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Sputnik's Children: History of the Major Work Program in Winnipeg, Manitoba, Schools, 1954–1972

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ABSTRACT
Set in the context of the Cold War, the space race, and the 1957 Soviet launch of the Sputnik satellite, interest in gifted education, which had waned in the years leading up to the Second World War, was once again reignited in Canadian education. North America looked to its human capital, particularly in the areas of mathematics, science, and engineering to keep up with the Soviets. Departments of education in Canada and the United States prioritized the identification and nurturing of the "best and brightest" students for the sake of the nation. The Major Work program in Winnipeg, which began in 1954 and ended rather abruptly in 1972, seventeen years before the end of the Cold War, was one of many gifted programs introduced in Canada and the United States in an attempt to address the supposed innovation gap with the Soviet Union. This article looks at the rise of Winnipeg's Major Work program in the 1950s, when society-centred rhetoric replaced earlier child-centred rhetoric and then itself was overridden by the 1970s social, economic, and political reforms, which again tended towards child-centred, integrated education.

RÉSUMÉ
Dans le contexte de la guerre froide, de la course à l'espace et du lancement soviétique en 1957 du satellite Spoutnik, l'éducation pour les enfants doués, qui avait été délaissée dans les années menant à la Seconde Guerre mondiale, connaît un regain d'intérêt dans le milieu de l'éducation canadienne. L'Amérique du Nord se tourne alors vers son capital humain, particulièrement dans les domaines des mathématiques, de la science et de l'ingénierie, pour rivaliser avec les Soviétiques. Les départements de l'éducation du Canada et des États-Unis privilégient l'identification et l'encadrement des étudiants les plus brillants, et ce, pour le bien de la nation. À Winnipeg, le programme connu sous le nom de « *Major Work* », qui a commencé en 1954 et qui s'est abruptement arrêté en 1972, dix-sept années avant la fin de la guerre froide, fut l'un des programmes consacrés à l'éducation des enfants les plus doués mis en place au Canada et aux États-Unis en vue de réduire le déficit en matière d'innovation par rapport à l'Union soviétique. Cet article examine l'essor de ce programme au cours des années 50, alors que le discours centré sur la société remplace celui centré sur le développement de l'enfant, lui-même remplacé, au cours des réformes politiques, sociales et économiques des années 1970, par une approche intégrée de l'éducation à nouveau basée sur les besoins de l'enfant.

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Introduction

The Major Work program in Winnipeg was described equivocally by former students and teachers as "successful and very useful"; "isolating and elitist"; "intellectually stimulating"; "a poorly conceived program"; "segregating"; "just school"; "overwhelmingly positive"; "too competitive"; "the most wonderful teaching experience I ever had"; and the "best thing educationally I've experienced in my life."[1] The program was implemented in Winnipeg between 1954 and 1972, beginning amidst the Cold War and the onset of the "space race." It was named for a time when the demand for scientists, mathematicians, and engineers to compete with Russian technology demanded more academic rigour and the nurture of highly intelligent students to compete with the Russians. Its rather short life ended in 1972, when a more secure North American climate, made confident through the landing of a man on the moon and advances in technology, turned once again towards child-centred education.

This article is based on a literature review and case study into the Major Work gifted education program in Winnipeg, Manitoba. The case study involved an online survey that asked former students to identify the schools and years of their Major Work participation and to describe their experiences within the program, their school and home contexts, their education and career paths, and their overall thoughts about the program. From among the 190 Major Work students who completed the survey, a number indicated that they would also be interested in attending a focus group. Based on their responses, fourteen focus groups of between four and eight people were held, seeking elaboration of the survey answers. Five participants also requested individual interviews to elaborate on the survey, and a further seven interviews were held with former Major Work teachers and parents, with discussions based on the survey questions. The resulting data is held by the author. This article discusses the background to the program, its beginnings, and the circumstances that marked the end of the program.

Background

In 1974, seventeen years after the launch of Sputnik, historian Jeffrey Herold, commenting on the impact Russia's first satellite had on North American education, wrote that "Reform is never undertaken primarily for the sake of young people's welfare, but rather for the sake of preserving the existing social, economic, and political system."[2] Over the years, government and educational institutes seem to have shifted their approaches to education based on the perceived social, economic, and political needs of the time. Jason Ellis has argued that prior to Stanford University professor Lewis Terman's 1916 introduction of the Stanford-Binet intelligence test, highly intelligent children were considered precocious curiosities, even prone to physical and mental disorders, such as coma leading to death and a mental disorder dubbed "dementia praecox" by C. K. Clarke, Canada's leading psychiatrist.[3] Dementia praecox, considered a serious mental disorder, was said to affect mainly highly intelligent adolescent males, beginning "with an 'episode' of bizarre behaviour, followed by

deteriorating cognition leading to permanent disability with no hope of recovery."[4]

Terman, along with other high-profile people of his time, was a eugenicist. In the early part of the twentieth century, the eugenics movement supported social engineering by promoting the idea that people of different races and nationalities were born with different degrees of intelligence. One of the movement's goals was to encourage and cultivate gifted children's minds and to discourage and control people of low intelligence.[5] Thirty-three states in the United States made sterilization mandatory for the "feeble-minded."[6] In Canada, British Columbia and Alberta established the Board of Eugenics Hereditarian Program by passing laws advocating the sterilization of the feeble-minded. In 1925, when Ontario sought to follow British Columbia and Alberta's lead, the Eugenics Society of Canada was created, although it later fell out of favour when it became associated with Nazi extremes.[7]

According to Terman, gifted children inherited their intelligence and were mainly white, from the highest social classes, and had parents who were highly educated.[8] Canadian psychologists of the time accepted Terman's ideas, but few studies were done of gifted Canadian children.[9]

The popularity of IQ testing grew and helped shape school practices over the course of the twentieth century. In schools throughout North America, classes were established for gifted students. In 1922, Leta Hollingworth started a Special Opportunity class in New York that was the basis for many of her research papers, for the first textbook on gifted children, *Gifted Children: Their Nature and Nurture,* published in 1926, and the 1936 establishment of the Speyer School for gifted children.[10] Robins reports that "by 1920, almost two thirds of large cities across the country had some form of a program to educate bright students."[11] These included Opportunity classes in California, Major Work classes in Cleveland, and Hollingworth's Special Opportunity classes in New York. The Major Work program in Cleveland began in 1922 "during a period of initiative and optimism in the US."[12] Roberta Holden Bole, a member of the Women's City Club in Cleveland and an advocate for improving the cultural and intellectual life of the community, followed the work of Lewis Terman, and by 1922, had set up six Major Work classes for "supernormal children" in Cleveland.[13] In Canada, as Ellis has documented, gifted classes were set up in cities such as Saskatoon, London, Oshawa, Kingston, Sudbury, Montreal, Ottawa, and Vancouver.[14]

The purpose of Bole's Major Work classes was to train community leaders who were not only intelligent, but also had a sense of responsibility for the social good of the nation. Music, poetry, art, classic literature, and French — representing the cultural pursuits and ideals of the upper-class, white, Anglo-Saxon Protestants of Cleveland — were studied alongside traditional subjects such as reading, writing, mathematics, geography, and science, by children who, ironically, were mainly from eastern European immigrant families.[15] Classroom setup was informal, and direct instruction was minimal. Instead, the focus was on independent study. Additional experiences, such as creative writing and field trips, were provided, but students were also encouraged to participate with mainstream students at recess and in physical education and club activities.[16]

From the 1920s until the Second World War, North American education was child-centred. The child-centred approach shifted the focus from the teacher to the student, and schools and curricula were designed to meet the needs of the child.[17] According to Herold, "in the years during and after World War Two, when it became apparent that the mass of youth was in school to stay, educators continued to believe that since the majority of American youth were interested in neither vocational nor college preparation, life-adjustment education was the answer for them"[18] and progressive, or child-centred education, rather than academic rigour, thrived. During this period, acceleration, enrichment, and separate classes were introduced into Canadian schools to meet the educational needs of gifted children. Acceleration involved skipping a grade or completing two years of schooling in one year; enrichment meant offering augmented activities to gifted children in mainstream classes; and separate classes, the least favoured method, enrolled only gifted students, all of whom received enhanced learning activities.[19] In the Winnipeg Major Work program, begun in 1954, a number of children were accelerated and then placed in Major Work classes.

The cry for academic reform, however, had begun years before Sputnik and even before the end of the Second World War. Herold highlights that "the examination of draftees during World War II… revealed that many high school graduates were mathematical and scientific illiterates."[20] Concern about the quality of mathematics and science education triggered study groups, conferences, and even the establishment of agencies and foundations to address the issue, with school reformers demanding updates of curricula "with the theoretical constructs that give 'facts' meaning."[21] A conviction arose among the federal-scientific community in the United States, echoed in Canada, that it was necessary "to create the technologically trained manpower and management personnel that the growing electronics, aerospace, and atomic industries required."[22]

Political tensions following the war stimulated a growing concern among the public about security in the face of an escalating arms race. This concern was followed by Terman's 1947 publication, *The Gifted Child Grows Up,* the onset of the Cold War, and later, the 1957 launch of Sputnik. More and more, attention was drawn to education of the gifted as a way to ensure a positive future for North America. Noting that Canada had always followed the United States in its changing approaches to education, former Major Work teacher Phyllis Moore Hunter explained that after the war, "America then developed programs to educate bright kids with the hope of making the country superior."[23] In 1953, Northwestern University's Paul Witty, founder and director of Northwestern's Psychoeducational Clinic, sparked an interest in gifted education, arguing that gifted children, one of the nation's greatest resources, were being neglected. However, a year later, as Robins reports, "Witty noted a resurgence of interest in gifted education with people becoming more interested in providing for gifted students in the regular classroom."[24] Furthermore, as Herold argued regarding the child-centred life-adjustment program in the United States, "when Sputnik made it appear that the post-War world demanded that American schools stress rigorous academic programs, the emphasis of educators on life-adjustment education proved to be embarrassing."[25]

Commenting on the school climate during the 1950s, David Hoffman recalled that "back in the classroom [there was] a school system suddenly in flux, thanks to a growing paranoia that Soviet education was superior."[26] Filmmaker Hoffman, whose 2007 film, *Sputnik Mania*, documented the time, remarked "I can't think of a time where we were that afraid, even at Pearl Harbor, even at 9/11.… This was a frightening time."[27] Hoffman recalled reading an article in *Life Magazine* at the time:

> They went to some high school in Chicago, I believe, and showed my generation out there—dancing and all the frivolity. And then the Soviet student is shown working at his desk on calculus at midnight, with a light bulb over his head. Our entire educational structure changed. There were programs in schools that didn't exist before. There was [*sic*] homework assignments by the hours at night. There were special classes for smart kids.[28]

These factors caused North America "to re-examine its human capital and quality of… schooling, particularly in mathematics and science"[29] and reinvigorated interest in "the nurturing of gifted students."[30] Once again and later, with the 1958 National Defence Education Act in the United States, gifted classes and organizations became popular as "investments in future security and/or prosperity of the nation."[31] This included the 1954 establishment of the National Association for Gifted Children in the United States[32] and interestingly, the establishment of the first Major Work classes in Winnipeg, Manitoba. By the time the Major Work program had begun in Winnipeg, educational rhetoric had shifted from child-centred to society-centred education.

Beginnings

Canada and the United States were shifting their attention towards gifted education during a time of community fear. Astronaut John Glenn, the first American to orbit the moon, recalled:

> I don't think many people remember what life was like in those days. This was the era when the Russians were claiming superiority, and they could make a pretty good case—they put up Sputnik in '57; they had already sent men into space to orbit the earth. There was this fear that perhaps communism was the wave of the future. The astronauts, all of us, really believed we were locked in a battle of democracy versus communism, where the winner would dominate the world.[33]

Canada and the United States were looking for ways to protect themselves and their democratic way of life. Within this climate, attention was drawn to developing scientists and world leaders from among the brightest youths in both countries. This idea was reiterated in a 1952 address given to the Winnipeg Women's Club by Dr. Wesley Crawford Lorimer (1913–2010), superintendent of Winnipeg schools, who

described the education system of the time as catering to the "middle of the road," rather than high or low achieving students. He warned that

> we are in danger of not doing everything we should do for people who are superior. It is undesirable to teach every person the same, but we should educate the child to the limit of his "capacity."[34]

Lorimer stressed the need to nurture future leaders, and thought that the way to do so was through enrichment and acceleration of the brightest students, concluding that "by working together, giving the time and energy to select the people who will lead society tomorrow, the home and school can train them to do the difficult job that lies ahead."[35] Lorimer, originally from Saskatoon, was born in 1913 and had worked as a teacher and vice-principal in rural Saskatchewan before serving as a navigation instructor in the Royal Canadian Air Force during the Second World War. Following the war, he obtained further academic qualifications, including a master of arts and a doctorate in education from Columbia University. He moved to Winnipeg in 1949 and became superintendent of Winnipeg schools in 1953, a position he held until 1966. During this time, he spearheaded programs for gifted, mentally and physically disabled, and hospitalized students. He became deputy minister of education for Manitoba in 1967, a position he held until 1978, and retired in 1981.[36]

With the general acceptance of individual differences among students and a need to differentiate educational programs to better meet the needs of society, the trustees of Winnipeg School Division No.1 identified "an urgent need for highly educated intelligent leaders, in science and politics particularly." They also acknowledged the complex, highly skilled roles to be played in future society and "the fact that many superior students do not enrol in university indicates a waste of intellectual potential" as justification for special classes.[37]

In 1954, Lorimer, along with the assistant schools superintendent, Arthur D. Thomson, established the Major Work program for gifted students in Winnipeg School Division schools. The program lasted from 1954 to 1972. Major Work programs were also initiated in other school districts in the region, including St. James, Seven Oaks, Transcona, and St. Vital, and in other areas of Canada, such as North Vancouver. Possibly named "Major Work" to correspond with Cleveland's Major Work program, other gifted programs were established in North America with varying names, such as Opportunity or Special Opportunity Classes. Thomson justified the establishment of Major Work classes as follows:

> It was recognized that the bright child masters the essentials of the prescribed program in a shorter period of time than is usually allotted; that he does not require more of the same kind of work to keep him occupied but that he does need additional activities which encourage wholesome mental, physical and social development; and that he needs challenging work in order to derive satisfaction, to use his potential intellectual powers, and in order that he may develop good study habits. The fast learner needs the association of children of

> ability equal to his own to challenge him and to make him realize that he has many peers.[38]

Thomson, an advocate for the enrichment of bright students, further stated in a 1957 article, "Education of the Gifted in Winnipeg," published in the *Exceptional Children* journal that while segregated, Major Work students were "not in any way isolated from the rest of the school. They participate in activities and are an integral part of the school."[39]

The Major Work program became part of the special education branch of Winnipeg School Division No. 1. Nadine Chidley, who in 1956 became the director of special education, began her career as a classroom teacher in Winnipeg schools, followed by positions in the Child Guidance Clinic and the child psychology department.[40] She was involved at a local and national level with the Council for Exceptional Children, founding the Manitoba branch.[41] Justifying the establishment of the Major Work program in Winnipeg schools, Chidley remarked that, "gifted children are generally directed into segregated major work classrooms, as enrichment in a regular classroom is not possible."[42] The aim of the Major Work program was to increase critical thinking, love of learning, and skill and talent development, by providing a "special program for intellectually gifted students in grades IV to IX which will challenge their capabilities to the full, and which will result in the continuation of their education beyond high school."[43]

Naomi Hersom, a Major Work teacher in Winnipeg, researched the high school performance of initial Major Work classes in Winnipeg for her 1962 master's thesis in education, "A Follow-up Study of the High School Performance of Students Who Were Members of the Inaugural Major Work Classes in Winnipeg." She said the Major Work program was designed "to encourage the development of latent abilities in superior children, but also to prevent the loss of their potential contribution to society by allowing poor work habits and attitudes to develop in the non-stimulating atmosphere of a classroom where others are not of the same calibre."[44] This would be achieved through carefully planned curricula taught by teachers who had a great knowledge of child development and curriculum planning. According to a 1958 Winnipeg School Division Superintendent's Department report,

> education provision for children of superior ability must create an atmosphere in which creativity, curiosity, initiative and imagination may flourish. The ability to evaluate, to see relationships, to make judgments and to think critically is of a higher order than the acquisition of facts.[45]

The program for Major Work students in the Winnipeg School Division lasted for six years and was followed by enriched subjects in high school. In the first three years, coinciding with grades 4 through 6, students remained together as a class, usually with the same teacher. Class sizes were fixed at twenty-five students, at a time when mainstream classes held thirty to thirty-five students.[46] Thomson explained, "The enrolment is below the city average to ensure that the teacher can adequately handle

the necessary group work, and the extras which can provide enrichment."[47] Students had a number of different subject teachers in grades 7 to 9, but they stayed together as a class and were provided with enriched versions of subjects and exclusive subjects, such as Latin. Field trips and excursions were popular Major Work activities.

The program itself was meant to be flexible and experiential, with no fixed way of teaching. Learning was enriched by various activities, based on student interests and teachers' skills. Activities included "special instruction in art, intensive work in language and literature, preparing and presenting reports, reviewing books, studying a foreign language at an early age, and speaking before the class."[48] French was taught from grade 4 in Major Work, whereas in mainstream classes, French instruction began in grade 7. Many students in Major Work classes were also taught how to type. Integration with mainstream students was meant to occur through physical education, music, playground activities, and school assemblies.[49] Creativity was encouraged through the writing of poetry, prose, and plays, as well as through arts and crafts activities. Many classes were given the opportunity to further explore writing and art through organizing and publishing a class newspaper.

Students regularly gave oral presentations about topics they had researched, which were accompanied by illustrations, charts, maps, or samples. The class later evaluated the presentation, based on standards they had previously designed.[50] Some of the science-based research was showcased at the annual Winnipeg Schools Science Fair, which began in 1962 and was frequently entered and won by Major Work students.

But perhaps one of the most memorable components of the Major Work program was the literature or reading club. Leadership and the responsibility associated with it were important aspects of student learning and were developed through a reading club. Through reading club activities, students learned "to organize class meetings using parliamentary procedures and to chair various types of discussion groups, panels, and debates."[51] A club also helped students develop grammar and language skills and encouraged critical thinking. A former teacher recalls that

> we used a program called "reading club" and we did have instruction on using the method.… The books were supplied by the school division in quantities for half the class. We were encouraged to have two clubs going on all the time. We could choose whatever book we wanted. But that was a tremendous amount of work for the teacher. I would have the book in front of me at night to go through myself so that I could ask questions.[52]

Beginning in grade 4, clubs were initially led by the teacher. A manual developed in the Cleveland Public School system explains that "gradually the children will begin to assume the responsibilities of leadership.… When the children indicate a readiness to assume leadership, a leader is chosen."[53] The leader's responsibilities included identifying the book's title, author, illustrator, and publisher, summarizing chapters previously read, and writing questions about the current chapter to ask the group. The manual suggested that "each child should be encouraged to bring in background material relevant to the story and original contributions which will enrich the meeting.

The leader should carefully prepare for the responsibility of leading the Literature Club."[54] The role of leader, then, involved thoughtful preparation as well as managing the club.

Rather than a whole-class activity, reading clubs usually consisted of approximately half the class. Hersom noted that

> usually the class is divided into two groups. Each group discusses a worthwhile book which has been read by all members. One or two challenging questions are provided as a starting point for the discussions. These meetings are chaired by each pupil in turn, and the group members are encouraged to carry on the discussion informally. During the Reading Club meetings, the pupils make inferences, draw conclusions, and note figures of speech and style. Again, evaluation of the effectiveness of the Reading Club meeting is considered a necessary conclusion to each one.[55]

Students both self-evaluated and were evaluated by the leader, answering questions such as: Was I prepared? Was I courteous? Did I contribute? Did I help make the discussion interesting? Was the leader prepared?[56] Teachers followed up with discussions of grammar features such as simile, metaphor, onomatopoeia, antonym, and synonym.

Enrichment activities such as reading clubs did not end on Friday afternoon for many Major Work students. For example, in 1961, there were four Saturday morning enrichment sessions for Major Work students in junior high, with their locations varying among the schools attended by these students. During enrichment sessions, school division specialists in various disciplines presented different topics "to stimulate the students by means of group discussions, and to make them acquainted with relatively advanced phases of science, psychology, art, music, foreign affairs."[57]

The first three Major Work classes began in Winnipeg in September 1954 at Queenston (south Winnipeg), Greenway (central west Winnipeg), and Machray (north Winnipeg) Schools. Although they were all considered to be superior students, the abilities within the group were not considered to be uniform. Lorimer, using the term "mental age," a referral to the IQ testing influence of the times, noted that the students within the group had widely varied intellectual abilities "from 11 years to 19 years for these pupils in Grades 4 and 5."[58] Once classes commenced, the three principals invited parents to their schools so teachers and assistant principals could discuss the aims of the program with them. In 1955, Riverview School was added to the Major Work program, drawing students from three other schools in the area. French, puppetry, and geology were some of the "extras" taught. Plans were underway to follow the careers of these students and "to give special attention to their school programme in the junior and senior schools."[59] A committee on gifted pupils was established in 1955 to recommend the best methods for meeting gifted students' needs, showing the importance placed on the program. It included junior high school principals and a representative of the Child Guidance Clinic's psychological department.[60]

In 1956, with the first cohort of Major Work students reaching junior high, the Major Work program was expanded to the junior high school. One junior high teacher recalls that "we followed the same curriculum as everybody else. I went in with the expectation of teaching them, with the point of view that I'm teaching children with great potential."[61] At the time, there were eight elementary classes and three junior high classes of Major Work, with a total enrolment of 269 children.[62]

By 1957, there were thirteen elementary and six junior high Major Work classes in the Winnipeg school district. While the scope of this paper does not include a review of possible socio-economic bias in the development of the Major Work program in Winnipeg, it is interesting to note that only one of the thirteen elementary classes was located in Winnipeg's north end (a lower socio-economic area) at Machray School. Without a critical review of the situation, the justification given at the time was a lack of space in north Winnipeg schools (and not enough north-end children being identified for Major Work).[63] However, more north-end schools were added as the program evolved.

That same year, Superintendent Lorimer suggested a one-year acceleration for top students. In the wake of Sputnik, he spoke against the tendency to compare our education system to the Russian system, cautioning, "we shouldn't get in a flap about what the Russians are doing in education."[64] Yet the thrust of the gifted programs in Winnipeg continued to be the development of leadership capabilities among their students.

Lorimer's 1958 proposal for a high school for gifted children was vetoed by city trustees, replaced with a recommendation to extend Major Work to senior high school, which, at the time, only meant an extra subject in high school for Major Work graduates. By 1959, there were thirty-six Major Work classes in the Winnipeg School Division, representing 3.9 per cent of students enrolled in grades 4 to 9. Students from the original Major Work classes of 1954 entered high school and enrolled in honours courses to expand their minds. They also took on extra subjects and participated in extracurricular activities.[65]

With estimates of approximately 2 per cent of each grade level qualifying for Major Work, the 1960 annual report of Winnipeg School Division No. 1 stated that 628 boys and 502 girls were enrolled in the Major Work programs in elementary and junior high in Winnipeg. By 1961, student numbers had increased by over a hundred to 1275 students. With steady growth, the 1962 annual report named the Major Work program as "the largest special education program in terms of the number of classes and of the children involved."[66] The following four years showed the program continuing to expand, and by 1965, there were sixty-six classes. Major Work was then at its peak in the Winnipeg School Division. The 1967 superintendent's report recommended that Major Work be continued, but with a "general up-grading" in the areas of art, music, and creative writing.

To facilitate such a growing, flexible, and creative program required highly skilled teachers who were able to use a variety of resources to support student interest and learning. Hersom described the selection of teachers for the program.

> The teachers for the Major Work classes are chosen on the bases of their academic and professional training and demonstrated ability to organize a classroom flexibly. Often these teachers have special interests and abilities in the fields of music, art, drama, and science, which enable them to recognize and foster the special talents of their pupils.[67]

Major Work teachers used a variety of teaching strategies to engage their learners. One junior high Major Work teacher's strategies were described by a colleague.

> He would spontaneously hand out papers to everybody in the class. And he would do these pop-up tests. But they weren't tests on the curriculum. They were tests like, "Who painted the Blue Boy?" He'd pick 10 snappers and they'd exchange their own papers and mark and they seemed to get a lot of fun out of that. He did this sort of thing every day. I thought it was such a great idea that I did it.[68]

As Hersom relayed, while many teachers at the time did not possess university bachelor's degrees, "teachers of Major Work classes are selected, wherever possible, from those who are university graduates and who have given outstanding service for some years."[69] "You had to have a degree and you had to have at least 5 years of teaching experience and be recommended by a supervisor" recalls a former Major Work teacher adding that, "we were supposed to be superhuman!"[70]

Teachers selected for the 1954 rollout of the Major Work program in Winnipeg were given bursaries to spend the summer before school commenced studying gifted education at Northwestern University in Chicago,[71] consolidating the connection between the Winnipeg gifted program and key programs in the United States. One of the teachers at Northwestern University, Mrs. D. E. Morris, was the supervisor of the Major Work classes in Cleveland, which may account for the use of the name "Major Work" in Winnipeg and the way the program was presented. Northwestern University's summer program continued to play a role in the professional development of Major Work teachers, with a 1955 Winnipeg School Division report noting that teachers were meeting expectations and children were enjoying the enriched Major Work program. However, the bursary program was gradually phased out, and by 1959, then-Assistant Schools Superintendent G. T. MacDonell rationalized that what teachers really needed was liveliness and imagination to make students "self-propelled."[72] The 1960 annual report of the trustees of Winnipeg School Division No. 1 acknowledged that with steady growth of the Major Work program, there was "a continuing need in this area… for local facilities for the training of specialist teachers."[73]

Major Work teachers needed to be "at home in this swift-moving stream and know just when to place a skilled hand on the steering wheel."[74] Beyond the good teacher qualities of "alertness, friendliness, understanding, and a constructive attitude toward the individual,"[75] they were expected to have an appreciation of Major Work students' needs, be flexible, be willing to engage in group work based on children's

interests, and use a range of resources. Having the same cohort of students for three years also meant assuming more of a nurturing role. A former teacher explains that "you certainly had a different feel for your class. I often felt more like the mother than the teacher… because with the working parents, you had more time with the kids than the parents did.… I felt that if you knew about my students, if there were any playground problems, and there were rarely any, I had to be there to sort it out."[76]

Assistant Superintendent of Schools A. D. Thomson commented in a 1957 interview with the *Winnipeg Free Press* that, while teachers were asked to identify and work with gifted students, "most of our teachers themselves would not qualify for Major Work classes."[77] Teachers often joked that they had trouble keeping up with their students. M. Pelletier, a Major Work teacher at Isbister School, gave an example.

> Last year the class prepared this report on the moon. They discussed scientific facts about its composition, that I had never heard of. Then they reported on its physical effects on the earth and gave a quick run-down of the many legends the moon has inspired since earliest times.[78]

Major Work students were gifted and, although described historically as "precocious," were now being seen in more favourable terms: "To the casual visitor, the students look like any children, with varying sizes, temperaments and features. But let the lesson start and immediately 25 little human dynamos snap into action."[79] Described by Taylor as the "gifted" ones, these were "the children who learn rapidly, who often get bored because they find normal studies too easy. The children who can grasp complex concepts, understand profoundly and work independently as they follow their own interests in learning."[80] While all Major Work students were considered to have high intellectual ability, within each class, "the range of mental ability is much wider than that in a normal class."[81] In 1957, Long described Major Work students as follows:

> These pupils need less drill than does the average class to fix facts in their minds. They aren't plunged into an accelerated course to take up the time that would be otherwise spent in drilling, but they explore subjects more deeply, often on their own initiative.[82]

The selection process for Major Work began in grade 3, when all students were administered the Stanford-Binet IQ test. Those who scored 120 and above were given a further test, the Primary Mental Abilities Test. This test, developed in 1938 by Louis Thurstone, measured word fluency, verbal comprehension, spatial visualization, number facility, associative memory, reasoning, and perceptual speed.[83] If students scored 125 or above on the Primary Mental Abilities Test, a report about them was prepared based on information from present and past teachers, the school principal, and the school nurse. Students were classified as either accepted, doubtful, or not accepted. Children in the doubtful group were re-tested individually. The final decision about student selection rested with the supervisor of special education. If the child was accepted by the supervisor, Major Work teachers sought parental consent

through home visits or phone calls. If parents refused consent, the child was not admitted to the program. In grades 4, 5, and 6, children in mainstream classes were re-tested to identify any Major Work candidates who might have been missed in the grade 3 recruitment.[84]

Major Work students, who may have been at the top of their mainstream classes, were challenged by other students of similar ability. Assistant Superintendent Thomson explained that the Major Work student "soon learns that there are others brighter than himself. It is hoped that this association will tend towards making him a better student because of the challenging environment and develop within him a finer character."[85] This challenge was meant to produce a better learner and person. In some cases, however, students were actually withdrawn from the program. Chidley argued that

> when children who would lead a general class are put into contact with others of their mental calibre for a change, this often causes their grades to drop in comparison. Some parents are so upset by this… that they withdraw their children and have them placed back in a regular classroom where they can be "The Best"… a dreadful mistake.[86]

Arguing against the belief that the program turned children into snobs, Chidley noted that if anything, it was the parents who became snobs, at times moving their children back into regular classes where they could become top of the class.

Limited studies and reports were written about the Major Work program in Winnipeg. This was justified by the fact that its impacts could not be quantitatively measured. For example, a 1955 report made by Winnipeg School Division No. 1 stated that "the success of these [Major Work] classes cannot be measured in objective terms. One must rely on the attitudes of the children towards school, one another, and the measure of participation in class activities, and on the attitude of the parents which will be built on any significant changes seen in the children."[87] Furthermore, the 1958 superintendent's department report for Winnipeg School Division No. 1 noted that

> one of the difficulties in gaining widespread acceptance of the need to make provision for the child of superior potential is the fact that there are many intangibles that cannot be readily evaluated and reduced to objective terms. The value of the additional experiences made available to Major Work pupils cannot be scored in factual tests.[88]

Nonetheless, a few quantitative and qualitative studies were conducted and reports written. For example, a 1958 evaluation of the Major Work program was carried out using four measures: a Sequential Test of Educational Progress (STEP) was administered to select students; students from four Major Work classes were given the Pybus Test in Social Concepts; parents of Major Work students were asked to complete a questionnaire; and all Major Work students completed a questionnaire. The

STEP test was "designed to measure the educational growth of children in the basic areas of Communication (Reading and Writing), Mathematics, Science, and Social Studies."[89]

Data showed that Major Work students excelled in all subjects in grades 4 to 6 compared to the publisher's norm sample. It concluded that "the results obtained tend to support the view that these children do have superior ability and are using it."[90] These results reappeared in the test of social concepts. Parents showed strong support for the Major Work program, with positive changes noted in their children's habits, attitudes, intellectual development, friendships, adjustments, and personal happiness. Children in the program reported enjoyment and benefits from the program. The report concluded that "failure to provide the most favourable conditions for the development of potential strengths may deprive society of outstanding contributions."[91]

A second evaluation was formed by Hersom's 1962 thesis results. As reported in the 1967 document, "Evaluation of the Major Work Program in Winnipeg Schools," Hersom identified five main findings.

> Intellectually gifted students in the Major Work program scored higher than intellectually gifted students in mainstream programs in Grade 10 literature and French and Grade 11 literature.
>
> These two groups (above) did not score differently in Grade 10 subjects of composition, geography, mathematics and science, as well as their Grade 11 subjects of composition, history, mathematics, chemistry, physics and French.
>
> The overall academic achievement of these two groups in Grade 10 was significantly higher for the Major Work students.
>
> There was no significant difference in critical thinking between the two groups.
>
> There was no significant difference in leadership, withdrawal and aggressiveness traits between the two groups.[92]

While Hersom's findings indicate a significant difference in overall achievement between the Major Work and mainstream gifted students, looking at individual subjects, the areas of greater achievement were only in French and literature. The fact that Major Work students began studying French in grade 4 while mainstream students did not begin until grade 7 may have given the Major Work students an advantage in French and the emphasis on literature from Major Work programs such as the reading clubs may have accounted for the higher literature scores.

In August 1966, a questionnaire was sent out to 234 former Major Work students in Winnipeg, and 201 students, or 82.6 per cent, responded to it. By then, they were between eighteen and twenty-two years old. From their responses, it was found that five out of six students, or 84 per cent, had gone to university after finishing high school.[93] In contrast, a *Winnipeg Tribune* article dated October 14, 1967, noted that only 25 to 30 per cent of high school students at the time went on to university.[94] The 1967 evaluation reported that the Major Work program was rated by former

students as valuable preparation for high school, but both the Major Work program and the high school program following Major Work could have been more challenging. When asked about future plans, two-thirds mentioned continuing in university. Although 55 per cent said that they strongly approved of the Major Work program, 83.5 per cent said they would recommend the program to other students.[95] It was clear that the Major Work program had enriched these students' education and paved the way for further study at the university level.

Endings

Historian Jeffrey Herold, writing in 1974, remarked: "When the society finds itself in need of certain kinds of personnel… humanistic pretenses are thrown to the wind in the interests of grinding out manpower."[96] While the Cold War, and later Sputnik, had pushed Canada and the United States to identify and nurture bright students to keep up with and ultimately surpass the Russians, Herold, highlighting the shift to society-centred education, argued that "any concerns about the humanity of the students themselves or about how education might enrich the quality of their lives necessarily got lost in the shuffle."[97] Children became a commodity to be used for the purposes of the nation, rather than being considered as humans with needs and desires. As Suzanne Gold notes, "unfortunately, programs for the gifted have been buffeted by social, psychological and philosophical currents."[98] This was certainly true of Winnipeg's Major Work program. Its ending, between 1969 and 1972, was the result of social, psychological, and philosophical change. These changes included the notion of "equal opportunity for all" and the ongoing challenges to IQ testing. Furthermore, parental attitudes towards the program were becoming less favourable and changes were occurring within both the family structure and the education system. Finally, "Sputnik-weariness," America's lead in the space race, and the Vietnam War triggered the end of Winnipeg's Major Work program.

The issue of equal opportunity for all had featured earlier in the program, when a hint of the shift away from the Major Work program in Winnipeg came in a 1959 speech made by Assistant Superintendent A. D. Thomson at a convention of school trustees held in Brandon, Manitoba. He lamented that the Major Work program was being looked at less favourably in Winnipeg, and that brighter students were being neglected in favour of slower learners. In the years following the 1957 launch of Sputnik, along with a focus on gifted students, "communities and governments expected school programs and personnel to address a host of other issues: poverty, crime, civil rights, and racial discrimination for example."[99] The 1964 Civil Rights Act in the United States reinforced equal opportunity for all in education.[100] In the 1960s and 1970s, special education evolved to include students with mild disabilities in learning and emotion regulation in regular classrooms. Integration, rather than segregation, was promoted.

With the focus of schools in Canada and the United States shifting towards socially disadvantaged children, criticism arose about the narrow nature of IQ testing.[101] Psychologists challenged the validity of the IQ test on the grounds that it

was biased against racial minorities, and that the determinants of "giftedness" were too narrow and were not inclusive of creativity, originality, temperament, and personality.[102] David Wechsler, who developed the 1949 Wechsler Intelligence scale for children, critiqued the IQ test because he felt that intelligence should be a manifestation of the whole personality.[103] The misuse of IQ testing by eugenicists resulted in "compulsory sterilization in the US on the basis of IQ [which] continued formally until the mid 1970s when organizations like the Southern Poverty Law Center began filing lawsuits on behalf of people who had been sterilized."[104] According to Erna Kurbegovic, it wasn't until the 1990s that "sterilization survivors first publicized their experience and mistreatment under Alberta's eugenic program."[105]

While criticism of IQ testing came mainly from psychologists and academics, parental criticisms of the Major Work program also contributed to its termination. A 1959 *Winnipeg Free Press* article reported that around fifteen parents had turned down their child's offer of a place in the Major Work program. Reasons given by parents included not wanting their children to travel to an out-of-area school, feeling that their child had enough to do in a mainstream class, or that they were just not interested in the program.[106]

The issue of travel to schools out of the local area came up a number of times over the years. A former student commented, "I was one of those kids taking the bus. It was inconvenient but not too bad. It made the days long, not leaving much time or opportunity for socializing with school friends."[107] The minutes of a special meeting of the board of trustees of Winnipeg School Division No. 1 held in June 1965 highlighted that there had been a number of complaints from parents of Weston Elementary School Major Work students that, when their children reached junior high school, the distance they would have to travel to school at Hugh John Macdonald was too great. It was further reported that year that in the grade 7 Major Work class at Hugh John Macdonald school, of the twenty-five students, only eight had been in Major Work in elementary school, and that this was partly due to the distance to be travelled.[108]

But travel out of the area did not just mean by bus. One former student, who was placed in an out-of-neighbourhood school, commented, "There was no bus for me. I walked… and there were many days on the frigid walk to school that I just wanted to crawl into a snowbank rather than go on!"[109] Living out of the area also precluded students from socializing with their classmates after school and on weekends and isolated them from the friends they had left behind at their original schools. A parent who withdrew her child (who was in Major Work, had also been accelerated a grade, and attended an out-of-area school) from the program, commented, "She was quite stressed. I think it was the Major Work that worried her. She was very young. She started school young. I think maybe socially and emotionally she wasn't quite ready."[110]

While parental attitudes had an impact on the program, families themselves were changing. Lupart and Webber state that in the 1960s and 1970s, "roles within the family group evolved, with two working parents becoming the norm for children" and "there were sharp increases in the numbers of children in single-parent families."[111]

People were becoming less involved with the school and "predictably there was a corresponding decline in public interest in supporting and trusting education."[112] This lack of interest in education overall and public criticism left the program vulnerable to change, contributing to its early termination.

Public criticism was not aimed only at gifted programs, but at all separate classes for special education. The outcome was a shift in attitude towards disabled students and their integration into mainstream classes, making separate classes for any student less favourable than integrating them.[113] Moore Hunter explains:

> Instead of programs for bright children or slower children, the philosophy became that children should all be getting the same education together. Slower children you would work with more and for bright children any old education would do. Since then, there have not been many programs to develop bright children except that some schools have enrichment in certain areas.[114]

Integration rather than segregation in mainstream classes meant, unfortunately, that the educational needs of bright children often went unaddressed and these learners instead were often used as helpers for less academically-inclined fellow students.

By 1968, it was clear that the Major Work program was declining. The superintendent's report No. 57, dated November 5, 1968, foreshadowed the termination of Major Work in junior high school, based on what was labelled "changed circumstances" and were essentially shifting trends in education. They were named as the introduction of team teaching (where two teachers work co-operatively to instruct their classes, sharing knowledge and expertise so that both classes benefit from the teachers' input), more individualized learning, and mainstream teachers using Major Work teaching methods.[115] Again the trend in education was moving towards child-centred education; teaching approaches once only afforded to segregated Major Work classes were being integrated into mainstream teaching, and the School Library and Information Services department was established in the Winnipeg School Division.

In 1963, when Harry E. Newsom was appointed as the first supervisor of school libraries for the Winnipeg School Division, a position he held until 1966, it was mainly Major Work classrooms that had libraries; mainstream classes lacked access to books.[116] School librarians were approved for Winnipeg schools and school libraries were set up in Winnipeg schools in the following years. "I would go to the principals and ask for the most effective and gifted teacher to become the school librarian," says Gerald Brown, adding that when chosen, these teachers were required to attend the University of Manitoba to study library science, in either the bachelor's or master's program in education.[117] Their job became to support best teaching practice, much of it from the Major Work program, to help other teachers to develop literacy and learning excellence in the students. This was implemented through co-operative planning and teaching, independent learning skills, literacy, and cultural appreciation. Along with other aspects of the curriculum, Major Work methods such as research, public speaking, and presentations were supported by teacher-librarians. Opportunities and support that had been afforded to Major Work students were

now being experienced by all students and, as Major Work classes closed, they were usually made into whole school libraries. Books and resources from all other areas of the school were brought to the newly-designated library, catalogued, and pooled for use by the whole school.[118]

Increasingly, it was considered "better to integrate these bright students with others of various levels of ability in a flexible program designed to meet the differing needs of all the boys and girls."[119] It was recommended that junior high Major Work classes be discontinued as of June 10, 1969. The demand for academic rigour, which had reverberated loudly through the education field since Sputnik, was becoming more of a whisper than a shout. "Sputnik weariness," however, had actually begun years before this.

In 1957, Canada and the United States had reacted seriously to the Sputnik launch, out of fear of losing the space race and being attacked by the Russians, who were thought to have nuclear weapons. Great steps were taken to win the Cold War and compete with the Russians through nurturing future scientists, mathematicians, and engineers. Herold observed that, by 1959, the concern Americans had once expressed regarding the space race and Sputnik, "had turned to weariness."[120] He stated that research had shown that the existing school system wasn't so bad and, with further funding and community support, could become even better at producing students to address the needs of the future. Furthermore, he cited Burgess and Borrowman's idea that "the public dismay that followed Sputnik must be seen as an expression of the general disillusionment and frustration that Americans experienced in the years after the end of World War II when their hopes for world peace did not materialize."[121]

Two other events in the late 1960s took the edge off "Sputnik seriousness." The first was the 1969 American moon landing. The United States had won the space race and Russia was no longer in control. This came as a huge relief to North Americans. But with the Americans now leading the space race, Herold (1974) recounted that

> we now find ourselves in a position we could not possibly have conceived of back then — we have scaled down our space program, and many of the engineers and PhDs in physics we thought we needed so desperately and expanded our university programs so feverishly to produce are out looking for work.[122]

The second event that took the edge off "Sputnik seriousness" was the Vietnam War. While Canada did not officially participate in the war, over 30,000 Canadian soldiers volunteered to fight, and up to twice as many Americans fled to Canada to avoid the draft.[123] The war drained American resources that could have been spent on education and research and contributed to the shift back to child-centred rhetoric in North American education. While junior high Major Work had ended in 1969, the phasing out of elementary Major Work classes began in September 1970, with the entire program terminated in June 1972. Major Work students re-entered mainstream classes; Major Work teachers were often allocated administrative or teacher-librarian roles within the school division; and many Major Work classrooms became school libraries.

Conclusion

The end of the Second World War, the beginning of the Cold War, the launch of the Russian satellite Sputnik, and the threat of Russian dominance triggered a sense of urgency in North America, with education tasked with creating future leaders in science, mathematics, and engineering. While academic rigour had lapsed somewhat in the years leading to the war,[124] following the war it had once again been called for as the cycle of education reform shifted from child-centred to society-centred. Gifted programs in schools in many places throughout North America, including Winnipeg School Division No. 1, that had lost favour during the war were reinstated in the 1950s to ensure North America's place in the space race. Education funds were invested in nurturing gifted students to become the scientists, mathematicians, and engineers who would compete in the space race and technology. In the short period of time between the 1950s and the early 1970s, however, the Americans landed on the moon, establishing its lead in the space race. The urgent need to educate scientists, mathematicians, and engineers was no longer there, so the focus in education shifted from gifted learners to learners with disabilities and disadvantages in integrated classrooms. Giftedness and gifted programs no longer held the focus they had previously experienced within the education system. As Sputnik and the space program burned brightly and then burned out, so too Major Work, the program spawned by these events, thrived, reached its peak, and then, like so many other innovations over time, lost momentum with the weight of the times as society, economics, and politics changed.

In the years following the program's demise, no program with the same scope has been implemented in the Winnipeg School Division. Undoubtedly there have been and still exist programs to supplement bright students' learning. For example, the Advanced Academic Placement (AP) program, in which students in high school can undertake university-level courses for advanced standing, is offered in three Winnipeg high schools (Daniel McIntyre, Sisler, and Grant Park), but none have been designated as specific classes within the public school system. A 2001 Winnipeg School Division policy stated that: "The Winnipeg School Division is committed to an educational philosophy that recognizes the unique needs of gifted and talented students." How this was elaborated was for the division to support schools and teachers in mainstream classes to identify gifted students and provide them with "appropriate programs/strategies to enhance the educational opportunities for gifted and talented students."[125] Charter schools, which are publicly funded independent schools, exist in Canada but only in the province of Alberta and, of the fifteen in existence, only two cater to gifted students.[126]

This article has examined the evolution and decline of the Major Work program in Winnipeg between 1954 and 1972. Deemed by many to have been a remarkable, positive experience that influenced their education and career trajectory, the program was praised for its academic challenge, friendships and motivation, confidence and skills building, and its high quality teaching.[127] It was also criticized for its elitism, isolation, a lack of social and emotional learning by students, long travelling times

for out-of-area students, and for some, the teachers and program.[128] The program was an example of what can happen when both the government and educationalists deem it a necessity to move society in a certain direction, through society-centred education. When necessity was no longer there, the system moved back to what seemed more appropriate for the times, which in this case was child-centred education — demonstrating that our ability to educate our children is as flexible as necessary and can move quickly when the need becomes apparent. In today's education climate, a former Major Work student, reflecting on the impact of the program and other education reforms, suggested that "the educational systems should be providing challenges to support all children reaching their maximum potential.… We need to nurture creativity and creative thought and problem solving and joy of learning. This is what will make our country's future strong and unique."[129]

Notes

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