson School Itzkow had a monthly meeting with school staff "to discuss questions in mental health related to disturbed children in the classroom". 56 Eventually Itzkow published a synopsis of his work entitled Reports on the Project Undertaken in Three Vancouver Elementary Schools: Dawson, Lord Roberts, Seymour, September 1953 to June 1955. Dawson and Lord Roberts were in the west end of the city’s downtown but Dawson was located near the railway yards of False Creek and warehouse district of Yaletown. Seymour was in the east end of the city near the shipping docks. The project seemed to revolve around developing a team approach to pupil problems in each school as managed by the social worker. Itzkow’s assessment of the study subjects was highly negative:

There was no attempt to classify these children as being moderately or severely maladjusted. It could be stated that the behaviour of these children was so different from that of other children that they were considered to be maladjusted and in poor mental health. 57

The teacher, school nurse, principal, psychologist, psychiatrist and social worker made up the management team. The teacher was the most important member since he would have the most "dealings with the child". The child and parents were merely interviewed for information. 58 Decisions were clearly made by school and medical professionals on behalf of the child and parent concerned.

In 1956 Itzkow resigned from his position of social worker in the schools of Vancouver to take up an appointment as mental health consultant for the schools of Synder, Texas. 59 There is also no further
mention of the work of Russell Mackenzie at Templeton. However, that is of little consequence because such problems as student academic failure, delinquency and behaviour problems were being increasingly linked to a causal explanation based in mental hygiene. In 1953 a committee of the Vancouver School Board was organized under Trustee Mrs. H.F. Angus to study the present state and future need for mental health services in the school system. In June, 1954, Angus submitted the report of Special Committee #5 to the School Board. It is noted that Dr. C.H. Gundry was to be commended "for his help and courtesy". The study purported to find that "10% of the school population...showed signs of incipient or overt mental disturbance". About 5% would "benefit by psychiatric diagnosis and treatment". The only specific school mentioned in the report is John Oliver High School where "only 5% of the school population or one in every ten of those needing this service, were seen by the Mental Hygiene Clinic". John Oliver is located in the southeast part of Vancouver in a traditional working-class area. It is not surprising that Angus cited this school and proclaimed that "many students would benefit by diagnosis and treatment". The committee recommended smaller classes for remedial students, better teacher training, more mental health co-ordinators and a residential treatment center for emotionally disturbed children "similar to Seattle's Ryther Center". In a letter of June 16, 1954, Angus appealed to the Canadian Mental Health Association as such services were beyond the means of the School Board. In The Vancouver Sun of June 8, 1954, an article proclaimed: "10 Percent of City Students Believed Mentally Disturbed". The most "serious lack of mental facilities" was to be found in the neighbourhood of "the John Oliver High School area, Forty-first and Fraser". The solution put forth was to "start special remedial classes for maladjusted pupils". In fact such classes had a historical precedence in Vancouver's special classes for subnormal pupils which had begun amidst the same alarmist environment over the feebleminded during the early twentieth century. It is very clear
from the Angus report that the panic or rather fear of the feebleminded shown by the School Board during the early part of the century was still very much evident in connection with the perceived mental problems of delinquent or maladjusted youth in the city's east end in the 1950s.

The mid-1950s marked the highest period of interest in the Vancouver school system concerning mental hygiene and its application to school work. A memo of April 28, 1954, from Superintendent H.N. MacCorkindale to all principals and teachers shows that an extensive mental health talk series was to be offered in five city high schools on the evening of Wednesday, May 5th. The series' outline is reproduced on the next page. All interested school personnel were invited "to visit the Crease Clinic Open House" on Friday, May 7, 1954, from 2:00 P.M. onwards. Crease Clinic was the newest building at Essondale, the Provincial Mental Hospital in Coquitlam. It is notable that Gundry himself did not speak, although many in his department did, such as fellow psychiatrist Dr. M.A. Menzies and psychiatric social worker, Mr. H. Itzkow. 62

In 1955 a major initiative was launched utilizing a "mental hygiene grant" from the federal Department of Health as administered by the Senior Health Officer of the Metropolitan Health Board. It provided for "in-service training in mental hygiene for counsellors" in many Vancouver schools. This "pioneer venture" sought to make not only counsellors but "eventually some principals...sensitive to the mental hygiene needs of children". There were 137 cases in 1955 and a comparison of east side to west side high schools reveals a startling contrast for that year. On the east side Templeton Jr. High, John Oliver and Gladstone accounted for 22 referrals for mental hygiene consultations. On the west side Kitsilano Jr. High, Point Grey Jr. High, Prince of Wales and King Edward provided only 7 cases for that same year. There were 81 cases of poor school progress, 60 behaviour problems and 15 pupils with nervous disorders affecting their reading/arithmetic
ability. 63 During 1956 the first special counsellors were ready to begin their work. Eight were initially assigned to district secondary schools and visited each high school's feeder elementary schools. They functioned much the same as mental health co-ordinator Russell Mackenzie had in the early 1950s; half days were spent at elementary schools, while each counsellor was actually based in a particular secondary school. The success of the program had been so encouraging that Gundry stated "we hope that it can be carried on indefinitely". In the School Board's yearly report it is noted that as a "result of higher enrolment" and the "increasing awareness of the value of mental health" there was a noticeable increase in the demand for diagnostic and treatment services". It was fortunate these special mental hygiene counsellors just happened to be present to fill that demand. Once again during 1956 the cases seemed to be centered on the east side of Vancouver when comparing the secondary schools. Templeton Jr. High, Britannia, John Oliver and the Technical High School referred 20 cases to Dr. Gundry from the east side. Prince of Wales, Point Grey Jr. High and King Edward from the west side only provided 6 cases. It is safe to conclude that the special counsellors on the east side had much to preoccupy their time, where that was definitely not the case on the west side. An east side school like Templeton Jr. High and its feeder schools Begbie, Lord Nelson and Hastings provided 12 cases. Compare this to Point Grey Jr. High on the west side and its feeder schools, Quilchena and Kerrisdale, which only yielded 6 cases. The east side sample had double the number of cases as compared to the west side. 64

During the 1957/1958 school year 13 special counsellors "had more than 3,000 consultations with teachers regarding pupils with problems". Gundry reported that "one of the original special counsellors has become a principal". In an interview with Dr. Norman Ellis, a psychologist in the Vancouver school system from 1957 to 1978, the special counsellors' program was known at the time as a career track
vehicle. Ellis recalls: "It was considered to be good, basic training for people who were going on to become administrators or principals". He also recalled Dr. Gundry was the "principle instructor in that training program" and that Russ Mackenzie assisted him. There were 141 cases in 1957 of which 109 were referred for "poor school progress" and 56 had "conduct disorders". East side schools provided the bulk of referrals as Britannia, John Oliver, Templeton and Vancouver Technical had 18 cases combined, while Lord Byng, Prince of Wales and King Edward provided a total of 6 cases from the west side. East end elementary schools like Begbie (5), Strathcona (7) and Nelson (6) were not matched by their west side counterparts, Henry Hudson (2), General Gordon (2), Bayview (1) and Queen Mary (2). The 1958/1959 report of the School Health Services made it clear the special counsellors' assessments and examinations were not being included in the 264 "active cases" being dealt with by the Mental Hygiene Division. Gundry's staff had "carried out almost a thousand treatment interviews".

Gundry's report for 1958 shows that 225 referrals were made for "poor school progress" while the high school case data shows the same disproportionate east/west split. On the east side Britannia, Gladstone, John Oliver, Templeton and Vancouver Technical sent Gundry 27 cases. On the west side Lord Byng, King Edward, Kitsilano, Magee, Point Grey and Prince of Wales only provided 13 cases. An example of how privileges were being extended to high-achieving students drawn largely from west side schools was the gifted pupil program where "all superior children...would follow an enriched curriculum". The Board made $10,000 available to purchase materials as a part of this gifted education. Dr. Ellis devised a secondary program to have talented math and science students, the top 25 from the city, meet with "scientists from the business world and industrial world" every week for two hours at Kitsilano High to discuss issues of interest. Many of the grade 11 and 12 students in the program went on to university scholarships, Ellis
recalled. However, it is also clear that gifted programs for middle-
class students were the complete opposite of mental hygiene initiatives
for lower-class students. The first expanded social possibilities while
the second sought to confront supposedly unhealthy anti-social tendencies
and create conformist attitudes.

As the 1950s drew to a close, the special counsellors’ program
was expanded in 1956 to include trainees from neighbouring suburban
municipalities such as Surrey and Coquitlam. From 1956 to 1960 a total
of 31 counsellors were trained. In his 1959 report, Gundry noted with
pride that the special counsellors were "having a favourable effect on
the thoughtfulness with which the problems of individual children are
being considered throughout our schools". However, in 1959 the data for
case numbers per school in Vancouver ceased to be entered. Gundry did
a special study on "85 adolescent boys" who "were displaying serious
academic failure" and, after administering intelligence testing, he found
no evidence of low intelligence being the primary cause. It was their
family background and economic circumstances at fault. To Gundry the
only "successful treatment of these boys...demands that they be under
control for a lengthy period of time...away from their own homes, in a
situation where their programme is guided for 24 hours a day by
psychiatric principles". By the end of the 1950s the same type of
solution was being offered to the problems of wayward youngsters as
during the early part of the twentieth century, their removal to a
segregated setting. It was Vancouver’s first special class teacher of
subnormal children, Josephine Dauphinee, who had urged an audience of
concerned social leaders in 1918 to "remove from our midst these
unfortunates" for society’s and their own good. Mental hygiene
clearly had its therapeutic limitations within the public school system
which Gundry himself recognized. The 1960s would prove a difficult
decade for Gundry and his clinical approach to mental hygiene therapy.

viii. The Decline of Mental Hygiene in the 1960s:
In the 1960s the notion of mental hygiene being a therapeutic treatment process for a wide variety of school children's problems began to wane. This gradual decline was due to a variety of factors. Many school learning problems that were regarded in the 1950s by Dr. Gundry as having an emotional basis, such as reading, were diagnosed as learning disabilities requiring new teaching methods. A number of educational options open to children having learning difficulties began to appear. Such programs as remedial reading classes, what we would now call elementary social adjustment classes for pupils with emotional problems, secondary occupational training classes and expanded educational services to mentally retarded pupils diverted some of the students away from the Mental Hygiene Division. The special counsellors' program continued to grow and school-based treatment of pupils as well as their families became more common. Also outside psychiatric agencies such as private clinics and more private practitioners allowed families to seek professional help beyond the Mental Hygiene Division. Mental Health Centers were opened by the provincial government in lower mainland municipalities in the early 1960s and families sought counselling help through them. The ability of mental hygiene to account for a child's learning or social problems as being primarily caused by a defective state of mind or poor family dynamics was diminished as new learning and mental health therapies came into use. Dr. Gundry never lost his faith in mental hygiene and the fact that the name of his division was not altered until after he had resigned in 1969 attests to this fact.

In 1961 two initiatives were begun that placed more functions of the Mental Hygiene Division at the school level and took them away from the clinics developed by Gundry. The children seen that year at the clinics (111) were used as "teaching cases" for the nurses who worked in the schools in order "to avoid channelling all cases to the clinics". The 14 special counsellors who worked half time in their secondary school and half time in feeder elementary schools averaged over 300 interviews.
Gundry records that 21 cases were sent to them by the Mental Hygiene Division. With a total of 180 new cases Gundry stated there had to be "an acceptance of limitations, and economy of treatment". In 1962 Gundry detected a change in the type of cases he was receiving, noting that "this year, 'unsatisfactory school progress' was given as the reason for referring 240 boys between six and twelve to the clinics". Although most were of "normal ability" they were still "showing learning problems". It was due to "the instigation of the school" that these cases had been brought forward to the Mental Hygiene Division; they were not initiated by parental pressure. The cases referred to the special counsellors increased to 34. Gundry seemed perplexed and attributed the cause of the boys' problems to anxiety over their future employment chances. In other reports Gundry was praising the achievements of his department and how it handled its large case load to the Department of Health and Welfare in Ottawa. An old colleague of Gundry, Dr. Albert Menzies, now at John Hopkin Medical Center, presented a favourable description of how the Mental Hygiene Division practiced preventive psychiatry to the American Psychiatric Association. However, the group of problem boys Gundry received would in the next few years be seen not as anxiety cases but children with specific learning disabilities and cognitive problems. The school system itself would begin to remediate these pupils rather than a psychiatrist insisting their mental attitudes had to change.

In the early 1960s new techniques were being developed to deal with certain types of problem children. In 1963 Samuel Kirk devised the term "learning disabled" to describe children who were of normal intelligence, but had academic as well as social problems and did not exhibit signs of mental retardation. Kirk had developed remedial reading techniques since 1936. William Cruickshank first proposed the concept of hyperactive behaviour being a cause of learning problems in 1961. Gillingham and Stillman demonstrated in 1966 that many children thought
unable to read because of psychological problems could be taught language skills through phonetic decoding. The most influential experiment in the new field of remedial education was the work of Sigfried Engelmann among so-called disadvantaged children and the successful use of direct instruction techniques. Children who were of normal intelligence but had difficulty learning had been thought of as "brain injured" in the 1940s and 1950s. By the 1960s it was slowly being recognized that these children had some kind of "processing dysfunction" which could be remediated through new instruction techniques. 75 The field of learning disabilities recognized quite early on the fact that most of its pupils were males; these were Gundry's problem boys of 1962, whom he diagnosed as anxiety-ridden. 76

In 1963 the Vancouver School Board took the first steps to provide educational services to meet the demands of a small number of special-needs students. It was "recommended that a special remedial class for emotionally disturbed children, who could be helped in a regular school setting" be created. Another measure was the occupational program for work preparation and life skills development which had 566 pupils in twelve schools and was finally approved "on a permanent basis". Higher-level students in the mentally retarded category were being given specific work-skill training and it was hoped in the future actual "work experience" could be gained by the students. Gundry was still preoccupied by reading problems being caused by a child's mental instability. He was also concerned that many families were seeking outside psychiatric help for their children lessening the role of his division. Gundry ardently believed most children he was seeing simply had mental problems and needed to shape up. He declared: "The aim of mental hygiene is not an attempt to coddle children or over protect them but to try to teach them to want to do what they should do". 77 Learning disabilities were not a part of Gundry's diagnosis.

In 1964 the School Board noted the special remedial class for
"children of normal intelligence with learning problems resulting from emotional disturbances" was doing quite well. Special counsellors chose the candidates for the special remedial classes and during 1963-1964 some 9 additional counsellors were trained. The elementary/secondary special classes for slow learners contained 57 teachers and 902 pupils. In fact Gundry noted in a letter that not all of the students were "mentally defective" as "an occasional child of theoretically normal intelligence" could be found. Vancouver's Oakridge School for Retarded Children took those children below IQ 50, or the mentally retarded, of whom there were 166. All of these programs for different types of special-needs children seemed to perplex Gundry. He had to admit that the special remedial class for the emotionally disturbed children had made good progress. He stated "it was fair to conclude that many children with learning difficulties can be helped by an individualized programme". 78 Norman Ellis remembers how the parents of mentally retarded children had to operate schools in church basements during the 1950s until the Chant Report of 1960 which forced the provincial government into providing funding for special education. The opening of the Oakridge School provided "an ideal facility" with a gymnasium and swimming pool able to accommodate most children with physical/mental disabilities. Ellis also remembers the formation in the 1960s of a parents' group called "The Association for Children with Learning Disabilities". 79 The nature of how the Vancouver school system dealt with certain special-needs children was gradually changing during the 1960s.

By 1965 plans were underway for city-wide remedial reading classes. Vocational training programs were opening for non-academic students in grades 11 and 12. Many of the special counsellors trained in the past ten years had become administrators, 37 out of 65. In fact the report of 1965 notes that the "expansion of the special counsellor service has decreased the need for referrals to mental hygiene clinics". Gundry was feeling the pressure of changing circumstances when he drafted
a proposal for "more consultation service to schools". In the proposal he stressed that the special counsellors and principals referring a student "must be doing it on the basis of considerable knowledge" and it might be advisable "to have our psychologist see the child before the consultation". Obviously Gundry did not like having his clinical process usurped and the referral of 162 cases of poor school progress out of a total of 199 cases for 1965 was a matter of great concern. 80 In 1966 the School Board noted that 8 more special counsellors were trained in Vancouver and for the first time the "schools were encouraged to integrate slow learners into regular class academic work and into the social life of the school in general". Remedial reading classes enrolled 3,342 pupils and taught them corrective reading strategies. In only 330 of the pupils receiving remedial help for reading problems was "emotional disturbance" considered to be the "primary causal factor" and most of these were referred by Gundry himself. In fact Gundry was complaining he was seeing "rather fewer children" with neurotic or behavioural symptoms but rather "more whose only outstanding difficulties are academic". 81 Perhaps that was the actual situation all along.

In 1967 Gundry's frustration was growing over how the Vancouver school system was dealing with special-needs children. There was a "growing concern about children with learning difficulties" being "the main emphasis in activities of the mental hygiene division". School consultations between "health and education agents will 'nip in the bud' many emerging problems of youngsters and will completely prevent others". In his yearly report Gundry lamented about "the present system of providing more and more special classes for an increasing number of crudely diagnosed, overlapping groups". Admissions "to special classes can be clarified" because of the "tendency to use them as dumping grounds". He felt there was "a diminished tolerance for the non-conforming youngster in the ordinary classroom". 82 However, Gundry's views should not be taken as an objection to the overloading of these
special classes. He objected to the new types of programs being created to deal with the learning difficulties of children because he attributed their problems entirely to mental causes. In the newly reorganized Department of Research and Student Services there was now counselling, speech therapy, remedial reading, educational psychology, slow-learner classes, occupational classes and English classes for new Canadians. A "co-ordinator of special classes" position was created to cope with "the steadily increasing administrative and supervisory work resulting from the rapid expansion of special teaching services". 83 In 1968 the School Board's yearly report proclaimed that "innovation, experimentation, and examination of techniques and practices" constituted a "gradually changing pattern of education in Vancouver". All IQ testing was suspended except for "individual tests" which were "retained for diagnostic purposes". A Head Start program was initiated in the summer for young children in order to "counteract deficiencies" so "they could derive greater benefit from learning experiences" when they started school in the fall. A training class for children with motor difficulties was also started, an observational class to diagnose learning problems as well as recommend teaching methods and the first learning assistance class was created at an elementary school during 1968. More "New Canadian classes" were created for non-English speaking children and two more slow-learner classes were added. Gundry notes a major "decentralization of staff" to local health units to facilitate more "school consultations". However, despite the apparent restructuring of his department and the evolution of a varied number of educational options for exceptional children, Gundry's opinions remained unchanged. He asserted that the "principles of mental hygiene can be applied to the study of the predicament of large numbers of children". Gundry notes a rise in the number of school consultations and a decline in "clinic cases" but he cautioned that "clinical experience is a necessary background for those who are taking responsibility for 'consultation',
as we use the term". Clearly Gundry did not want to abandon his clinical approach to mental hygiene. He viewed with great suspicion those educational personnel unversed in the philosophic and diagnostic principles of mental hygiene who dealt with the problems of school children. The trend of the times was against Gundry as educational services became more decentralized and seemed to abandon his approach altogether.

ix. Conclusion:

In September, 1968, Dr. Gundry had to retire for medical reasons and died in Shaughnessy Hospital on Saturday, July 26, 1969, from terminal lung cancer. One Vancouver newspaper reviewed his career and it was noted that he "introduced training schemes for teachers...so that they could recognize mental health problems in pupils". Another newspaper called Gundry a "mental hygiene pioneer" who can be "credited with establishing the mental hygiene program as an important adjunct of the city public schools system". Gundry helped to give "public school teachers the diagnostic tools for spotting mental health problems in children" so that they could be given "effective treatment". At the time of Gundry's death he was a member of the medical faculty at the University of British Columbia and a consulting psychiatrist at Shaughnessy Hospital. The department that Gundry headed was being altered as he fell ill. The 1969 report of Dr. G.H. Bonham, new head of the Metropolitan Health Service, stated that the "name of this division will be changed from Mental Hygiene Division to Mental Health Services". Schools could now consult the "mental health team" rather than using "the traditional clinical team evaluation of children". "Special Education" now encompassed remedial reading, English classes for new Canadians, slow-learner classes, speech therapy, the Oakridge school for the mentally retarded and the occupational/vocational program in the secondary schools. Definite progress had been made in addressing the learning needs of certain categories of children.
There were 75 children from grades 2-6 who had been identified as learning disabled. The "criteria used in the selection of the children included learning disabilities" varied from a "background which might result from a lack of books or recreational opportunities or visiting experiences; economic problems; a foreign language background which was hindering development". Such overt causes as motor and perceptual problems were considered but a child's deprived social background was also seen as causing a learning disability. Gundry, in his examination of east Vancouver school children, also laid blame on a child's family background as causing mental problems. This tendency to attribute school failure to non-specific causes, such as a family's failings, was perhaps the main flaw of the mental hygiene approach. Just as eugenics had labelled many children from deprived social backgrounds feeble-minded so mental hygiene utilized the impoverished circumstances of many children to account for their poor mental health as well as learning problems. In 1967 Gundry still believed it was merely a matter of trying to "nip in the bud" the "emerging problems of youngsters". Mental hygiene, like the campaign to find and remove feeble-minded children from Vancouver's schools during the early twentieth century caused the unnecessary labelling of many students as mentally troubled. Today we have supposedly moved on from mental hygiene and in reference to those children diagnosed with learning disabilities and mental retardation that is the case. However, when schools cannot account for the learning problems of a child through diagnostic assessment, and in the case of hyperactivity, through medical treatment, students are labelled as "at-risk", largely on the basis of their cultural and economic impoverishment. In this regard the treatment of such school children has not progressed at all.
Notes:


2. Ibid., p. 112

3. Ibid., pp. 113-126


6. Angus McLaren (1990), op. cit., p. 167


8. Angus McLaren (1990), op. cit., p. 147


11. Ibid., pp. 160-161


17. Angus McLaren (1990), op. cit., p. 205 Footnote #67; p. 119
18. Ibid., pp. 96-97


22. "Greater City in Health Unit: Metropolitan Board Becomes Reality on Sunday", Daily Province, October 31, 1936, p. 14

23. Dr. G.F. Amyot, Report of the Proposed Metropolitan Health Department for the Greater Vancouver Area, 1936, p. 12

24. Metropolitan Health Committee Minutes, Wednesday, November 16, 1938, pp. 64-65

25. Ibid., Wednesday, December 21, 1938, p. 67


27. Angus McLaren (1990), op. cit., p. 112


29. "Declares Mental Diseases Curable", Daily Province, Monday, August 7, 1939, p. 9

30. Dr. C.H. Gundry, "Our Bad Boys", The B.C. Teacher, Vol. 19, No. 3 (November 1939), pp. 139-140


32. H.N. MacCorkindale, "Health Services", Vancouver Board of School Trustees (Hereafter Vancouver B.S.T.) Annual Report for 1939/1940, pp. 44-46

33. "Report of the Chairman of the Board 1940 - Health Services", Ibid., p. 84; Margaret Ecker (1939), op. cit., p.

34. Ibid., p. 83


36. Metropolitan Health Committee Minutes, Wednesday, March 19, 1941, p. 122, Item #5

38. "Dr. Gundry Funeral Set Today", Daily Province (1969), op. cit., p.10
40. Metropolitan Health Committee Minutes, Wednesday, November 19, 1947, Item 5 "Address by Dr. Gundry", p. 309
42. Report of Dr. C.H. Gundry, Mental Hygiene Division, for 1946, pp.1-2; "Abnormality and Criminality", Vancouver Sun, February 10, 1947, p. 4
44. Report of Dr. C.H. Gundry, Mental Hygiene Division, for 1947, pp. 1-3
46. Report of Dr. C.H. Gundry, Mental Hygiene Division, for 1948, pp. 1-7
47. Dr. C.H. Gundry, "Mental Hygiene" Vancouver B.S.T. Annual Report for 1948/1949, pp. 118-119
48. Report of Dr. C.H. Gundry, Mental Hygiene Division, for 1949, pp. 1-6; Report of Dr. C.H. Gundry, Mental Hygiene Division, for 1950, pp. 1-6; Russell K. Mackenzie, Report of My Activities as Mental Health Coordinator in the Vancouver Schools, for the First Seven Months, April 26, 1950, pp. 1-2; Letter of June 30, 1950 from Superintendent H.N. MacCorkindale to Dr. F.T. Fairey, Deputy Minister of Education: Re: Training of Teachers in Mental Health Through the Mental Hygiene Fellowship, pp. 1-2; For a recent work on the use of documentary films made by the National Film Board of Canada to promote mental hygiene in school classrooms, See Brian Low, "Graduation Day: Schooling for Mental Health in the Cinematic Society of the National Film Board of Canada, 1940-1980", (Ph.D. diss., University of British Columbia, 1998).
49. Reports of Dr. C.H. Gundry for 1949 and 1950, op. cit., 1949-p.6; 1950-p.7, School case totals combined
50. "City Doctor Starts Asian Job For UN", Daily Province, September 6, 1951, p. 5; Report of Dr. C.H. Gundry, Mental Hygiene Division, for 1951, p. 1; Metropolitan Health Committee Minutes, Wednesday, February 20, 1952, pp. 27-28 "Dr. C.H. Gundry: Experiences in Thailand"
53. Report of Dr. C.H. Gundry, Mental Hygiene Division, for 1952, p. 1
55. Report of Dr. C.H. Gundry, Mental Hygiene Division, for 1953, p. 1
56. "Mr. H. Itzkow", Report of Dr. C.H. Gundry, Mental Hygiene Division, for 1954, pp. 6-7

58. Ibid., p. 15

59. Report of Dr. C.H. Gundry, Mental Hygiene Division, for 1956, p. 1

60. Trustees Mrs. H.F. Angus, Mr. D.M. Owen, and Mr. G.H. Rogers, Report of Special Committee No.5; Re: Mental Health Services in the Vancouver School System, June 1954, p. 1, p. 4, p. 8

61. Letter of Trustee Mrs. H.F. Angus to Mrs. William Irwin, Canadian Mental Health Association, June 16, 1954; "Committee Estimate: 10 Percent of City Students Believed Mentally Disturbed", *Vancouver Sun*, June 8, 1954, p. 1

62. H.N. MacCorkindale, Superintendent, "Special Invitation to Principals and Teachers, April 28, 1954"

63. Report of Dr. C.H. Gundry, Mental Hygiene Division, for 1955, pp. 1-6

64. Report of Dr. C.H. Gundry, Mental Hygiene Division, for 1956, pp. 1-7; "Mental Hygiene Services", *Vancouver B.S.T. Annual Report for 1956/1957*, p. 18


66. Report of Dr. C.H. Gundry, Mental Hygiene Division, for 1958, pp. 1-9


68. Interview with Dr. Norman Ellis, op. cit., pp. 16-17; "Gifted Pupil Programme", *Vancouver B.S.T. Annual Report for 1958/1959*, p. 5


70. Report of Dr. C.H. Gundry, Mental Hygiene Division, for 1959, pp. 1-7


75. Joseph K. Torgesen, "Learning Disabilities: Historical and Conceptual

76. Janet W. Lerner, Learning Disabilities: Theories, Diagnosis, and Teaching Strategies, (Boston: Houghton Mifflin Press, 1981). Lerner states: "children in every classroom who can be identified as learning disabled, and they are four to six times more likely to be boys than girls", p. 17


79. Interview with Dr. Norman Ellis, op. cit., pp. 19-20


CONCLUSION:

In this dissertation I have attempted to sketch a history of special education, educational psychology, educational efficiency and mental hygiene in the Vancouver school system from 1911 to 1969. My study was not originally planned to be such a comprehensive history. It was intended to be a small historical study of special education and the special class system in Vancouver. However, after starting my research on the first special education teachers in 1911, Josephine Dauphinee and Ruby Kerr, I realized I was dealing with a period of history with much broader implications. It was one of these special class teachers, Dauphinee, who brought the first educational psychologist, Martha Lindley, into the Vancouver school system from Seattle in 1918. They helped to create a reformist climate in which the school population would be differentiated on the basis of mental ability. The study expanded dramatically beyond the special class teachers when I happened upon the early involvement of the second school doctor, F.W. Brydone-Jack, and his staff nurses in labelling selected students as subnormal or feebleminded. This discovery was indicative of how my research would proceed.

After I began to research various sources dealing with the special classes in the 1920s, the presence of mental testing and psychologists became extremely prominent. It was the testing survey of Peter Sandiford, a University of Toronto educational psychologist, for the 1925 Putman/Weir Survey of the School System which officially sanctioned the use of mental measurement in the province's public schools. The introduction of mental testing in the Vancouver school system created a new level of bureaucracy by 1927, the Bureau of Measurements. It also offered another focus to my study, how the educational efficiency movement affected Vancouver's schools and certain school administrators who were involved in that process. Robert Straight, as the Bureau's head, and Herbert Baxter King, as principal of
Kitsilano Junior High School, introduced mental testing and student differentiation according to mental ability into Vancouver's schools in the name of educational efficiency. Also both men attended the University of Washington in Seattle and while there were influenced by these largely American educational ideas. The thrust of educational psychology and school efficiency was very similar to the early special classes which sought to remove from the mainstream all pupils judged to be subnormal. The new rationale was the reorganization of students into various high school tracks according to natural mental ability and future vocation. Removal was supplemented by student reorganization for a differential education.

In the process of looking at the Bureau of Measurements during the 1930s, the name of a school psychiatrist was mentioned, Dr. Charles Hegler Gundry. A new topic began to emerge, the use of mental hygiene as a method to deal with troublesome students. The Mental Hygiene Division of the Metropolitan Health Services was created to provide psychotherapy to children experiencing school problems and hopefully prevent them becoming criminals or antisocial adults. Dr. Gundry began his school psychiatric work in 1939 and continued until 1969 with the only interruption being the period he served as an army psychiatrist during World War Two. Gundry provided a new approach to exceptional children, he did not want to segregate them or test their mental ability in order to differentiate their education, he wanted to find the source of their mental problems. He sent children and parents alike into therapeutic treatment. Gundry saw the school difficulties of children as being primarily due to mental problems, even the inability of dyslexic students to read.

Mental hygiene like educational efficiency as well as mental testing before it and the segregation of the subnormal children at the beginning of the twentieth century in Vancouver schools all shared a common feature, the labelling of students. In fact, the intrusion of
science into education in the guise of medicine as well as psychology during this century has resulted in ever more labelling and categorization of children. In Vancouver the first medical doctor, Georgina L. Urquhart, began the process in 1907 by labelling physical diseases in children who were sometimes segregated as contagious. However, by 1910 the second school doctor, F.W. Brydone-Jack, moved very quickly into the classification of mental disorders. These newly-labelled subnormal children were placed in a special class and a former nurse, Josephine Dauphinee, was hired as their teacher. Dauphinee was sent by the School Board to Seattle and there she found a new scientific means to classify children, by labelling them as subnormal through intelligence testing. With the importation of the American psychologist, Martha Lindley, in 1918, began a program of systematic mental examinations which stressed the efficiency of ridding classrooms of slow students.

In the 1920s the rhetoric of educational efficiency, pupil classification and educating students according to their natural mental abilities became institutional practices within the Vancouver school system. The two Vancouver school principals, Straight and King, who had studied at the University of Washington in the early 1920s, advanced their careers through the practical demonstration of educational efficiency. Straight piloted platooning in his elementary school so that he could show how more children could be taught with fewer teachers in existing school buildings. He was later chosen to head the Bureau of Measurements in 1927 in order to bring the same level of efficient school management to the entire school system. The other principal, King, created the first junior high school in Canada organized with educational tracks populated by students who were placed in either vocational or academic programs on the basis of mental tests in elementary school. Later, as Superintendent of Education for the province, he constantly stressed the need for the school system to mesh itself with the
industrial needs of the economy. Labelling and classifying students became an institutional feature of public education in Vancouver.

When the Metropolitan Health Services decided to bestow a mental hygienist or psychiatrist upon Vancouver’s schools by creating a Mental Hygiene Division in 1939, a new type of pupil labelling was introduced. Beyond the labels already created such as mentally subnormal, vocational or trades student, and matriculation or academic graduation student, a new term was introduced, the mentally ill or troubled student. The new psychiatrist, Dr. Gundry, was quite confident in his view of how to diagnose the learning problems of children; they were due to mental problems brought on by a bad family life. However, after examining two decades of case data for the 1940s and 1950s that indicated from which schools individual cases originated, it became clear that most of these troubled youths, as well as their dysfunctional families, came from the working-class east side or south east zone of Vancouver. Very nebulous diagnoses that had little to do with mental diseases such as "poor school progress", "negativism" and "academic failure" were offered by the psychiatrist. In the early 1960s the psychiatrist attributed the reading problems of dyslexic boys to anxiety over future adult employment. The mental hygiene approach was quite consistent with the other school reform efforts that came before it; by labelling and classifying problem children they could then be treated as outside the mainstream. The labelling was quite imprecise and undiagnostic in a contemporary scientific sense. Many of the mental hygienist’s problem children had, by the late 1960s, been given new labels such as learning disabled and mildly to severe mentally retarded, which did entitle them to more relevant forms of remedial education. However, even today imprecise labels persist and are given to children whose learning problems cannot be validated through psychoeducational testing. When a specific cognitive defect cannot be determined, the school system returns to such broad labels as feebleminded, subnormal,
occupational, and now, "at-risk". Usually these "at-risk" children are of lower economic status than the middle-class social norm and that in itself also contributes to a historical pattern.

Beyond a historical reliance on the labelling of problem children this dissertation has also found several significant undercurrents of how school reforms actually came to Vancouver. The most important was the traffic in reformist ideas established between Vancouver and Seattle, Washington. The first special class teacher, Miss Dauphinee, forged that link through her counterpart in Seattle, Miss Nellie Goodhue. The Vancouver School Board also made several trips south culminating in the hiring of the American psychologist, Martha Lindley, during World War One. In the 1920s the attendance of two prominent Vancouver school principals at the University of Washington brought about the early importation of educational efficiency into the Vancouver school system, well before the Putman/Weir Survey of the School System in 1925. Platooning, mental testing and differential junior high school educational tracks were first put into practice in Vancouver schools well before any other major city in Canada. In fact the special class teachers throughout the early 1920s took summer courses at Berkeley, California, and the Ohio State University, in order to upgrade their expertise concerning the education of feebleminded school children. The University of Washington’s summer education courses were patronized throughout the 1920s by British Columbia teachers. The president of the university, Henry Suzzallo, was frequently asked to speak to the British Columbia Teachers Federation’s spring conventions about educational reform in the 1920s. This overt American influence on the schools of Vancouver has only been touched upon by Angus McLaren (1990); this dissertation fully elucidates its scope and longevity. 2

Another undercurrent that has not been fully understood until the writing of this dissertation is the influence of eugenics and, later, mental hygiene, on the Vancouver school system. The first special
education teacher brought a eugenic framework to her work with Vancouver's mentally handicapped children. Dauphinee quickly blamed her lack of success with the first group of enrolled students because they were imbeciles or low grade defectives. She wanted to train a higher intellectual level of subnormal child, the moron. In 1918 she made an inflammatory speech to the Local Council of Women about the feebleminded who had to be controlled for society's sake through special class training or institutionalization. She admonished her audience to "remove from our midst these unfortunates, who through no fault of their own form the largest proportion of your poverty-stricken, criminal and socially degenerate class". The adult feebleminded were the criminals of society, their care as youths was critical. What the first special class teacher did was to bring the terminology of eugenic classification and the rhetoric of the fear of the feebleminded to Vancouver. It was Dauphinee, along with her teaching colleague, Ruby Kerr, the first female Chairman of the School Board, Irene Moody, and the Vancouver Local Council of Women who were largely responsible for the passage of the Sterilization Bill of 1933. She created an alliance between teachers, the Local Council of Women and national medical bodies, such as the Canadian National Committee on Mental Hygiene or CNCMH, to pursue eugenic social policies. Also she recommended hiring the first school psychologist who had been trained by one of the leading eugenicians in the United States, Henry Herbert Goddard, at the Vineland Training School as McLaren has noted. The removal of Vancouver's feeble-minded school children to special classes or a training institute where they might eventually be sterilized, a negative eugenics policy, proved her allegiance to the early twentieth century tenets of eugenics. When she died in the early 1970s, no mention was made of this aspect of her legacy.

Eugenic ideas also affected the Vancouver school system through Peter Sandiford's presence in 1924-1925 when he conducted an
intelligence testing survey for the upcoming Putman/Weir survey. Sandiford did indepth testing of Vancouver's school children and used the IQ data to show links to racial origins as well as social class status. He despaired at the prodigious breeding of the labouring classes, who created low IQ offspring, and the lack of reproduction among professional classes with their higher intellects. Even Putman/Weir despaired of racial degeneracy in rural schools where mixed blood children, aboriginal-white, were numerous. Such examples suggest that eugenic thinking during the early twentieth century could be found in the intellectual mainstream of Canadian society and was not confined to its eccentric fringes. The first special class teacher, despite her emotional rhetoric, cannot be cast as a mere eugenic aberration in British Columbia society. Even the mental hygienist, Dr. Gundry, was trained at the Toronto Psychiatric Hospital under one of the most influential psychologists of the time, C.B. Farrar. Farrar was an avid eugenicist and advocate of forced sterilization. However, Gundry expressed no eugenic leanings in his career but it is significant that his medical training had a eugenic component. McLaren suggests that even though eugenics and mental hygiene differed theoretically, their goals of efficient social management were remarkably consistent. The ways in which Dauphinee tried to manage the lives of her subnormal charges bore a distinct similarity to how Gundry confronted the mentally-troubled children of Vancouver's east side. They were equally paternalistic, self righteous and dogmatic about the educational problems of the children they attempted to help.

In the end this dissertation probably evolved along the same lines that most research projects do. The initial line of research leads to a related one, which in turn leads to another, and so forth. However, in the final analysis a coherent pattern of labelling and classifying school children from the early to the mid-twentieth century has emerged. The ideological undercurrents behind the entire historical course of this
process has also became much clearer. Eugenics, educational efficiency, differential education in high school tracks, mental testing and mental hygiene propelled these school reforms. Behind them was the constant cause of change during the twentieth century, the application of scientific organization to everyday life. The final outlook is not that encouraging in a school system still intent upon labelling students as "at-risk" rather than taking the responsibility to educate all children in terms of their individual needs. The labelling and classifying of children in Vancouver’s schools was started in the early twentieth century in an attempt to supposedly rationalize educational services to a growing and diverse student population. At the end of the twentieth century Vancouver’s school system is still trying to cope with a growing and diverse pupil population but the approach used today is not rationalization so much as the rationing of educational services to those labelled as "special needs" students.

Notes:


4. Angus McLaren (1990), op. cit., p. 92

5. Ibid., p. 112
BIBLIOGRAPHY:

A. PRIMARY DOCUMENTS:

i. Government Documents:

a. Reports:

Amyot, Dr. G. F. Report of the Proposed Metropolitan Health Department for the Greater Vancouver Area, 1936.


b. Legal Statutes:


The Statutes of the Province of British Columbia, 1911. Chapter 27 "An Act to Provide for the Medical Inspection of Schools". Section 11.

c. Minutes:

Metropolitan Health Committee Minutes. November 16, 1938.

--------- December 21, 1938.
--------- March 19, 1941.
--------- November 19, 1947.
--------- February, 20, 1952
--------- February 20, 1952.
--------- September 19, 1962.

Minutes of the Vancouver School Board. December 21, 1909.

--------- January 31, 1910.
March 16, 1911.

April 10, 1911.

October 16, 1913.

December 22, 1913.

October 19, 1914.

October 30, 1916.

December 28, 1917.

March 27, 1917.

March 14, 1918.

March 21, 1918.

May 7, 1918.

October 15, 1918.

September 9, 1920.

May 4, 1922.

May 4, 1922.

Seattle School Board Minutes. September 14, 1911.

November 13, 1912.

June 11, 1913.

September 22, 1913.

January 16, 1917.

August 15, 1954.

ii. Newspapers:
(Chronological)

"Misinformed As To Residence in City: Mrs. Moody Regrets Inability to Qualify as School Board Candidate", Daily Province, January 7, 1916, p. 15.

"Vancouver Was Among First Cities in Canada to Have Pupils Medically Examined", Daily Province, January 8, 1916, p. 11.


iii. Reports:

Thirty-Third to Thirty-Fourth Annual Reports of the Public Schools of
British Columbia. 1903-1905. Victoria: King’s Printer.

Thirty-Sixth to Thirty-Ninth Annual Reports of the Public Schools of British Columbia. 1906-1910. Victoria: King’s Printer.

Forty-First to Forty-Fifth Annual Reports of the Public Schools of British Columbia. 1911-1916. Victoria: King’s Printer.

Forty-Seventh to Fiftieth Annual Reports of the Public Schools of British Columbia. 1917-1921. Victoria: King’s Printer.

Fifty-Second to Fifty-Sixth Annual Reports of the Public Schools of British Columbia. 1922-1926. Victoria: King’s Printer.


Annual Report of the Seattle School District No. 1 for the Year 1911.

----------1912.

----------1913.


Reports of Dr. C.H. Gundry, Mental Hygiene Division, for 1946 to 1949.

Reports of Dr. C.H. Gundry, Mental Hygiene Division, for 1950 to 1959.

Reports of Dr. C.H. Gundry, Mental Hygiene Division, for 1960 to 1968.


The Vancouver Board of School Trustees Annual Reports for 1907 to 1915, 1917 to 1919.

The Vancouver Board of School Trustees Annual Reports for 1920 to 1923, 1925 to 1929.

The Vancouver Board of School Trustees Annual Reports for 1930 to 1939.

The Vancouver Board of School Trustees Annual Reports for 1940 to 1949.

The Vancouver Board of School Trustees Annual Reports for 1951 to 1954, 1956 to 1959.

The Vancouver Board of School Trustees Annual Reports for 1960 to 1969.

Miscellaneous Reports:

Angus, Mrs. H.F., et al. Report of Special Committee #5; Re: Mental Health Services in the Vancouver School System, June, 1954.


MacKenzie, Russell K. Report of My Activities as Mental Health Coordinator in the Vancouver Schools, for the First Seven Months, April 26, 1950.

iv. Professional Association Journals:


"Dr. Ellwood P. Cubberley". The B.C. Teacher, Vol. 6 (March 1927), p. 3.


Gundry, Dr. C.H. "Our Bad Boys". The B.C. Teacher, Vol. 9 (November 1939), pp. 139-140.


"Primary Grade Section". The B.C. Teacher, Vol. 3 (March 1929), p. 8.


"The University of Washington". *The B.C. Teacher*, Vol. 6 (September 1926), pp. 31-32.


v. Interviews:

Interview with Dr. Norman Ellis, January 25, 1997.

Interview with Miss Grace Jamieson, February 27, 1997.

Interview with Lee Straight, son of Robert Straight, March 5, 1997.

vi. Correspondence:

a. Fond of the Vancouver Local Council of Women as found in the University of British Columbia's Special Collection Division.

Letter of April 4, 1924, from Mrs. Irene H. Moody concerning a booth in the Vancouver Exhibition's Women's Building and display for the 1924 Fair in August.

Letter of January, 1925, from J. Baker, South Vancouver Women's Institute to Mrs. H.J.K. Labsik, Vancouver Council of Women, re working Resolution on Sterilization.

Letter of March 30, 1925, to Dr. Clarence Hincks (President CNCMH) from Mrs. C. Labsik (Secretary, Vancouver Local Council of Women) about addressing a meeting at Wesley Church School on the afternoon of Monday, April 6, 1925.

June, 1925, copy of Sterilization Resolution.

July, 1925, Memo from the Vancouver Local Council of Women to all presidents of affiliated societies re the Sterilization Resolution of the New Westminster Local Council.

Letter of April 1, 1926, from Mrs. C. Labsik to Miss Mabel Gray (Committee of Public Health) re the adoption of the New Westminster Sterilization Resolution by the Vancouver Local Council of Women.

Letter of April 13, 1926, from Dr. J. Carson of the Vancouver Y.M.C.A. to the Vancouver Local Council supporting their "resolution regarding the Mentally Deficient".

Letter of May 14, 1926, from Miss Munslow, R.N., Secretary of the Vancouver Nurses Association to the Vancouver Local Council supporting the "resolution regarding sterilization of the mentally deficient".

Letter of May 18, 1926, from Gladys E. Simms of the Canadian Daughters League to the Vancouver Local Council "supporting the Resolution re Sterilization for the Sexes of the mentally deficient".

Letter of August 7, 1926, from Dr. J.G. McKay (Hollywood Sanatorium, New Westminster) concerning his agreement to speak to the Local Council of Women, Vancouver. Follow-up letter of July 28, 1926, confirms Dr. McKay will speak on Tuesday afternoon, September 7, 1926, on "Sterilization".

Letter of January, 1927, from Mrs. Irene Moody about Miss Dauphinee’s efforts to secure Dr. D.M. Le Bourdais as a speaker.

March, 1927, copy of final Sterilization Resolution.

Letter of June 21, 1929, from Mrs. J.H. Kirk, Mrs. Irene H. Moody, Mrs. Jane Steeves, Miss Ruby Kerr & Miss Josephine Dauphinee of the "Mental Hygiene Committee" to the Honourable S.L. Howe, Provincial Secretary re four resolutions on mental hygiene and list of societies/churches endorsing those resolutions.

Letter of April 30, 1930, from Mrs. Irene Moody of the Mental Hygiene Committee to the Honourable S.L. Howe, Provincial Secretary, re the lack of response over the June, 1929, submission of the committee.

Letter of May 6, 1930, from the Honourable S.L. Howe, Provincial Secretary, to Mrs. Irene Moody of the Mental Hygiene Committee through the office of Mrs. C. Labsik, Local Council of Women, Vancouver.

Letter of January 9, 1931, from the Correspondence Secretary, Local Council of Women, Vancouver, to the Provincial Secretary, S.L. Howe, "re care of the Feeble-minded".

Letter of October 8, 1930, from Mrs. C. Labsik to Mrs. C.D. Peele, Correspondence Secretary, New Westminster Local Council of Women, about the final adoption of resolution demanding the government introduce the conclusions of the 1927 Mental Hygiene Commission Report.

b. Letters of Dr. Charles Hegler Gundry, Mental Hygiene Division, Metropolitan Health Services & Superintendent H.N. MacCorkindale, Vancouver school system.

Letter of June 30, 1950, from Superintendent H.N. MacCorkindale to Dr. F.T. Fairey, Deputy Minister of Education, Re: Training of Teachers in Mental Health Through the Mental Hygiene Fellowship.

Letter of May 26, 1961, from Dr. C.H. Gundry to Dr. Morgan Martin, Department of National Health & Welfare, Ottawa, Re: Mental Health in Public Health.

Letter of February 5, 1964, from Dr. C.H. Gundry to Dr. T.E. McNair, Okanagan Health Centre.

vii. University Transcripts/Calendars:

Transcripts of the University of Washington: Robert Sparling, Robert Straight, and Herbert Baxter King. (Provided for research purposes only by the Registrar’s Office of the University of Washington.)


---------- Summer Quarter, 1921.

---------- Summer Quarter, 1922.

---------- Summer Quarter, 1923.

---------- Summer Quarter, 1924.

University of British Columbia Calendar: 1926-1927. Twelfth Session.
University of British Columbia Calendar: 1927-1928. Thirteenth Session.
University of British Columbia Calendar: 1929-1930. Fifteenth Session.
University of British Columbia Calendar: 1930-1931. Sixteenth Session.
University of British Columbia Calendar: 1931-1932. Seventeenth Session.
University of British Columbia Calendar: 1932-1933. Eighteenth Session.

B. Secondary Sources:

i. Books:


Epp, Junita Ross, and Alisa M. Watkinson, eds. *Systemic Violence: How


ii. Journal Articles:


--------. "Practical Eugenics". The Pedagogical Seminary, Vol. 16 (September 1909), pp. 385-394.


"Canadian National Committee for Mental Hygiene: As Described in an Interview with Dr. C.M. Hincks". Western Women's Weekly, Vol. 2 (March 8, 1919), pp. 1-2.


Fallis, Mrs. G.O., and Mrs. Margaret Sutherland. "Local Council of Women". Western Women's Weekly, Vol. 6 (March 10, 1923), p. 2.


Hastings, Dr. Charles J.C.O. "Medical Inspections of Public Schools". Canadian Journal of Medicine and Surgery, Vol. 21 (January-June 1907), pp. 73-76.


Knight, A.P. "Medical Inspection of Schools". Queen's Quarterly, Vol. 15 (July 1907-April 1908), pp. 138-146.


"Kerrisdale". Western Women's Weekly, Vol. 5 (February 4, 1922), p. 2


--------. "The Application of the Binet-Simon Tests (Stanford Revision)


--------. "Curriculum Revision in Canada". The School (February 1938), pp. 475-477.


"Tell of Great Need for an Institution for Feeble-Minded". Western Women’s Weekly, Vol. 5 (June 24, 1922), p. 9

"Survey of Mentally Defective Children in the Schools of San Luis Obispo". Psychological Clinic, Vol. 6 (1912), pp. 131-139.


"A University Department for the Study of Defective Children". The


iii. Theses:


Davidson, Helen P. "An Experimental Study of Bright, Average, and Dull Children at the Four Year Mental Levels". Ph.D. diss., Stanford University, 1928.


Appendix I:

Vancouver's Special Classes 1910-1941:

The following tables show the yearly expansion of the special classes in the Vancouver school system from 1910 to 1945. Individual teachers, school sites, class size, and their gender compositions are noted. Yearly totals of the sexes are also given along with total class numbers as well as administrative officers. There will be a discrepancy noted between official totals for the number of special classes and those listed. This is because the tables only note the special classes which could be confirmed by the criterion of having a smaller size. The average classroom had between thirty and forty children enrolled, while most special classes had twenty or less students. From 1909 to 1918 only the school, teacher and salaries thereof are noted. From 1918 onward detailed statistical returns begin to appear and this same format was used until 1945. Only in the 1918/1919 school year were the special classes labelled as such and must thereafter be discerned by pupil numbers alone. The source for all the data is: Reports of the Public Schools of British Columbia, "Statistical Returns".

Terms: Admin. = Administration  PT Ratio = Pupil Teacher Ratio

<table>
<thead>
<tr>
<th>Year: 1910-1911</th>
<th>Special Classes - 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>Teacher</td>
</tr>
<tr>
<td>Central</td>
<td>Miss J. Dauphinee</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year: 1911-1912</th>
<th>Special Classes - 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>Teacher</td>
</tr>
<tr>
<td>Central</td>
<td>Miss J. Dauphinee</td>
</tr>
<tr>
<td>Central</td>
<td>Miss R. Kerr</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year: 1912-1913</th>
<th>Special Classes - 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>Teacher</td>
</tr>
<tr>
<td>Central</td>
<td>Miss J. Dauphinee</td>
</tr>
<tr>
<td>Central</td>
<td>Miss R. Kerr</td>
</tr>
</tbody>
</table>
In the 1913/1914 school year several pre-vocational classes began at Central Elementary for students "whose abilities lie in a practical direction". The classes had "no intention to regard such students as mentally deficient". The shop classes for boys were eventually combined with handicrafts for girls and gardening classes for all pupils through a nature study program. Mr. J. Stuart was the first to take "wayward" boys into his classes and eventually some special class children were placed in pre-vocational activities. This information was relayed to the writer by Miss Grace Jamieson. Mr. Stuart's classes will be noted but not counted as special classes. However, the mixed levels of reading abilities in his classes are significant.

Source: Vancouver B.S.T. Annual Report for 1914, p. 72; Interview Miss Grace Jamieson, February 27, 1997

<table>
<thead>
<tr>
<th>Year: 1913-1914</th>
<th>Special Classes - 2 * Denotes non-special class or excluded from tally.</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>Teacher</td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Mr. J. Stuart</td>
</tr>
<tr>
<td>Central</td>
<td>Miss J. Dauphinee</td>
</tr>
<tr>
<td>Central</td>
<td>Miss R. Kerr</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year: 1914-1915</th>
<th>Special Classes - 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>Teacher</td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Mr. J. Stuart</td>
</tr>
<tr>
<td>Central</td>
<td>Miss J. Dauphinee</td>
</tr>
<tr>
<td>Central</td>
<td>Miss R. Kerr</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year: 1915-1916</th>
<th>Special Classes - 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>Teacher</td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Mr. J. Stuart</td>
</tr>
<tr>
<td>Central</td>
<td>Miss J. Dauphinee</td>
</tr>
<tr>
<td>Central</td>
<td>Miss R. Kerr</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year: 1916-1917</th>
<th>Special Classes - 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>Teacher</td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Mr. J. Stuart</td>
</tr>
<tr>
<td>Central</td>
<td>Miss J. Dauphinee</td>
</tr>
<tr>
<td>School</td>
<td>Teacher</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Central</td>
<td>Miss R. Kerr</td>
</tr>
<tr>
<td><strong>Year: 1917-1918</strong></td>
<td><strong>Special Classes - 2 to 2</strong></td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Mr. J. Stuart</td>
</tr>
<tr>
<td>Central</td>
<td>Miss J. Dauphinee</td>
</tr>
<tr>
<td>Central</td>
<td>Mrs. M. Good</td>
</tr>
<tr>
<td>Central</td>
<td>Mrs. E. Barnard (Temporary)</td>
</tr>
<tr>
<td><strong>Totals:</strong></td>
<td><strong>Teachers: 2 Admin.: 1 PT Ratio: 12 to 1</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>School</th>
<th>Teacher</th>
<th>Class Size</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexandra</td>
<td>Mrs. E. Barnard</td>
<td>16</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Central</td>
<td>Miss R. Graham</td>
<td>14</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Central</td>
<td>Miss L. Frith</td>
<td>16</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Mr. J. Stuart</td>
<td>92 (Readers' grades: Primer - 3)</td>
<td>92</td>
<td>-</td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Mr. W. Flett</td>
<td>153 (Readers' grades: Primer - 4)</td>
<td>153</td>
<td>-</td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Mr. G. Craig</td>
<td>44 (Readers' grades: Primer - 2)</td>
<td>44</td>
<td>-</td>
</tr>
<tr>
<td>Central</td>
<td>Miss R. Kerr</td>
<td>6</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Dawson</td>
<td>Miss E. Watson</td>
<td>12</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Special Class Supervisor</td>
<td>Miss J. Dauphinee</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Psychological Clinic</td>
<td>Miss M. Lindley</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Totals:</strong></td>
<td><strong>Teachers: 5 Admin.: 2 PT Ratio: 12.8 to 1</strong></td>
<td>64</td>
<td>39</td>
<td>25</td>
</tr>
<tr>
<td>Year: 1919-1920</td>
<td>Special Classes - 10 to 12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>---------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School</td>
<td>Teacher</td>
<td>Class Size</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Alexandra</td>
<td>Mrs. E. Barnard</td>
<td>(13)</td>
<td>(9)</td>
<td>(4)</td>
</tr>
<tr>
<td>(To Laura Secord)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central</td>
<td>Miss R. Graham</td>
<td>10</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Central</td>
<td>Miss L. Frith</td>
<td>19</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Mr. J. Stuart</td>
<td>68</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Readers’ grades: Primer - 2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Mr. W. Flett</td>
<td>46</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Readers’ grades: 2 - 4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Mrs. Halliday</td>
<td>27</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Readers’ grades: Primer - 3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dawson</td>
<td>Miss G. McLean</td>
<td>16</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Fairview</td>
<td>Mrs. J. Leach</td>
<td>13</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>(Detention Home)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fairview</td>
<td>Miss H. Brown</td>
<td>14</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Simon Fraser</td>
<td>Miss K. Buckerfield</td>
<td>15</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Kitsilano</td>
<td>Miss J. Cantelon</td>
<td>15</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Mount Pleasant</td>
<td>Miss C. McKenzie</td>
<td>19</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Laura Secord</td>
<td>Miss E. Barnard</td>
<td>14</td>
<td>9</td>
<td>5 (+1)</td>
</tr>
<tr>
<td>Seymour</td>
<td>Miss I. Herd</td>
<td>15</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Psychologist</td>
<td>Miss M. Lindley</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>(Resigned 1920)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological Clinic</td>
<td>Miss R. Kerr</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>(From September 1920)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological Clinical Assistant</td>
<td>Miss M. Amos</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Social Worker</td>
<td>Miss E. Clark</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>(April 1920)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals:</td>
<td>Teachers: 10</td>
<td>150</td>
<td>97</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Admin.: 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PT Ratio: 15 to 1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year: 1920-1921</th>
<th>Special Classes - 13 to 17</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>Teacher</td>
</tr>
<tr>
<td>Central</td>
<td>Miss L. Frith</td>
</tr>
</tbody>
</table>
| Location                      | Person            | Total | Reading Grades | Supervisor
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Mr. J. Stuart</td>
<td>104</td>
<td>Primer 2</td>
<td>104</td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Mr. W. Flett</td>
<td>72</td>
<td>2 - 4</td>
<td>72</td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Mr. E. Grant</td>
<td>68</td>
<td>Primer 1</td>
<td>68</td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Miss E. Millar</td>
<td>29</td>
<td>Primer 4</td>
<td>14</td>
</tr>
<tr>
<td>Dawson</td>
<td>Miss G. McLean</td>
<td>16</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Fairview (Detention Home)</td>
<td>Miss J. Leach</td>
<td>12</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Fairview</td>
<td>Miss H. Brown</td>
<td>15</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Simon Fraser</td>
<td>Miss K. Buckerfield</td>
<td>13</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Henry Hudson</td>
<td>Miss E. Sutherland</td>
<td>18</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Henry Hudson</td>
<td>Miss I. Calbick (Replaces Miss Cantelon)</td>
<td>13</td>
<td>13</td>
<td>-</td>
</tr>
<tr>
<td>Mount Pleasant</td>
<td>Miss C. MacKenzie</td>
<td>18</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>Florence Nightingale</td>
<td>Miss A. Guest</td>
<td>16</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>Laura Secord</td>
<td>Miss E. Barnard</td>
<td>16</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Seymour</td>
<td>Miss I. Herd</td>
<td>18</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Strathcona</td>
<td>Miss E. Quigley</td>
<td>16</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Strathcona</td>
<td>Miss R. Graham</td>
<td>12</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Supervisor</td>
<td>Miss J. Dauphinee</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Psychologist</td>
<td>Miss R. Kerr</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Psychological Clinic</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Psychological Clinical Assistant</td>
<td>Miss M. Amos</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Social Worker</td>
<td>Miss J. Cantelon (Miss Clark on leave)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>School</td>
<td>Teacher</td>
<td>Class Size</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------</td>
<td>------------</td>
<td>------</td>
<td>--------</td>
</tr>
<tr>
<td>Central</td>
<td>Miss L. Frith</td>
<td>16</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Mr. J. Stuart</td>
<td>81</td>
<td>81</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>(Readers' grades: Primer - 1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Mr. W. Flett</td>
<td>77</td>
<td>77</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>(Readers' grades: 1 - 4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Miss E. Millar</td>
<td>29</td>
<td>7</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>(Readers' grades: Primer - 4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dawson</td>
<td>Miss G. MacLean</td>
<td>16</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Fairview (Detention Home)</td>
<td>Miss J. Leach</td>
<td>17</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>Fairview</td>
<td>Miss H. Brown</td>
<td>13</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Simon Fraser</td>
<td>Miss K. Buckerfield</td>
<td>16</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Henry Hudson</td>
<td>Miss E. Sutherland</td>
<td>15</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Henry Hudson</td>
<td>Miss I. Calbick</td>
<td>16</td>
<td>16</td>
<td>-</td>
</tr>
<tr>
<td>Mount Pleasant</td>
<td>Miss C. MacKenzie</td>
<td>20</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>MacDonald</td>
<td>Miss M. Read</td>
<td>15</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Florence Nightingale</td>
<td>Miss M. Herd</td>
<td>16</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Florence Nightingale</td>
<td>Miss J. Guest</td>
<td>17</td>
<td>17</td>
<td>-</td>
</tr>
<tr>
<td>Cecil Rhodes</td>
<td>Miss J. Wilkinson</td>
<td>16</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Laura Secord</td>
<td>Miss E. Barnard</td>
<td>14</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Laura Secord</td>
<td>Miss S. Houston</td>
<td>15</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Seymour</td>
<td>Miss I. Herd</td>
<td>18</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Strathcona</td>
<td>Miss E. Quigley</td>
<td>18</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Strathcona</td>
<td>Miss R. Graham</td>
<td>17</td>
<td>12</td>
<td>5</td>
</tr>
</tbody>
</table>
### Supervisor
<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor</td>
<td>Miss J. Dauphinee</td>
</tr>
</tbody>
</table>

### Psychologist
<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychologist</td>
<td>Miss R. Kerr</td>
</tr>
</tbody>
</table>

### Psychological Clinical Assistant
<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological Clinical Assistant</td>
<td>Miss M. Amos</td>
</tr>
</tbody>
</table>

### Social Worker
<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Worker</td>
<td>Miss J. Cantelon</td>
</tr>
</tbody>
</table>

### Totals:
<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>17</td>
</tr>
<tr>
<td>Admin.</td>
<td>4</td>
</tr>
<tr>
<td>PT Ratio</td>
<td>16.2 to 1</td>
</tr>
<tr>
<td>Students</td>
<td>275</td>
</tr>
<tr>
<td>Teachers</td>
<td>182</td>
</tr>
<tr>
<td>Students</td>
<td>93</td>
</tr>
</tbody>
</table>

### Year 1921-1922

#### Reading Curriculum Analysis
(17 Classes / 275 Students)

<table>
<thead>
<tr>
<th>Reader Level</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Primer</td>
<td>37</td>
</tr>
<tr>
<td>2nd Primer</td>
<td>13</td>
</tr>
<tr>
<td>1st Reader</td>
<td>28</td>
</tr>
<tr>
<td>2nd Reader</td>
<td>69</td>
</tr>
<tr>
<td>3rd Reader</td>
<td>98</td>
</tr>
<tr>
<td>4th Reader</td>
<td>28</td>
</tr>
<tr>
<td>5th Reader</td>
<td>2</td>
</tr>
</tbody>
</table>

### Year: 1922-1923

#### Special Classes - 18 to 22

<table>
<thead>
<tr>
<th>School</th>
<th>Teacher</th>
<th>Class Size</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>Mrs. M. Spouse</td>
<td>10</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Central</td>
<td>Miss 1. Frith (Transferred)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Mr. J. Stuart</td>
<td>61 (Readers' grades: 1 - 3)</td>
<td>61</td>
<td>-</td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Mr. W. Flett</td>
<td>46 (Readers' grades: 3 - 5)</td>
<td>46</td>
<td>-</td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Miss E. Millar</td>
<td>27 (Readers' grades: 1 - 6)</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>Dawson</td>
<td>Mrs. A. Russell</td>
<td>16</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Dawson</td>
<td>Mrs. G. MacLean</td>
<td>17</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Fairview (Detention Home)</td>
<td>Miss J. Leach</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Fairview</td>
<td>Miss G Brown</td>
<td>14</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>School</td>
<td>Teacher</td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>--------------------</td>
<td>--------------------</td>
<td>------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>Fairview</td>
<td>Miss F. Wilkinson</td>
<td>15</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Grenfell</td>
<td>Miss M. Anderson</td>
<td>15</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Henry Hudson</td>
<td>Miss I. Calbick</td>
<td>11</td>
<td>11</td>
<td>-</td>
</tr>
<tr>
<td>Kitsilano</td>
<td>Miss E. Sutherland</td>
<td>12</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Mount Pleasant</td>
<td>Miss C. MacKenzie</td>
<td>19</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>MacDonald</td>
<td>Miss M. Read</td>
<td>16</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Florence Nightingale</td>
<td>Miss M. Herd</td>
<td>16</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Florence Nightingale</td>
<td>Miss J. Guest</td>
<td>18</td>
<td>18</td>
<td>-</td>
</tr>
<tr>
<td>Cecil Rhodes</td>
<td>Miss K. Buckerfield</td>
<td>14</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Laura Secord</td>
<td>Miss J. MacBeth</td>
<td>14</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Seymour</td>
<td>Miss D. Hardwick</td>
<td>15</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Strathcona</td>
<td>Miss E. Quigley</td>
<td>16</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Strathcona</td>
<td>Miss R. Graham</td>
<td>12</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Manual Training</td>
<td>Mr. J. Tingley</td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Manual Training</td>
<td>Mr. C. Cameron</td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Remedial Classes</td>
<td>Miss L. Cotswort</td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Supervisor</td>
<td>Miss J. Dauphinee</td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Psychologist</td>
<td>Miss R. Kerr</td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Psychological Clinic</td>
<td>Miss L. Frith</td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Social Worker</td>
<td>Miss J. Cantelon</td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Totals:</td>
<td>Teachers: 18</td>
<td>250</td>
<td>165</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>Admin.: 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Speciality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Instructors: 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PT Ratio: 13.8 - 1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Year: 1923-1924

<table>
<thead>
<tr>
<th>School</th>
<th>Teacher</th>
<th>Class Size</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>Mrs. M. Spouse</td>
<td>15</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Location</td>
<td>Teacher</td>
<td>Readers' grades:</td>
<td>Grade Position</td>
<td></td>
</tr>
<tr>
<td>------------------------------</td>
<td>--------------------</td>
<td>------------------</td>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td>Central (Observation Class)</td>
<td>Miss. L. Frith</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Mr. J. Stuart</td>
<td>59 (Readers’ grades: 1 - 3)</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Mr. W. Flett</td>
<td>52 (Readers’ grades: 3 - 7)</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Miss E. Millar</td>
<td>26 (Readers’ grades: 2 - 7)</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Dawson</td>
<td>Miss M. Adam</td>
<td>16</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Dawson</td>
<td>Miss E. Bird</td>
<td>16</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Fairview (Detention Home)</td>
<td>Mrs. J. Leach</td>
<td>17</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Fairview</td>
<td>Miss H. Brown</td>
<td>18</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Fairview</td>
<td>Miss W. Wilkinson</td>
<td>14</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Grenfell</td>
<td>Miss M. Anderson</td>
<td>14</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Grenfell</td>
<td>Miss E. Snider</td>
<td>12</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Henry Hudson</td>
<td>Miss I. Calbick</td>
<td>11</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Kitsilano</td>
<td>Miss E. Sutherland</td>
<td>15</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Mount Pleasant</td>
<td>Miss C. MacKenzie</td>
<td>19</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>MacDonald</td>
<td>Miss M. Read</td>
<td>15</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Florence Nightingale</td>
<td>Miss M. Herd</td>
<td>18</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Florence Nightingale</td>
<td>Mrs. Guest</td>
<td>16</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Cecil Rhodes</td>
<td>Miss K. Buckerfield</td>
<td>13</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Laura Secord</td>
<td>Miss E. Barnard</td>
<td>16</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Seymour</td>
<td>Miss I. Herd</td>
<td>18</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Seymour</td>
<td>Miss D. Hardwick</td>
<td>15</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Strathcona</td>
<td>Miss E. Quigley</td>
<td>18</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Strathcona</td>
<td>Miss L. Hudson</td>
<td>14</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Manual Training</td>
<td>Mr. J. Tingley</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Manual Training</td>
<td>Mr. C. Cameron</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Remedial Class</td>
<td>Miss H. Wright</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Remedial Class</td>
<td>Miss L. Cotsworth</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Supervisor</td>
<td>Miss J. Dauphinee</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Psychologist</td>
<td>Miss R. Kerr</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Psychological Clinic</td>
<td>Miss J. Cantelon</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Social Worker</td>
<td>Miss L. Frith</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Psychological Clinical Assistant</td>
<td>Miss J. Leach</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Totals:</td>
<td>Teachers: 21 Admin.: 4 Speciality Instructors: 4 PT Ratio: 14.9 to 1</td>
<td>313</td>
<td>205</td>
<td>108</td>
</tr>
</tbody>
</table>

**Year: 1924-1925**

**Special Classes - 22 to 22**

N.B.: A June 1925 testing survey of the 303 special class students showed 296 pupils to be of mental age 2 to 7 years old. Source: Vancouver B.S.T. Annual Report for 1925, p. 52

<table>
<thead>
<tr>
<th>School</th>
<th>Teacher</th>
<th>Class Size</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>Miss E. Bird</td>
<td>17</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Mr. J. Stuart</td>
<td>41 (Readers' grades: 2 - 5)</td>
<td>31</td>
<td>-</td>
</tr>
<tr>
<td>* Central (Observation Class)</td>
<td>Miss L. Frith</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Mr. W. Flett</td>
<td>31 (Readers' grades: 3 - 4)</td>
<td>31</td>
<td>-</td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Miss E. Millar</td>
<td>28 (Readers' grades: 1 - 7)</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
<td>Miss M. Moody</td>
<td>23 (Readers' grades: 4 - 7)</td>
<td>18</td>
<td>5</td>
</tr>
<tr>
<td>Dawson</td>
<td>Mrs. A. Russell</td>
<td>17</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>Dawson</td>
<td>Mrs. M. Spouse</td>
<td>16</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Fairview (Detention Home)</td>
<td>Miss J. Leach</td>
<td>11</td>
<td>11</td>
<td>-</td>
</tr>
<tr>
<td>Fairview</td>
<td>Miss H. Brown</td>
<td>13</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Fairview</td>
<td>Miss F. Wilkinson</td>
<td>17</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>School</td>
<td>Teacher</td>
<td>Class Size</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------------</td>
<td>------------</td>
<td>------</td>
<td>--------</td>
</tr>
<tr>
<td>Simon Fraser</td>
<td>Mrs. K. Buckerfield</td>
<td>16</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Grenfell</td>
<td>Miss M. Anderson</td>
<td>18</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Henry Hudson</td>
<td>Miss I. Calbick</td>
<td>15</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Kitsilano</td>
<td>Miss E. Sutherland</td>
<td>9</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>MacDonald</td>
<td>Miss M. Read</td>
<td>15</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Mount Pleasant</td>
<td>Miss C. MacKenzie</td>
<td>16</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Florence Nightingale</td>
<td>Miss M. Herd</td>
<td>19</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Florence Nightingale</td>
<td>Mrs. A. Guest</td>
<td>17</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Laura Secord</td>
<td>Miss E. Barnard</td>
<td>17</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Seymour</td>
<td>Miss E. Snider</td>
<td>17</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Seymour</td>
<td>Miss I. Herd</td>
<td>16</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Strathcona</td>
<td>Mrs. E. Quigley</td>
<td>18</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Strathcona</td>
<td>Miss L. Hudson</td>
<td>17</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Manual Training</td>
<td>Mr. A. Tingley</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Manual Training</td>
<td>Mr. C. Cameron</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Supervisor</td>
<td>Miss J. Dauphinee</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Psychologist</td>
<td>Miss R. Kerr</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Psychological Clinic</td>
<td>Miss L. Frith</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>* Psychological Clinical Assistant</td>
<td>Miss J. Cantelon</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Totals:
- Teachers: 20
- Admin.: 4
- Speciality Instructors: 2
- PT Ratio: 15.2 to 1
- Total: 303
- Teachers: 201
- Female: 102

Year: 1925-1926

<table>
<thead>
<tr>
<th>Special Classes - 22 to 22</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
</tr>
<tr>
<td>Central</td>
</tr>
<tr>
<td>* Central (Pre-Voc.)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Location</td>
</tr>
<tr>
<td>----------------------------------</td>
</tr>
<tr>
<td>* Central</td>
</tr>
<tr>
<td>Dawson</td>
</tr>
<tr>
<td>Dawson</td>
</tr>
<tr>
<td>Fairview (Detention Home)</td>
</tr>
<tr>
<td>Fairview</td>
</tr>
<tr>
<td>Fairview</td>
</tr>
<tr>
<td>Simon Fraser</td>
</tr>
<tr>
<td>Grenfell</td>
</tr>
<tr>
<td>Hastings</td>
</tr>
<tr>
<td>Kitsilano</td>
</tr>
<tr>
<td>MacDonald</td>
</tr>
<tr>
<td>Mount Pleasant</td>
</tr>
<tr>
<td>Florence Nightingale</td>
</tr>
<tr>
<td>Florence Nightingale</td>
</tr>
<tr>
<td>Laura Secord</td>
</tr>
<tr>
<td>Seymour</td>
</tr>
<tr>
<td>Seymour</td>
</tr>
<tr>
<td>Strathcona</td>
</tr>
<tr>
<td>Strathcona</td>
</tr>
<tr>
<td>Manual Training</td>
</tr>
<tr>
<td>Manual Training</td>
</tr>
<tr>
<td>Supervisor</td>
</tr>
<tr>
<td>Psychologist</td>
</tr>
<tr>
<td>Psychological Clinic</td>
</tr>
<tr>
<td>Psychological Clinical Assistant</td>
</tr>
<tr>
<td>Social Worker</td>
</tr>
</tbody>
</table>
Totals:

<table>
<thead>
<tr>
<th>Teachers: 19</th>
<th>Admin.: 4</th>
<th>Speciality</th>
<th>Instructors: 2</th>
<th>PT Ratio: 17.5 to 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year: 1926-1927</th>
<th>Special Classes - 22 to 22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolment - 352 pupils (Miss J. Dauphinee’s Stats)</td>
<td>The psychological clinic is closed, Miss R. Kerr becomes assistant to Mr. R. Straight, Miss L. Frith dies and Miss J. Cantelon is made a Social Worker, also under the supervision of Mr. Straight. All reforms as per Putman/Weir survey recommendations made in 1925.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>School</th>
<th>Teacher</th>
<th>Class Size</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaconsfield</td>
<td>Miss G. McNeil</td>
<td>12</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Central</td>
<td>Miss E. Bird</td>
<td>19</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>Dawson</td>
<td>Miss J. Russell</td>
<td>16</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Dawson</td>
<td>Mrs. J. Spouse</td>
<td>22</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Fairview</td>
<td>Miss J. Leach</td>
<td>9</td>
<td>9</td>
<td>-</td>
</tr>
<tr>
<td>Fairview</td>
<td>Miss H. Brown</td>
<td>18</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Fairview</td>
<td>Miss F. Wilkinson</td>
<td>18</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Simon Fraser</td>
<td>Miss K. Buckerfield</td>
<td>16</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Hastings</td>
<td>Miss H. Clark</td>
<td>17</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>Kitsilano</td>
<td>Miss I. Calbick</td>
<td>21</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Mount Pleasant</td>
<td>Miss C. MacKenzie</td>
<td>18</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>MacDonald</td>
<td>Miss M. Read</td>
<td>19</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Florence Nightingale</td>
<td>Miss M. Anderson</td>
<td>17</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Florence Nightingale</td>
<td>Miss A. Guest</td>
<td>17</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>* Open Air</td>
<td>Three teachers</td>
<td>73</td>
<td>32</td>
<td>41</td>
</tr>
<tr>
<td>Laura Secord</td>
<td>Mrs. M. Barnard</td>
<td>19</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Seymour</td>
<td>Miss W. Hall</td>
<td>18</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Seymour</td>
<td>Miss E. Snider</td>
<td>16</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>* Strathcona (Pre-Voc.)</td>
<td>Mr. J. Stuart (Readers’ grades: 1 - 5)</td>
<td>36</td>
<td>36</td>
<td>-</td>
</tr>
<tr>
<td>Strathcona</td>
<td>Miss E. Quigley</td>
<td>15</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Strathcona</td>
<td>Miss M. Coleman</td>
<td>19</td>
<td>-</td>
<td>19</td>
</tr>
<tr>
<td>School</td>
<td>Teacher</td>
<td>Class Size</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------</td>
<td>------------</td>
<td>------</td>
<td>--------</td>
</tr>
<tr>
<td>Beaconsfield</td>
<td>Miss G. McNeil</td>
<td>15</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Central</td>
<td>Miss E. Bird</td>
<td>8</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>Dawson</td>
<td>Miss A. Russell</td>
<td>17</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Dawson</td>
<td>Miss J. Spouse</td>
<td>21</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>Simon Fraser</td>
<td>Miss K. Buckerfield</td>
<td>14</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>General Gordon</td>
<td>Miss P. Morrison</td>
<td>13</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Hastings</td>
<td>Miss H. Clark</td>
<td>18</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Kitsilano</td>
<td>Miss I. Calbick</td>
<td>16</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Mount Pleasant</td>
<td>Miss C. MacKenzie</td>
<td>18</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>MacDonald</td>
<td>Miss M. Read</td>
<td>16</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Florence Nightingale</td>
<td>Miss M. Anderson</td>
<td>16</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Florence Nightingale</td>
<td>Miss M. Parkins</td>
<td>16</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>* Open Air</td>
<td>Three teachers</td>
<td>70</td>
<td>34</td>
<td>36</td>
</tr>
<tr>
<td>Laura Secord</td>
<td>Mrs. M. Barnard</td>
<td>21</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Seymour</td>
<td>Miss M. Hall</td>
<td>16</td>
<td>7</td>
<td>9</td>
</tr>
</tbody>
</table>
Year: 1928-1929

<table>
<thead>
<tr>
<th>School</th>
<th>Teacher</th>
<th>Class Size</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaconsfield</td>
<td>Miss G. McNeil</td>
<td>17</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Dawson</td>
<td>Mrs. G. Russell</td>
<td>14</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Dawson</td>
<td>Mrs. J. Spouse</td>
<td>16</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Simon Fraser</td>
<td>Miss K. Buckerfield</td>
<td>16</td>
<td>11</td>
<td>5</td>
</tr>
</tbody>
</table>

The experimental classes created in September 1928 at the Junior High level. One at Kitsilano (42 pupils) and another at Templeton (30 pupils). All students were fourteen years or older, of both sexes, and had a variety of mental ages.
<table>
<thead>
<tr>
<th>School</th>
<th>Teacher</th>
<th>Class Size</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kitsilano</td>
<td>Miss C. MacKenzie</td>
<td>42 (Grade 7's)</td>
<td>22</td>
<td>20</td>
</tr>
<tr>
<td>Kitsilano</td>
<td>Mr. F. Templer</td>
<td>Shop Instruction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Templeton</td>
<td>Miss M. Anderson</td>
<td>30 (Grade 7's)</td>
<td>19</td>
<td>11</td>
</tr>
<tr>
<td>Templeton</td>
<td>Mr. C. Cameron</td>
<td>Shop Instruction</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Year: 1928-1929

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Class Size</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miss P. Morrison</td>
<td>16</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Miss H. Brown</td>
<td>13</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Miss I. Calbick</td>
<td>14</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Miss J. Warden</td>
<td>8</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Miss M. Smith</td>
<td>13</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Mrs. Parkins</td>
<td>16</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>Mrs. A. Guest</td>
<td>15</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Miss R. Becker</td>
<td>14</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Miss M. McLeod</td>
<td>13</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Three teachers</td>
<td>72</td>
<td>30</td>
<td>42</td>
</tr>
<tr>
<td>Mrs. E. Barnard</td>
<td>17</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Miss W. Hall</td>
<td>11</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Miss E. Snider</td>
<td>18</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Mr. J. Stuart</td>
<td>36 (Readers' grades: 2 - 6)</td>
<td>36</td>
<td>-</td>
</tr>
<tr>
<td>Miss E. Sutherland</td>
<td>47 (Returned to regular classroom)</td>
<td>47</td>
<td>-</td>
</tr>
<tr>
<td>Mrs. E. Quigley</td>
<td>19</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Miss A. Glennie</td>
<td>17</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Miss F. Wilkinson</td>
<td>16</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>Mrs. J. Leach</td>
<td>11</td>
<td>11</td>
<td>-</td>
</tr>
<tr>
<td>Teachers: 20 Admin.: 4 Speciality Instructors: 2 PT Ratio: 14.7 to 1</td>
<td>294</td>
<td>206</td>
<td>88</td>
</tr>
</tbody>
</table>
Totals:

<table>
<thead>
<tr>
<th>Special Class:</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT Ratio:</td>
<td>42 to 1</td>
</tr>
<tr>
<td>PT Ratio:</td>
<td>30 to 1</td>
</tr>
<tr>
<td>72</td>
<td>41</td>
</tr>
<tr>
<td>31</td>
<td></td>
</tr>
</tbody>
</table>

Year: 1928-1929

<table>
<thead>
<tr>
<th>Bureau of Measurements</th>
<th>Mr. R. Straight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychologist</td>
<td>Miss R. Kerr</td>
</tr>
<tr>
<td>Special Class Supervisor</td>
<td>Miss J. Dauphinee</td>
</tr>
<tr>
<td>Social Worker</td>
<td>Miss J. Cantelon</td>
</tr>
<tr>
<td>Totals:</td>
<td>Administration: 4</td>
</tr>
</tbody>
</table>

Year: 1929-1930

<table>
<thead>
<tr>
<th>Special Classes</th>
<th>-20 Elementary/2 Junior High=22</th>
</tr>
</thead>
</table>

Promotion to Junior High School special classes is now geared to a minimum Grade Four level in eight years of schooling. In the Spring of 1930, 35 pupils were selected on this basis. Many boys returned to Junior High in September 1930 as they could not find employment.

I. Elementary

<table>
<thead>
<tr>
<th>School</th>
<th>Teacher</th>
<th>Class Size</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaconsfield</td>
<td>Miss G. McNeil</td>
<td>15</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Dawson</td>
<td>Mrs. G. Russell</td>
<td>13</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Dawson</td>
<td>Mrs. M. Spouse</td>
<td>12</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Simon Fraser</td>
<td>Miss K. Buckerfield</td>
<td>15</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>General Gordon</td>
<td>Miss P. Morrison</td>
<td>15</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Hastings</td>
<td>Miss H. Brown</td>
<td>17</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>Kitsilano</td>
<td>Miss I. Calbick</td>
<td>15</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>David Lloyd George</td>
<td>Miss J. Warden</td>
<td>15</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>MacDonald</td>
<td>Miss M. Smith</td>
<td>19</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>Florence Nightingale</td>
<td>Mrs. M. Parkins</td>
<td>21</td>
<td>17</td>
<td>4</td>
</tr>
<tr>
<td>Florence Nightingale</td>
<td>Mrs. A. Guest</td>
<td>21</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>John Norquay</td>
<td>Miss C. Becker</td>
<td>22</td>
<td>17</td>
<td>5</td>
</tr>
<tr>
<td>John Norquay</td>
<td>Miss A. Browne</td>
<td>14</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>* Open Air</td>
<td>Three teachers</td>
<td>74</td>
<td>28</td>
<td>46</td>
</tr>
<tr>
<td>Laura Secord</td>
<td>Mrs. E. Barnard</td>
<td>15</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>
### Year: 1929-1930

#### Seymour

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Class Size</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miss M. Banks</td>
<td>14</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>Miss E. Snider</td>
<td>12</td>
<td>8</td>
<td>4</td>
</tr>
</tbody>
</table>

#### *Strathcona (Pre-Voc.)*

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Class Size</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. J. Stuart</td>
<td>34 (Readers Grades: 1, 2, 4 &amp; 6)</td>
<td>33</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Strathcona

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Class Size</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miss E. Quigley</td>
<td>17</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Miss E. Bird</td>
<td>17</td>
<td>12</td>
<td>5</td>
</tr>
</tbody>
</table>

#### Lord Tennyson

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Class Size</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mrs. Wilkinson</td>
<td>17</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>Mrs. J. Leach</td>
<td>11</td>
<td>11</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Totals:

- Teachers: 20
- Speciality Instructors: 4
- PT Ratio: 16 to 1
- Total: 317
- Total: 235
- Total: 82

#### Year: 1929-1930 II. Secondary

<table>
<thead>
<tr>
<th>School</th>
<th>Teacher</th>
<th>Class Size</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kitsilano</td>
<td>Miss C. MacKenzie</td>
<td>42 - Grade 8</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>Kitsilano</td>
<td>Mr. F. Templer</td>
<td>Shop Instruction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Templeton</td>
<td>Miss M. Anderson</td>
<td>28 (18-7's)</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Templeton</td>
<td>Mr. C. Cameron</td>
<td>Shop Instruction</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Totals:

- Special Class: 2
- Total: 72
- PT Ratio: 42 to 1
- Total: 70 (18-7's)
- Total: 52 (8's)
- Total: 35
- Total: 35

### Year: 1929-1930 III. Administration

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>-</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bureau of Measurements</td>
<td>Mr. R. Straight</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Psychologist</td>
<td>Miss R. Kerr</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Special Class Supervisor</td>
<td>Miss J. Dauphinee</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Social Worker</td>
<td>Miss J. Cantelon</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Totals:

- Administration: 4

### Year: 1930-1931

<table>
<thead>
<tr>
<th>Special Classes</th>
<th>Year</th>
<th>Enrolment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>19</td>
<td>412 pupils in total (Miss J. Dauphinee's statistics)</td>
</tr>
<tr>
<td>Junior High</td>
<td>2</td>
<td>416 pupils in total (Provincial statistics)</td>
</tr>
<tr>
<td>Intermediate</td>
<td>2</td>
<td>23</td>
</tr>
</tbody>
</table>

### Year: 1930-1931 Special Classes: 19 Elementary/ 2 Junior High/ 2 Intermediate = 23
One new class was added at Lord Tennyson School and taught by Miss E. Unsworth. Two new intermediate classes for "Senior special pupils" at the upper elementary level were created at John Oliver High School Annex under Miss L.C. Becker and Miss G. Jamieson. The classes were moved in the fall of 1931 to Sir Alexander MacKenzie and Miss Becker moved to Sir William Van Horne School in 1932.

<table>
<thead>
<tr>
<th>I. Elementary</th>
<th>Teacher</th>
<th>Class Size</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaconfield</td>
<td>Miss G. McNeil</td>
<td>13</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Dawson</td>
<td>Miss A. Lewis</td>
<td>23</td>
<td>23</td>
<td>-</td>
</tr>
<tr>
<td>Dawson</td>
<td>Mrs. M. Spouse</td>
<td>22</td>
<td>-</td>
<td>22</td>
</tr>
<tr>
<td>Dawson</td>
<td>Mrs. G. Russell</td>
<td>14</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Dawson</td>
<td>Miss M. Banks</td>
<td>14</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Simon Fraser</td>
<td>Miss K. Buckerfield</td>
<td>20</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>General Gordon</td>
<td>Miss P. Morrison</td>
<td>14</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Hastings</td>
<td>Miss H. Brown</td>
<td>16</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Kitsilano</td>
<td>Miss I. Calbick</td>
<td>16</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>MacDonald</td>
<td>Miss M. Smith</td>
<td>12</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>David Lloyd George</td>
<td>Miss J. Warden</td>
<td>12</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Sir A. MacKenzie</td>
<td>Miss L. Becker</td>
<td>14</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Sir A. MacKenzie</td>
<td>Miss G. Jamieson</td>
<td>9</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Florence Nightingale</td>
<td>Mrs. M. Parkins</td>
<td>18</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>Florence Nightingale</td>
<td>Mrs. A. Guest</td>
<td>16</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>John Norquay</td>
<td>Miss C. Becker</td>
<td>17</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>John Norquay</td>
<td>Miss A. Browne</td>
<td>20</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>* Open Air</td>
<td>Three teachers</td>
<td>77</td>
<td>26</td>
<td>51</td>
</tr>
<tr>
<td>Laura Secord</td>
<td>Mrs. E. Barnard</td>
<td>14</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Seymour</td>
<td>Miss J. Milne</td>
<td>15</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Seymour</td>
<td>Miss E. Snider</td>
<td>16</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>* Strathcona (Pre-Voc.)</td>
<td>Mr. J. Stuart</td>
<td>38</td>
<td>38</td>
<td>-</td>
</tr>
<tr>
<td>Strathcona</td>
<td>Miss M. Kania</td>
<td>15</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Strathcona</td>
<td>Miss E. Bird</td>
<td>20</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>Lord Tennyson</td>
<td>Miss F. Wilkinson</td>
<td>15</td>
<td>11</td>
<td>4</td>
</tr>
</tbody>
</table>
### I. Elementary

<table>
<thead>
<tr>
<th>School</th>
<th>Teacher</th>
<th>Class Size</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaconfield</td>
<td>Miss G. McNeil</td>
<td>15</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>* Beaconfield</td>
<td>Miss A. Tingley</td>
<td>18</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>* Beaconfield</td>
<td>(Preventorium)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dawson</td>
<td>Mrs. M. Spouse</td>
<td>18</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Dawson</td>
<td>Mrs. G. Russell</td>
<td>14</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Dawson</td>
<td>Miss M. Banks</td>
<td>10</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

### II. Secondary

<table>
<thead>
<tr>
<th>School</th>
<th>Teacher</th>
<th>Class Size</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kitsilano</td>
<td>Miss C. MacKenzie</td>
<td>36 (Grade 8)</td>
<td>22</td>
<td>14</td>
</tr>
<tr>
<td>Kitsilano</td>
<td>Mr. F. Templer</td>
<td>Shop Instruction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Templeton</td>
<td>Miss M. Anderson</td>
<td>45 (Grade 7)</td>
<td>27</td>
<td>18</td>
</tr>
<tr>
<td>Templeton</td>
<td>Mr. C. Cameron</td>
<td>Shop Instruction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals:</td>
<td>Special Class: 2</td>
<td>81</td>
<td>49</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>PT Ratio: 36 to 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PT Ratio: 45 to 1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### III. Administration

<table>
<thead>
<tr>
<th>Department</th>
<th>Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bureau of Measurements</td>
<td>Mr. R. Straight</td>
</tr>
<tr>
<td>Social Worker</td>
<td>Miss J. Cantelon</td>
</tr>
<tr>
<td>Psychologist</td>
<td>Miss R. Kerr</td>
</tr>
<tr>
<td>Special Class Supervisor</td>
<td>Miss J. Dauphinee</td>
</tr>
<tr>
<td>Totals:</td>
<td>Administration: 4</td>
</tr>
</tbody>
</table>

### Year: 1931-1932

Special Classes: 32/33 including all specialty classes or 20 Elementary / 2 Junior High

Enrolment: 412 or 529 (1931) / 430 or 532 (1932). Including all speciality classes. Estimates vary between those of Miss J. Dauphinee and Education Department statistics. * Denotes non-special class or excluded from tally.

- Lord Tennyson
  - Mrs. J. Leach: 15, 10, 5
- Totals: Teachers: 25
  - Speciality Instructors: 4
  - PT Ratio: 16 to 1
  - Year: 1930-1931

- Year: 1930-1931
  - School: Kitsilano
    - Teacher: Miss C. MacKenzie
    - Class Size: 36 (Grade 8)
    - Male: 22, Female: 14
  - School: Kitsilano
    - Teacher: Mr. F. Templer
    - Shop Instruction
  - School: Templeton
    - Teacher: Miss M. Anderson
    - Class Size: 45 (Grade 7)
    - Male: 27, Female: 18
  - School: Templeton
    - Teacher: Mr. C. Cameron
    - Shop Instruction
  - Totals:
    - Special Class: 2
    - Male: 49, Female: 32
  - PT Ratio: 36 to 1
  - PT Ratio: 45 to 1

- Year: 1930-1931
  - School: Beaconfield
    - Teacher: Miss G. McNeil
    - Class Size: 15
    - Male: 11, Female: 4
  - School: Beaconfield
    - Teacher: Miss A. Tingley
    - Class Size: 18
    - Male: 11, Female: 7
  - School: Beaconfield (Preventorium)
    - Teacher: Miss A. Tingley
    - Class Size: 18
    - Male: 11, Female: 7
  - School: Dawson
    - Teacher: Mrs. M. Spouse
    - Class Size: 18
    - Male: 11, Female: 7
  - School: Dawson
    - Teacher: Mrs. G. Russell
    - Class Size: 14
    - Male: 10, Female: 4
  - School: Dawson
    - Teacher: Miss M. Banks
    - Class Size: 10
    - Male: 5, Female: 5
<table>
<thead>
<tr>
<th>School</th>
<th>Teacher</th>
<th>Boys</th>
<th>Girls</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simon Fraser</td>
<td>Miss K. Buckerfield</td>
<td>17</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>* General Gordon (Sight Conservation Class)</td>
<td>Miss Williamson (Exchange Teacher)</td>
<td>16</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Hastings (Detention Class)</td>
<td>Miss H. Brown</td>
<td>14</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Hastings</td>
<td>Miss J. Leach</td>
<td>23</td>
<td>23</td>
<td>-</td>
</tr>
<tr>
<td>Kitsilano</td>
<td>Miss I. Calbick</td>
<td>22</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>* David Lloyd George (Crippled Class)</td>
<td>Miss J. Warden</td>
<td>13</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>* Model (Hospital Class)</td>
<td>Miss M. Jacquot</td>
<td>19</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>* MacDonald</td>
<td>Miss N. Carter</td>
<td>10</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Sir Alexander MacKenzie</td>
<td>Miss G. Jamieson</td>
<td>14</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Florence Nightingale</td>
<td>Mrs. M. Parkins</td>
<td>20</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>Florence Nightingale</td>
<td>Mrs. A. Guest</td>
<td>14</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>John Norquay</td>
<td>Miss C. Becker</td>
<td>14</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>John Norquay</td>
<td>Miss A. Browne</td>
<td>16</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>* Open Air</td>
<td>Three teachers</td>
<td>75</td>
<td>29</td>
<td>46</td>
</tr>
<tr>
<td>Laura Secord</td>
<td>Mrs. E. Barnard</td>
<td>14</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>Seymour</td>
<td>Miss J. Milne</td>
<td>12</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Seymour</td>
<td>Miss E. Snider</td>
<td>15</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>* Strathcona (Pre-Voc.)</td>
<td>Mr. J. Stuart</td>
<td>26</td>
<td>22</td>
<td>4</td>
</tr>
<tr>
<td>(Readers' grades: 1 - 5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Strathcona</td>
<td>Miss R. Hamilton</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Strathcona</td>
<td>Miss Kania</td>
<td>18</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Strathcona</td>
<td>Miss R. Wadleigh</td>
<td>19</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Lord Tennyson</td>
<td>Miss M. Wilkinson</td>
<td>15</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Lord Tennyson</td>
<td>Miss F. Unsworth</td>
<td>15</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Sir William Van Horne</td>
<td>Miss L. Becker</td>
<td>18</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Totals: Special Classes</td>
<td>Teachers: 22 PT Ratio: 15.7 to 1</td>
<td>347</td>
<td>223</td>
<td>124</td>
</tr>
</tbody>
</table>
## Totals: Non-Special Classes

| Teachers: 9 | PT Ratio: 18.6 to 1 | 168 | 87 | 81 |

## Year: 1931-1932

### II. Secondary

<table>
<thead>
<tr>
<th>School</th>
<th>Teacher</th>
<th>Class Size</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kitsilano</td>
<td>Mr. L. Parfitt</td>
<td>42 (Grade 8)</td>
<td>19</td>
<td>23</td>
</tr>
<tr>
<td>Kitsilano</td>
<td>Mr. F. Templer</td>
<td>Shop Instruction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Templeton</td>
<td>Miss M. Anderson</td>
<td>37 (Grade 7)</td>
<td>23</td>
<td>14</td>
</tr>
<tr>
<td>Templeton</td>
<td>Mr. C. Cameron</td>
<td>Shop Instruction</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Totals:</strong></td>
<td>Special Class: 2</td>
<td>79</td>
<td>42</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>PT Ratio: 37 to 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PT Ratio: 42 to 1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Year: 1931-1932

### III. Administration

<table>
<thead>
<tr>
<th>Bureau of Measurements</th>
<th>Mr. R. Straight</th>
<th>Miss R. Kerr</th>
<th>Miss J. Dauphinee</th>
<th>Miss J. Cantelon</th>
<th>Administration: 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Testing Psychologist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Class Supervisor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Worker</td>
<td>Miss J. Cantelon</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Totals:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Year: 1932-1933

### Special Classes: 20 to 15 Elementary / 2 Junior High

### Enrolment: (1932) 430, (1933) 363 - 67 pupils (Miss J. Dauphinee's statistics)

| (1932) 449, (1933) 299 - 150 pupils (Provincial statistics) * Transfer or closure |

## I. Elementary

<table>
<thead>
<tr>
<th>School</th>
<th>Teacher</th>
<th>Class Size</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexandra</td>
<td>Miss E. Brown</td>
<td>17</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>* Beaconsfield</td>
<td>Miss G. McNeil</td>
<td>Closed</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>* Beaconsfield</td>
<td>Miss A. Tingley</td>
<td>Closed</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dawson</td>
<td>Mrs. M. Spouse</td>
<td>18</td>
<td>-</td>
<td>18</td>
</tr>
<tr>
<td>Dawson</td>
<td>Mrs. G. Russell</td>
<td>22</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Dawson</td>
<td>Miss M. Banks</td>
<td>14</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Simon Fraser</td>
<td>Miss K. Buckerfield</td>
<td>18</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>General Gordon</td>
<td>Miss P. Morrison</td>
<td>16</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>School</td>
<td>Teacher</td>
<td>Class Size</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>------------------------</td>
<td>------------------</td>
<td>------------</td>
<td>------</td>
<td>--------</td>
</tr>
<tr>
<td>Hastings</td>
<td>Miss H. Brown</td>
<td>20</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>* Hastings</td>
<td>Miss J. Leach</td>
<td>Closed</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>David Lloyd George</td>
<td>Miss G. Jamieson</td>
<td>8</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Model</td>
<td>Miss M. Jacquot</td>
<td>15</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Sir Alexander Mackenzie</td>
<td>Miss J. Leach</td>
<td>15</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Florence Nightingale</td>
<td>Mrs. M. Parkins</td>
<td>19</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Florence Nightingale</td>
<td>Mrs. A. Guest</td>
<td>20</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>John Norquay</td>
<td>Miss C. Becker</td>
<td>17</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>John Norquay</td>
<td>Miss N. Carter</td>
<td>14</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>* Open Air School</td>
<td>Closed</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Seaview</td>
<td>Miss I. Calbick</td>
<td>17</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Laura Secord</td>
<td>Mrs. E. Barnard</td>
<td>15</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Seymour</td>
<td>Miss J. Milne</td>
<td>17</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Seymour</td>
<td>Miss E. Snider</td>
<td>13</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>* Strathcona (Pre-Voc.)</td>
<td>Mr. J. Stuart</td>
<td>25</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>(Readers’ Grades: 1 - 6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strathcona</td>
<td>Miss R. Wadleigh</td>
<td>22</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>Lloyd Tennyson</td>
<td>Miss M. Wilkinson</td>
<td>24</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>* Lloyd Tennyson</td>
<td>Miss F. Unsworth</td>
<td>Closed</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sir William Van Horne</td>
<td>Miss M. Kania</td>
<td>Transferred</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>- Not special class</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sir William Van Horne</td>
<td>Miss L. Becker</td>
<td>16</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>General Wolfe</td>
<td>Miss J. Cantelon</td>
<td>Transferred</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>- Not special class</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals:</td>
<td>Teachers: 21</td>
<td>357</td>
<td>208</td>
<td>149</td>
</tr>
<tr>
<td></td>
<td>PT Ratio: 17 to 1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Year: 1932-1933

<table>
<thead>
<tr>
<th>School</th>
<th>Teacher</th>
<th>Class Size</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kitsilano</td>
<td>Miss L. Elliot</td>
<td>41 (Grade 8)</td>
<td>26</td>
<td>15</td>
</tr>
<tr>
<td>Kitsilano</td>
<td>Mr. F. Templer</td>
<td>Shop Instruction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Templeton</td>
<td>Miss M. Anderson</td>
<td>44 (Grade 7)</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>Templeton</td>
<td>Mr. C. Cameron</td>
<td>Shop Instruction</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Year: 1932-1933

<table>
<thead>
<tr>
<th>Totals:</th>
<th>Teachers: 2</th>
<th>PT Ratio: 44 to 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>85</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>35</td>
</tr>
</tbody>
</table>

III. Administration

<table>
<thead>
<tr>
<th>Bureau of Measurements</th>
<th>Mr. R. Straight</th>
<th>Reduced to half-time, 1931 &amp; 1932</th>
</tr>
</thead>
<tbody>
<tr>
<td>Testing Psychologist</td>
<td>Miss R. Kerr</td>
<td>Salary reduced $200.00</td>
</tr>
<tr>
<td>Special Class Supervisor</td>
<td>Miss J. Dauphinee</td>
<td>Salary reduced $200.00</td>
</tr>
<tr>
<td>Social Worker</td>
<td>Miss J. Cantelon</td>
<td>Transferred</td>
</tr>
<tr>
<td>Totals:</td>
<td>Administration: 3.5</td>
<td></td>
</tr>
</tbody>
</table>

N.B. The 1933-1934 statistics could not be located in either the bound volumes of the Public School Reports or on the microfilm copies. All of the statistics which follow are taken from Miss J. Dauphinee's yearly reports. If not, then a "*" indicates the source is the annual Public School Reports from the Department of Education.

Year: 1934-1935

<table>
<thead>
<tr>
<th>High School Special Reports</th>
<th>Elementary Special Classes (Subnormal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolment:</td>
<td></td>
</tr>
<tr>
<td>1933 - 297 (85)</td>
<td>1933 - 299</td>
</tr>
<tr>
<td>1934 - 463</td>
<td>1934 - 340</td>
</tr>
<tr>
<td>1933 - 1934 + 166 pupils</td>
<td>1933 - 1934 + 41 pupils</td>
</tr>
<tr>
<td>Classes:</td>
<td>18 Elementary classes</td>
</tr>
<tr>
<td>Details:</td>
<td></td>
</tr>
<tr>
<td>Two classes:</td>
<td></td>
</tr>
<tr>
<td>Kitsilano and Templeton</td>
<td></td>
</tr>
<tr>
<td>Junior High.</td>
<td></td>
</tr>
</tbody>
</table>

Year: 1935-1936

<table>
<thead>
<tr>
<th>High School Special Classes</th>
<th>Elementary Special Classes (Subnormal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolment:</td>
<td></td>
</tr>
<tr>
<td>1934 - 463</td>
<td>1934 - 340</td>
</tr>
<tr>
<td>1935 - 236</td>
<td>1935 - 345</td>
</tr>
<tr>
<td>1934 - 1935 + 227 pupils</td>
<td>1934 - 1935 + 5 pupils</td>
</tr>
<tr>
<td>Classes:</td>
<td>18 Elementary classes</td>
</tr>
<tr>
<td>Details:</td>
<td></td>
</tr>
<tr>
<td>Two Classes:</td>
<td></td>
</tr>
<tr>
<td>Kitsilano and Templeton</td>
<td></td>
</tr>
<tr>
<td>Junior High.</td>
<td></td>
</tr>
</tbody>
</table>

Year: 1936-1937

<table>
<thead>
<tr>
<th>High School Special Classes</th>
<th>Elementary Special Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolment:</td>
<td></td>
</tr>
<tr>
<td>1934 - 463</td>
<td>1934 - 340</td>
</tr>
<tr>
<td>1935 - 236</td>
<td>1935 - 345</td>
</tr>
<tr>
<td>1936 - 249</td>
<td>1936 - 362 (*350) (*16.9 PTR)</td>
</tr>
<tr>
<td>1935 - 1936 + 13 pupils</td>
<td>1935 - 1936 + 17 pupils</td>
</tr>
<tr>
<td>Classes:</td>
<td>2.5 Junior High classes</td>
</tr>
<tr>
<td>----------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Details:</td>
<td>Two classes:</td>
</tr>
<tr>
<td></td>
<td>- Kitsilano and Templeton Junior High.</td>
</tr>
<tr>
<td></td>
<td>- Fall 1936: MacDonald extension class formed for Templeton with 36 boys.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year: 1937-1938</th>
<th>High School Special Classes</th>
<th>Elementary Special Classes (Subnormal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolment:</td>
<td>* 1937 - 100 (Approx.)</td>
<td>* 1937 - 400 (Approx.)</td>
</tr>
<tr>
<td></td>
<td>* 1938 - 100 (Approx.)</td>
<td>* 1938 - 400 (Approx.)</td>
</tr>
<tr>
<td></td>
<td>* Kitsilano - 40</td>
<td>* 16 classes</td>
</tr>
<tr>
<td></td>
<td>male/female</td>
<td>* 1937 - PT Ratio: 16.42</td>
</tr>
<tr>
<td></td>
<td>* Templeton - 40</td>
<td>* 1938 - PT Ratio: 16.17</td>
</tr>
<tr>
<td></td>
<td>male/female</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Templeton extension</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 20 males</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Classes:</th>
<th>2.5 Junior High classes</th>
<th>16 Elementary special classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details:</td>
<td></td>
<td>Immigrant class at MacKenzie was &quot;well filled&quot; and had three teachers in each of its three years of existence.</td>
</tr>
</tbody>
</table>

| Year: 1938-1939 |                        | * No statistics from annual Public School Reports on special classes in Vancouver. |
|                 |                        | * No report by Miss J. Dauphinee due to missing Annual Report of Vancouver Schools for 1938 - 1939. |

<table>
<thead>
<tr>
<th>Year: 1939-1940</th>
<th>High School Special Classes</th>
<th>Elementary Special Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolment:</td>
<td>* 1939 - 100 (Approx.)</td>
<td>* 1939 - 16</td>
</tr>
<tr>
<td></td>
<td>* 1940 - 100 (Approx.)</td>
<td>* 1940 - 17</td>
</tr>
<tr>
<td></td>
<td>* Kitsilano -40 (Approx.)</td>
<td>* 1939 - 400 (Approx.)</td>
</tr>
<tr>
<td></td>
<td>* Templeton - 40 (Approx.)</td>
<td>* 1940 - 400 (Approx.)</td>
</tr>
<tr>
<td></td>
<td>* Templeton Extension-20</td>
<td>* 1939 - PT Ratio: 16.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* 1940 - PT Ratio: 16.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Classes:</th>
<th>2.5 Junior High classes</th>
<th>16/17 Elementary classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details:</td>
<td></td>
<td>- New senior pupil class created at Dawson School in 1940.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Immigrant class falls to 18 due to war and may be closed.</td>
</tr>
<tr>
<td>Year: 1940/1941</td>
<td>High School Special Classes</td>
<td>Elementary Special Classes</td>
</tr>
<tr>
<td>----------------</td>
<td>----------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>1941/1942</td>
<td>N.B.: Combine</td>
<td></td>
</tr>
<tr>
<td>Enrolment:</td>
<td>* 1941 - 2.5 Junior High</td>
<td>* 1942 - 18 elementary</td>
</tr>
<tr>
<td></td>
<td>* 1942 - 3 Junior High</td>
<td>- 400 pupils (Approx.)</td>
</tr>
<tr>
<td></td>
<td>* 1941 - Kitsilano - 1</td>
<td>* 1941 - PT Ratio: 16.33</td>
</tr>
<tr>
<td></td>
<td>class</td>
<td>* 1942 - PT Ratio: 15.13</td>
</tr>
<tr>
<td></td>
<td>* 1941 - Templeton - 1.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>classes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* 1942 - Kitsilano - 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>classes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* 1942 - Templeton - 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>class</td>
<td></td>
</tr>
<tr>
<td>Classes:</td>
<td>2.5 / 3 Junior High</td>
<td>18 Elementary classes</td>
</tr>
<tr>
<td></td>
<td>classes</td>
<td></td>
</tr>
<tr>
<td>Details:</td>
<td>- Templeton extension</td>
<td>- Senior class closed at</td>
</tr>
<tr>
<td></td>
<td>class was closed.</td>
<td>Seymour but another</td>
</tr>
<tr>
<td></td>
<td>- A new boys class</td>
<td>opened at MacDonald.</td>
</tr>
<tr>
<td></td>
<td>opened at Kitsilano.</td>
<td>- Junior class opened at</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Selkirk.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- &quot;Foreigners&quot; class</td>
</tr>
<tr>
<td></td>
<td></td>
<td>closed at Selkirk due to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the war.</td>
</tr>
</tbody>
</table>

Miss Edith Unsworth succeeds Miss J. Dauphinee as special class supervisor. Miss Kerr remains psychologist and Miss Cantelon is now called a "Field Department Investigator" instead of a social worker since being recalled from classroom teaching in 1936/1937.
Appendix II:

Chart of Special Class Growth 1910-1941:

Based upon the statistical records of the "Vancouver Schools" as found in the Annual Reports of the Public Schools (Victoria: Department of Education) and the yearly special class statistics of Miss A. J. Dauphinee (Special Class Supervisor) as found in the Annual Reports of the Vancouver School Board.
Appendix III:

Special Class Size and Pupil/Teacher Ratio 1910-1941:

* A compilation of Miss J. Dauphinee's own departmental statistics from her yearly reports to the Vancouver School Board and the statistical data contained in the Department of Education's annual report or the Reports of the Public Schools of British Columbia, "Statistical Returns: Vancouver Schools", (King's Printer: Victoria). Most data is from Miss J. Dauphinee's statistics, but some data conflicts. The provincial estimates are given first and Dauphinee's second as 421/398, the (+ 80) after 1929 indicates the tally of high school students while after 1934 only provincial statistics were used until 1937, and then from 1938 to 1941 only Miss J. Dauphinee's statistics are used.

Terms: Admin. = Administration  PT Ratio = Pupil Teacher Ratio  
E = Elementary  S = Junior High or Secondary

<table>
<thead>
<tr>
<th>Year</th>
<th>P/T Ratio</th>
<th>Enrolled</th>
<th>Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1910</td>
<td>12 to 1</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>1911</td>
<td>11 to 1</td>
<td>22</td>
<td>2</td>
</tr>
<tr>
<td>1912</td>
<td>11 to 1</td>
<td>22</td>
<td>2</td>
</tr>
<tr>
<td>1913</td>
<td>12 to 1</td>
<td>24</td>
<td>2</td>
</tr>
<tr>
<td>1914</td>
<td>No data</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>1915</td>
<td>No data</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>1916</td>
<td>No data</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>1917</td>
<td>No data</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>1918</td>
<td>No data</td>
<td>-</td>
<td>5 - 10</td>
</tr>
<tr>
<td>1919</td>
<td>13.3 to 1</td>
<td>160</td>
<td>12</td>
</tr>
<tr>
<td>1920</td>
<td>No data</td>
<td>-</td>
<td>15</td>
</tr>
<tr>
<td>1921</td>
<td>13.8 to 1</td>
<td>250</td>
<td>18</td>
</tr>
<tr>
<td>1922</td>
<td>13.8 to 1</td>
<td>250</td>
<td>18</td>
</tr>
<tr>
<td>1923</td>
<td>13.2 to 1</td>
<td>292</td>
<td>22</td>
</tr>
<tr>
<td>1924</td>
<td>16 to 1</td>
<td>350</td>
<td>22</td>
</tr>
<tr>
<td>1925</td>
<td>13.5 to 1</td>
<td>296</td>
<td>22</td>
</tr>
<tr>
<td>1926</td>
<td>* 14.9 to 1</td>
<td>* 304</td>
<td>22</td>
</tr>
</tbody>
</table>

* Based upon 19 classes. Maximum enrolment in each class raised from 15 to 18 due to Putman/Weir Survey of the School System (1925)

<table>
<thead>
<tr>
<th>Year</th>
<th>P/T Ratio</th>
<th>Enrolled</th>
<th>Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1927</td>
<td>* 18.5 to 1</td>
<td>* 352</td>
<td>22</td>
</tr>
<tr>
<td>1928</td>
<td>20.5 to 1</td>
<td>370/287</td>
<td>18</td>
</tr>
</tbody>
</table>

* Two teachers moved to Junior High School for manual training classes. Two female special class teachers moved to Junior High School to teach subnormal classes academic skills on a rotational basis with manual training instruction.
<table>
<thead>
<tr>
<th>Year</th>
<th>Ratio</th>
<th>Value 1</th>
<th>Value 2</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1929</td>
<td>15.1</td>
<td>35 to 1 (S)</td>
<td>342 (+72) / 369</td>
<td>18 (E) 2 (S)</td>
</tr>
<tr>
<td>1930</td>
<td>23.6</td>
<td>35 to 1 (S)</td>
<td>519 (+70) / 379</td>
<td>19 (E) 2 (S)</td>
</tr>
<tr>
<td>1931</td>
<td>15.9</td>
<td>40.5 to 1 (S)</td>
<td>416 (+81) / 412</td>
<td>21 (E) 2 (S)</td>
</tr>
<tr>
<td>1932</td>
<td>21.0</td>
<td>39.5 to 1 (S)</td>
<td>499 (+79) / 430</td>
<td>20 (E) 2 (S)</td>
</tr>
<tr>
<td>1933</td>
<td>14.3</td>
<td>42.5 to 1 (S)</td>
<td>299 (+85) / 363</td>
<td>15 (E) 2 (S)</td>
</tr>
<tr>
<td>1934</td>
<td>25.7</td>
<td>* 115 to 1 (S)</td>
<td>463 (S) / 340 (E)</td>
<td>18 (E) 2 (S) * Secondary Rotation Model</td>
</tr>
<tr>
<td>1935</td>
<td>19.1</td>
<td>* 59 to 1 (S)</td>
<td>236 (S) / 345 (E)</td>
<td>18 (E) 2 (S)</td>
</tr>
<tr>
<td>1936</td>
<td>22.6</td>
<td>* 62.3 to 1 (S)</td>
<td>249 (S) / 362 (E)</td>
<td>16 (E) 2.5 (S)</td>
</tr>
<tr>
<td>1937</td>
<td>16.42</td>
<td>* 40 to 1 (S)</td>
<td>400 (E) (+80 S)</td>
<td>16 (E) 2.5 (S)</td>
</tr>
<tr>
<td>1938</td>
<td>16.17</td>
<td>* 40 to 1 (S)</td>
<td>400 (E) (+80 S)</td>
<td>16 (E) 2.5 (S)</td>
</tr>
<tr>
<td>1939</td>
<td>No data</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1940</td>
<td>16.33</td>
<td>* 25 to 1 (S)</td>
<td>400 (E) (+100 S)</td>
<td>17 (E) 2.5 (S)</td>
</tr>
<tr>
<td>1941</td>
<td>15.13</td>
<td>* 25 to 1 (S)</td>
<td>400 (E) (+100 S)</td>
<td>18 (E) 3 (S)</td>
</tr>
</tbody>
</table>