THE UNIVERSITY OF MANITOBA

SCHOOL ARCHITECTURE IN MANITOBA

by
Kathleen Leathers

A Thesis
Submitted to the Faculty of Graduate Studies
in Partial Fulfilment of the Requirement for
the Degree of Master of Education

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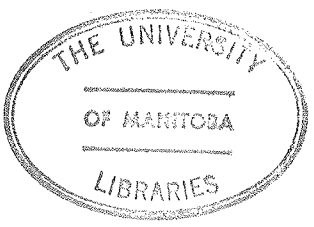

ABSTRACT

The purpose of this study was to examine the changes in the architecture of Manitoba's schools between the years 1870 and 1970.

As it was believed to be the first study of its kind a very broad approach was taken and only the most significant architectural changes were examined. Specifically, changes in plan, architectural style, materials, safety and hygiene were noted. The 1870 to 1970 time span was chosen so as to include some examples of schools built prior to the establishment of the first Board of Education as well as some examples of the open plan schools built in the late 1960s.

Illustrations were collected from: the Picture Library of the Provincial Archives; the Western Canada Pictorial Index, the University of Winnipeg; the Archives and Special Collections Department, Elizabeth Dafoe Library, the University of Manitoba; the Winnipeq School Division #1; Early Buildings of Manitoba and the Annual Reports of the Board of Education, and later the Department of Education; as well as some local histories.

Other information about school architecture in Manitoba was taken from the Annual Reports of the Board and later the Department of Education and from educational periodicals.

The resulting picture of school architecture in Manitoba indicates the following: The architecture of the earliest schools was influenced primarily by the isolation of the Red River Colony, the relative poverty of the colony and the religious traditions of the Roman Catholic and Protestant Churches; a great deal of architectural diversity existed for most of the period studied because of the differing maturity of settlements and the ethnic make-up and the prosperity of the settlers; the relative affluence of the Province during the periods 1900 to 1930 and from 1960 to 1970 was reflected in the quantity and quality of school construction; and finally that after 1871 the degree of government control over school architecture increased to the point where a high degree of uniformity existed in 1970.

The most obvious area for further study is the open plan schools, which are the most dramatic development in the history of school architecture in Manitoba.

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A very special thanks must go to my husband, Winston Leathers, for his support and encouragement throughout what seemed a very long time.

CONTENTS

Chapter I

INTRODUCTION

The history of education and the development of educational systems in Manitoba have been studied in some depth. The architecture of Manitoba's schools had not been similarly analyzed and as it appeared more interesting than its short span of slightly over one hundred years suggested, this study was proposed.

1.1 DEFINITION OF THE PROBLEM

The purpose of this study was to examine changes in Manitoba's school architecture between the years 1870 and 1970. As this is the first study of its kind, only the most significant changes in school architecture were examined. Specifically, an attempt was made to record the changes in plan, architectural style, and materials, as well as improvements in the safety and hygiene in school buildings during this period.

1.2 DELIMITATIONS

The study included those schools built in Manitoba between the years 1870 - 1970. This time span was chosen for two reasons. Schools built in 1870 pre date the establishment of the first Board of Education in Manitoba and schools built in the 1960s include some open plan schools.

The search for information, plans and photographs was limited to: the Picture Library of the Provincial Archives; the Western Canada Pictorial Index, the University of Winnipeg; the Archives and Special Collections Department, Elizabeth Dafoe Library, the University of Manitoba; the Winnipeg School Division #1; Early Buildings of Manitoba ; the Annual Reports of the Board and later the Department of Education; some local histories available at the Legislative Library; and the educational periodicals; Educational Journal of Western Canada, The Western School Journal, The Journal - Royal Architectural Institute of Canada, The Manitoba Journal of Education, and The Manitoba Teacher.

Because the study was the first of its kind in Manitoba a broad approach was taken. Some elements of school architecture such as fixtures, school grounds and teacherages were studied only where they had a direct effect upon one of the components chosen for study in more depth.

1.3 LIMITATIONS

Since the search for plans, photographs and information was limited to the aforementioned sources, data were not found pertaining to plan, materials, safety and hygiene for all the examples discussed. Since some chapters, specifically Chapter Six, covered a great number of years, information and examples were presented in chronological order rather than under the headings; plan; architectural style; materials; safety and hygiene.

1.4 ORGANIZATION

The report includes nine chapters. The first chapter serves to introduce the study. The second chapter contains an historical overview of education in Manitoba from 1870 to 1970. The following six chapters examine the changes made in school architecture over certain periods of time within those years. Chapter nine includes some generalizations of a overall nature, some conclusions about school architecture in Manitoba and some recommendations for further study.

The six chapters examining school architecture over the years are divided as follows:

Chapter III examines school architecture as it existed in Manitoba at the time Manitoba became a province and before the dual system of education was officially established.

Chapter IV examines those changes that took place in school architecture under the Protestant and Catholic

sections of the Board of Education between the year 1871 and 1890.

Chapter V examines school architecture after the abolishment of the dual system and under the Department of Education until school districts began to consolidate in 1906.

Chapter VI examines the architecture that resulted from school district consolidation, the growing demand for higher education and the lean economic times during much of the period 1906 to 1959.

Chapter VII examines those architectural changes that took place under the Progressive Conservative government of Duff Roblin and as a result of the MacFarlane Report.

Chapter VIII examines the open plan schools that first appeared in the 1960s.

1.5 METHODOLOGY

The historical overview was drawn from other theses, particularly The Development of Education in Manitoba by Keith Wilson and School District Reorganization in Rural Manitoba by J. J. Bergen, One Hundred Years in the History of the Rural Schools in Manitoba: Their Formation, Reorganization and Dissolution 1871-1971 by Mary Brewster Perfect, as well as from the annual reports of the Department of Education.

Photographs and plans were collected from the Provincial Archives; a number of local histories; Winnipeg School Division #1; and the University of Winnipeg's Western Canada Pictorial Index; The Archives and Special Collections Department, Elizabeth Dafoe Library, the University of Manitoba. Descriptions, theories, explanations and comments of school inspectors which pertain to school architecture were also taken from the annual reports of the Department of Education.

An attempt was made to select material that represented the period 1870 to 1970 as thoroughly as possible. A further attempt was made to match photographs to plans and descriptions so as to give the clearest and most comprehensive picture of school architecture for that period.

Further material was taken from articles and advertisements in The Western School Journal, The Journal - Royal Architectural Institute of Canada, The Manitoba Journal of Education, and The Manitoba Teacher.

1.6 DEFINITION OF TERMS

School and Schoolhouse: Both terms will be used as school is commonly accepted for school buildings today while school house and schoolhouse were used almost exclusively by the school inspectors in the early reports of the Department of Education.

Collegiate Department: A high school, grades nine to twelve, employing three teachers.

Collegiate Institute: A high school, grades nine to twelve, employing four or more teachers.

Intermediate School: An unofficial term, created for grant purposes, offering instruction for grades between six and twelve.

Consolidated School: A school located in a consolidated school district usually going beyond grade eight and generally providing transportation or pay for transportation.

Chapter II

AN HISTORICAL OVERVIEW

A number of excellent works have documented and analyzed the history of education in Manitoba.[1] The aim of this chapter is to present a condensed history, drawn from some of these sources, that can be used as a reference for the history of school architecture that follows. More specifically, developments in the history of education in Manitoba that have most affected the architecture will be emphasized and developments having little or no apparent effect on school architecture will be given less importance, referred to briefly or in some cases, omitted entirely.

2.1 THE YEARS PRIOR TO 1870

The first formal European education in what is now the province of Manitoba probably took place about 1808 when the Hudson's Bay Company provided three teachers from England to educate the children of their factors and employees.

The Selkirk Settlers of 1814 are reported to have held school aboard ship enroute to Canada.[2] Schools established at the Red River Settlement for and by the Selkirk Settlers were, however, rather short lived and it is generally agreed that the first permanent schools were not established until

1818 when a Catholic mission arrived from Quebec.[3] These first three schools, one in St. Boniface, one at Pembina and the third in an area described as "on the prairies"[4] seem to have operated more or less continually after this date.[5] These early schools were largely concerned with "instructing young and old, the former in baptism and the latter for legitimate marriage".[6] As early as 1822, however, some form of secondary education had begun in the colony. Bishop Provencher of St. Boniface took on an assistant to teach the elementary subjects while he began to teach "more advanced subjects".[7] Education began for girls when the Nolin sisters arrived at St. Boniface.[8] The first Protestant school of a permanent nature was established by the Rev. John West in 1820. It was taken over by the Church Missionary Society in 1822 and became an Indian residential school as well as a day school for the children of Protestant settlers and Hudson's Bay employees. By 1844 the Red River Colony was reported to have "four Protestant churches - St. John's, St. Paul's, St. Andrew's and St. Peter's - attended by 1700 persons and nine schools with 485 scholars".[9] By 1845 some of the Scottish settlers had begun a school in one of the settler's homes and by 1847 had erected a log school house.[10] The Kildonan settlement elected school trustees from among its residents, introduced the principle of voluntary contribution and selected teachers at public meetings or by trustees all prior to 1870.[11] A Presbyterian

school was also established in Kildonan. Rev. John Black is reported to have " tutored the most capable and ambitious boys in the classics, mathematics and theology".[12]

There were then, a number of schools operating in the Red River Colony prior to 1870. The schools run by the Roman Catholics and Anglicans and the Presbyterian school controlled by elected trustees, were all flourishing. All three denominations were also offering some form of secondary education by this time.

A school architecture, however, had not been established. Although some buildings had been erected solely for the purpose of education the use of churches, houses and other buildings for schoolrooms still prevailed until the year the Province was created.

2.2 THE YEARS OF THE DUAL SYSTEM: 1871-1890

From the creation of the Province until 1890 Manitoba had a dual system of education. The act that established this system provided for the election of school trustees, defined their duties, set aside certain sums of public money for the partial support of separate denominational schools, and established a Board of Education. It was the duty of this, Manitoba's first Board of Education, to design courses of study, fix requirements of teachers' certification, and allot government grants. The Board was, however, to work in two sections, one having charge of Catholic school

districts, the other having charge of Protestant school districts.

It was during this period that the University of Manitoba was established (1877) and compulsory education first proposed (1876). Both Winnipeg and Brandon and certain towns were given the authority to appoint their own school inspectors. In 1876 property owners with no religious affiliations began to be assessed by the trustees of the majority in each school district, by this time generally the Protestant Section, which distributed such tax money proportionally to both sections. In 1882 the first Normal Schools were established by both sections. In 1885 a new system of municipal levy was proposed which was designed to broaden the taxation base and provide more aid to the newer or poorer school districts within each municipality. The school inspectors appointed by the Board of Education in 1871 continued in their annual reports to press for higher standards of teacher training and school facilities. By 1885 they had succeeded in having a set of regulations passed by the Legislature (Appendix A) that laid down quite explicit standards for construction, design, hygiene and furniture for school buildings.

This dual system was abolished in 1890 when new legislation replaced the Board of Education and the system of denominational state-supported schools with a Department of Education and an Advisory Board with broad powers, and a system of non-sectarian public schools.

The period from 1870 to 1890 was, then, one of rapid growth and change for the Province. Many of the changes affecting education simply reflected the more permanent nature of settlement and the changing demography while others were less easily justified and were to lead to much dissension in later years.

2.3 THE YEARS 1890 - 1906

The years between 1890 and 1906 were years of rapid growth, extensive change and unusual dissension for education in Manitoba. The amazing immigration between 1870 and 1890 had upset what ethnic and religious balance did exist in 1870. Some 741 new school districts were formed during these years.[13] The older settlements reached a certain maturity and made even further demands on the educational system. There were cries for more secondary schooling, more progressive teaching methods and expanded curriculum, as well as new concerns for more hygienic conditions in schools.

The controversy ignited by the abolition of the dual system and the apparent injustices to the French Roman Catholics raged thoughout these years.

After 1897 a unique bilingual system of education existed in Manitoba. The multicultural makeup of the Province became more pronounced as immigrants from Ruthenia, Galicia and Poland joined those from Great Britain, Ontario, the

United States, Iceland and Russia. The immigrant vote became increasingly important and politicians were not above using the bilingual school situation for political gain. However much attention schooling may have received in the Legislature the standard of education failed to improve much, especially in the rural areas. While enrolments increased attendance remained relatively low, the average attendance in any one year seldom exceeding fifty per cent of the school age population.[14] The quality of teaching also improved very little. The high turnover of teachers, particularly in rural areas, remained a problem as the school facilities were often primitive, boarding places often unsatisfactory, and wages low.

By 1900 there were over one thousand school districts operating in Manitoba.[15] Most contained one small rural school with one teacher and sometimes as few as two pupils attending.[16] This placed a heavy burden on the ratepayers in the sparsely populated, newly settled areas and often schools had to close because a district could not secure a teacher, could not afford to pay a teacher or could not afford to maintain a schoolhouse. Thus, the consolidation of small school districts began in 1905. A number of small districts would unite and transport children to a central school by school van. Whether consolidation actually saved taxpayers money was never clearly established but the other advantages of the larger centralized schools overshadowed this issue.

There was a growing demand for higher levels of education. As early as 1892 Winnipeg, Brandon and Portage la Prairie all had enough high school students to establish collegiate institutes or departments and by 1904 all three had erected separate collegiate buildings. Growing too, was a demand for broader curricula. Changing lifestyles, changing technologies and influences from the United States and Ontario promoted the implementation of manual training for boys and domestic science for girls into high school programmes to better equip students not going on to university.[17] This cry for broadened curricula strengthened the case for consolidation of small school districts.

2.4 THE YEARS OF WAR AND DEPRESSION: 1906-1950

During this great block of time, nearly half a century, the speed at which Manitoba's educational system was developing was greatly reduced. Although the consolidation movement was launched at the beginning of this period it was not universally accepted throughout Manitoba. Some areas of the Province did not enter consolidation until as late as 1970.

The First World War drew attention to the poor physical condition of the youth enlisting and pointed to the need for physical fitness programmes in schools as well as for health inspection by medical personnel. The renewed patriotism of the war period also furthered the cause of larger

consolidated schools as they appeared to assimilate immigrant children more successfully than did tiny schools. The fact that children were being educated in the Province without mastering English was brought to the public's attention. Aware of the potential danger of this situation, the government abolished the bilingual system in 1916.

The years between the wars, although economically depressed, saw important changes in educational philosophies and a tremendous growth of the educational bureaucracy. Signs of the depression could be seen as early as 1922. A drastic decline in the building of rural schools and the closing of others for part of the year were both noted in the annual report of the Department of Education that year.[18] Many of the advances made in previous years were lost as school boards attempted to curb expenses. Many of those recently introduced subjects such as domestic science and manual training came to be viewed as frills and were discontinued. World War II focused attention on the desperate need for technically trained young people. No advances were made in this area, however, as school contruction reached an all time low. Between 1940 and 1944 the number of schools in the Province increased by only eight, slightly more than one a year.

The decade after World War II was one of transition and uncertainty for Manitoba's educational system. Although the educational bureaucracy seemed well established and the

teachers and school trustees well organized none was prepared to meet the needs of these post war years. Manitoba was moving away from its pioneer ways to a new industrial stage.

Manitoba fell from above to below the national mean for per capita and per pupil expenditures between 1940 and 1950.[19] Symptomatic of this was the fact that having opened Kindergarten classes as early as 1892 Manitoba had only six public schools with Kindergarten classes before 1950.[20]

The advanced psychological and educational testing methods developed between the wars were being implemented and were making apparent the vast individual differences and needs of pupils in the schools.

A 1945 Special Select Committee of the Legislative Assembly recommended the establishment of larger school administrative units. It recommended that an active campaign be initiated to promote larger school divisions and the establishment of an experimental division organized by the Department of Education in the Dauphin-Ochre River area for the 1945-46 school year. It further recommended that the Province should bear a greater proportion of the costs of education. Also recommended was "a closer adaptation of the general school programme to the problems and conditions to be found in life", by the provision of alternate courses more closely fitting the needs of pupils and communities, composite high schools capable of offering five basic types

of courses: general, agricultural, home economics, industrial and commercial, and again the upgrading of the status, training and remuneration of teachers.[21]

The concept of larger school administrative units was actively promoted by educators. Hundreds of meetings were held throughout the 1950s where representatives from the Department of Education explained the advantages of the proposed scheme to the residents of the Province. The idea did not, however, catch on. Only the Dauphin-Ochre River area, thirteen municipal districts and four secondary areas: Portage la Prairie, Springfield, North Norfolk-McGregor and Neepawa had been estalbished by 1950. There were still 1651 school districts operating in the Province at the end of the 1950s.

Bergen cites the following reasons for this lack of co-operation or tardiness on the part of rural communities:

1) community feeling or tradition,
2) fear of increasing school costs,
3) fear of loss of local control,
4) fear of change,
5) fear of weakening the local community unit
6) local community pride,
7) belief in the virtue of the small school,
8) fear of pupil transportation dangers,
9) fear of loss of parental control over children,
10) fear of loss of the intimate home/school relationship.[22]

Wilson has referred to the years 1916 to 1959 as years of "Educational Stagnation". The entire period, 1906 to 1959

was certainly one of political uncertainty and insecurity and coupled with the long periods of economic depression a noticeable check on the building of schools resulted.

2.5 THE MACFARLANE REPORT

In 1957 the government of Manitoba commissioned Dr. R.O. MacFarlane, a former deputy minister of education, to head another committee to investigate the plight of education and make recommendations.

The recommendations of the MacFarlane Report, as it came to be known, closely paralleled those of the Special Select Committee of 1945 - 46. It, too, recommended larger administrative units but only for secondary education as it recognized the fears of lost autonomy in the rural areas. It recommended that elementary education be left in the hands of local boards. The report departed from previous reports, however, in its recommendations for drastic changes in the amounts and systems for the funding of education. It recommended, generally, that the Province pay for a much greater share of educational costs. It aimed at a broader sharing of educational costs through large Provincial grants to division boards, equalizing costs over these large divisions as well as over school districts.

The MacFarlane Report, well received as it was, may have been set aside as had so many others, had not the government changed just before its publication. A Progressive

Conservative government led by Dufferin Roblin came to power and, having campaigned for educational reform, set about passing legislation that implemented most of the MacFarlane Report's recommendations. The Conservatives had also actively campaigned throughout the Province for local support for boundary changes in school administrative units.

The MacFarlane Report became a milestone in the history of education in Manitoba for after its publication came some of the most profound and rapidly occurring changes the educational system had ever seen. Besides the recommendations and financial incentives of the report there were other equally influential factors which contributed to these changes. The school population had grown rapidly during the 1950s as post war babies began entering the schools and this led to a shortage of teachers and classrooms.

The most notable change was the Division Plan that came into effect a short six months after the submission of the interim report of the MacFarlane Commission.[23] The old system of school district organization, largely a transplant from Ontario, and perhaps inevitable in a frontier, agrarian economy had not or could not adapt itself to provide the secondary schooling now demanded. The implementation of the Division Plan at the secondary level seemed also to stir a new interest in consolidation at the elementary level. The period 1959 - 1962 saw the formation of some thirty-three

new consolidated school districts[24] from the mergers of some 125 school districts. Although the formation of most Divisions happened rather quickly, this did not occur without a great deal of controversy.

The following excerpts from The Winnipeg Tribune and The Brandon Sun illustrate the concerns that lingered in 1963.

> The M.T.S. has shown a sensible awareness of the traditional local concern for education and has attempted to combine this understanding with proposals for the consolidation of school districts. Whether the idea of maintaining local school boards as advisors to consolidated division boards is a feasible suggestion is open to question, but at least it is a constructive attempt to tackle an extremely difficult problem . . . Obviously the introduction of a more rational organization of the entire public school system is long overdue.[25]

> There are obvious advantages in having education moneys in the hands of provincial experts applying a coordinated policy rather than in the hands of 100 school boards with 100 different policies, staffed by public-spirited but not necessarily qualified people. If education financing becomes a purely provincial affair, however, the question immediately arises as to the jurisdiction of the school boards. They will not control the schools' budgets anymore or decide what capital expenditures are to be made. They may in fact be reduced to the level of mainly advisory boards.[26]

There were some school districts, notably along the Manitoba/North Dakota border that repeatedly voted against the Division Plan for these and other reasons given by

Bergen. Some of these school districts were not dissolved until 1971.

H.J. MacDonald, in an article entitled "The Little Red School - Circa 1962", reiterated John Bergen's conclusions and added a further consideration. He claimed that many teachers preferred one-room schools because of the low enrolments which permitted individual instruction and because teachers were free of the "self-appointed expert in pedagogical affairs" found in larger schools.[27] There were still over twenty one-room school districts operating in 1970.[28]

The 1960s saw the most accelerated school building programme at the secondary level in the history of the Province. The recommendations of the MacFarlane Report were directly responsible for this phenomenon in two ways. First, the Division Plan left no room for school boards to escape the responsibility of providing secondary education; and secondly, the capital grants support recommended by the Report and ranging from forty to seventy-five per cent for secondary school construction had often been the single most enticing factor for voting for the Division Plan. There were other factors as well. The birth rate had risen from an average of 12,000 births per year in the 1930s to an average of 22,000 in the post war years. This meant that classrooms in small schools once housing high school students were now often needed for elementary school

students. Further, most of the first high school buildings built in the Province were now forty to sixty years old and were unsuitable for the broadening high school curriculum.

A significant development in Manitoba's educational system in the 1960s was a renewed attempt at providing a higher standard of vocational schooling. Perhaps it was the Russians' launching of their Sputnik in 1957 which motivated the western democracies so dramatically, or perhaps it was the signs of a recession or the mounting unemployment which began in 1959 that caused the Federal Government to actively promote higher standards of education. The president of the Canadian Vocational Association at that time explained:

> The only areas of Canadian education which have received any federal help have been vocational education and university education, in both these fields it has been recognized that the national welfare is at stake.[29]

In 1960 the Federal Government announced it would pay seventy-five per cent of the cost of new vocational education facilities and equipment if the provinces would agree to pay the other twenty-five per cent.

The lack of opportunity to enrol in courses leading to employment was blamed for the high drop-out rate which persisted in Manitoba. In 1944 the drop-out rate between Grade II and Grade XI was seventy-three percent. In 1958 it was still fifty-two per cent for this age bracket.[30] A concerted effort was made in the high schools to offer

vocational courses, to employ trades people when qualified teachers were unavailable and to channel students through the new Guidance and Counselling Services and on into vocational courses which would keep them in school until they graduated. The construction of the multi-million dollar Manitoba Institute of Technology which offered two-year post high school programmes in the technologies combined with the Provincial Trade School was further incentive for students not wishing to take university entrance courses to complete their high school programmes.

2.6 THE OPEN PLAN SCHOOL EMERGES

The 1960s will be remembered as boom years for educational institutions in Manitoba, years of expanding enrolments and facilities and growing professionalism for teachers. But during the latter years of that decade the phenomenon of Continuous Progress Education began to dominate the minds of Manitoba's educators. This concern for providing for the individual needs of all children surfaced at this time for a number of reasons. A declaration on the Rights of the Child had been adopted by the Commission on Human Rights of the United Nations in 1959. Principle Five of that declaration stated:

> . . . the child who is physically, mentally or socially handicapped shall be given special treatment, education and care required by his particular condition.[31]

It appeared that new teaching methods were required to cope successfully with this wider range of abilities.

Teachers with higher academic qualifications began perhaps to consider education more expansively and became familiar with curriculum and educational psychology.[32] The newly reorganized Faculty of Education at the University of Manitoba no doubt began acquainting students with similar developments in Great Britain and the United States.

The introduction of Kindergartens and Nursery classes with their British Infant School and Montessori philosophies also influenced teachers at the primary levels to reassess their teaching goals and methods.

Further, the soaring costs and controversy over the implementation of the Division Plan had awakened the public's interest in educational matters. There was a growing demand for accountability from schools.

Continuous Progress Education and the Open-Plan buildings and revised teaching practices it demanded were in the fore as the 1960 decade ended.

2.7 CONCLUSION

Education in Manitoba has passed through many stages in its relatively short history. The earliest settlers displayed both ingenuity and determination in providing schools for their children under rather formidable conditions. The local control over education established by

the pioneers has remained an important factor in Manitoba's educational system. The years immediately following federation were years of organization for education. Systems of administration and school inspection which lasted nearly a hundred years were established. There followed many years of ethnic and religious differences and apparent injustices to the French speaking communities through errors in judgement on the part of the Government and the first educational leaders. The same period before World War I also saw a boom in the growth of the school age population and in the construction of school buildings. The rapid growth and improvement of educational facilities was checked, however, by the economic depression of the 1930s. Educators, working under some very poor conditions, managed to advance both in their professionalism and educational philosophies over these lean years. With the return of more prosperous times, changes in government and some insightful Royal Commissions, most particularly the MacFarlane Commission, theories and practices recommended by educators throughout this stagnant period became reality. In the 1960s a second boom in the school age population and construction of schools occurred.

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Chapter III

THE YEARS PRIOR TO 1870

Only a few structures were designed and built in the Red River Colony specifically as schools prior to 1870. This is not surprising considering the impermanent nature of the settlements and the opposing interests of the fur trading companies, the many hardships and mishaps suffered by the first settlers and the nomadic lifestyle of a large portion of the population.

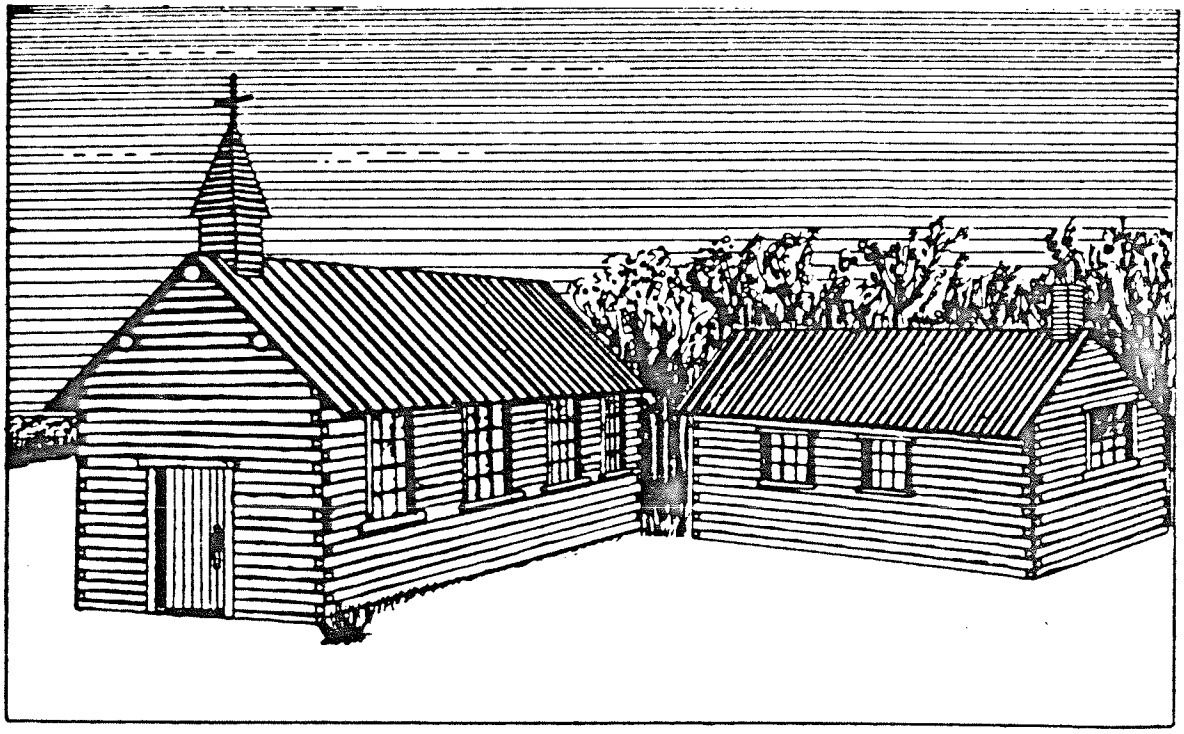
Lord Selkirk's plans for the settlement of the Red River Colony included the establishment of schools. The first of these schools for the Selkirk Settlers was probably the one opened by Selkirk's representative, Miles Macdonnell, in 1815.

> Prior to the arrest of Miles Macdonnell by the North-West Company in 1815, a school was organized and Macdonnell so reported to Selkirk. One John Matheson, a Scotch-Presbyterian, was engaged as teacher and opened school . . . January . . . 1815. Owing to difficulties between fur traders and colonists, this enterprise had to be abandoned after operating for not more than three months.[1]

The structure itself was probably not built specifically as a school but is believed to have originally been Macdonnell's residence.

> The location of the first school house or old huts according to present day street geography, would be the land lying between Market Street and Pacific Avenue close to the river.[2]

The Roman Catholic missions were more successful at establishing permanent schools. In 1818, on a site at the confluence of the Seine and Red Rivers granted to the Roman Catholic Church by Lord Selkirk, Father Provencher had a chapel and school erected.[3]

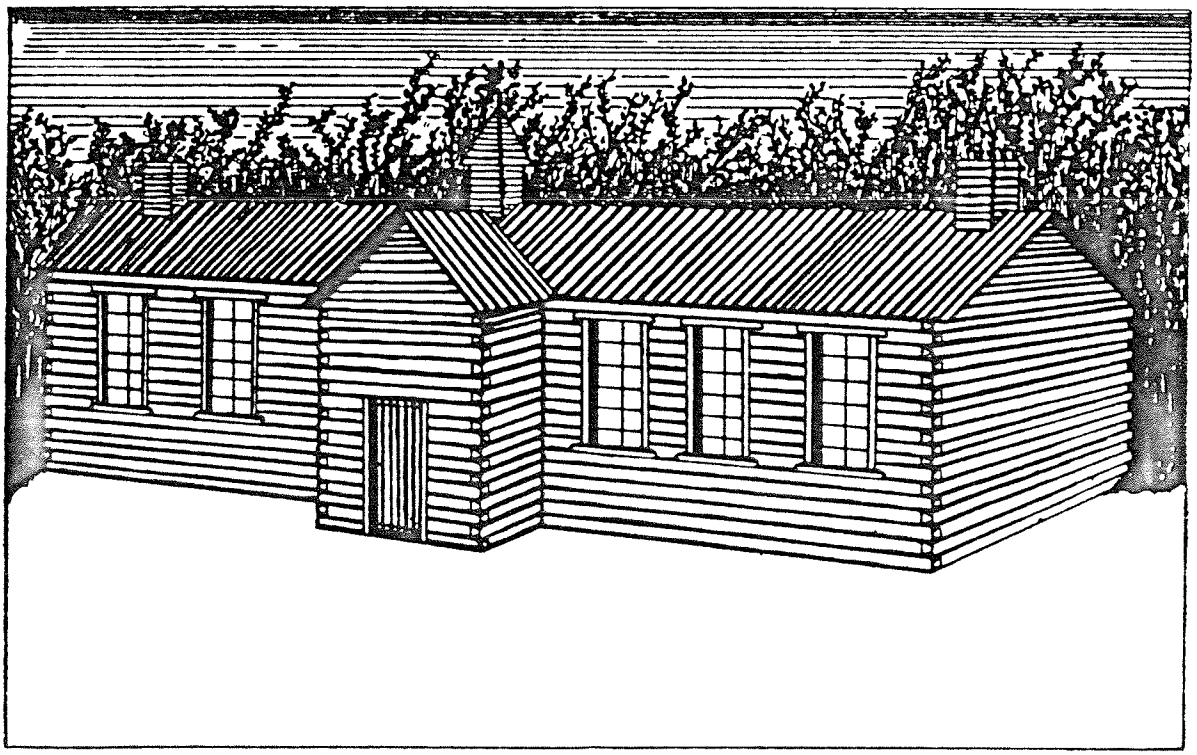


FIRST ST. BONIFACE CHURCH AND PRESBYTERY

Western Canada Pictorial Index

This illustration, redrawn from an 1821 watercolour,[4] is believed to be of Provencher's first school. Both the chapel and the school appear to be of log.

In 1823 a senior boy's school, really a secondary school, was also built in St. Boniface. D.S. Woods claims that by 1834 there was a class of six students "pursuing classical studies"[5] at this school. The following illustration, purportedly redrawn from a 1821 watercolour, shows a building much larger than one needed for so small a class. Possibly the enrolment was much larger, the remainder of the boys pursuing religious studies, or more probably the illustration is of a later date and depicts a structure built in 1857. In 1857 a new building "thirty-four by sixty feet" was built to replace the original. It had an enrolment of fifty students.[6]



FIRST ST. BONIFACE COLLEGE

Western Canada Pictorial Index

In 1820 the Rev. John West, Anglican chaplain to the Hudson's Bay Company, "opened a school in a log house at Fort Douglas"[7] which twenty students attended. Two years later West erected a boarding school near the present site of St. John's Cathedral.[8] The following illustration, labelled "St. John's Cathedral 1823" appears to fit the description of West's school given by both Newfield and Berger.

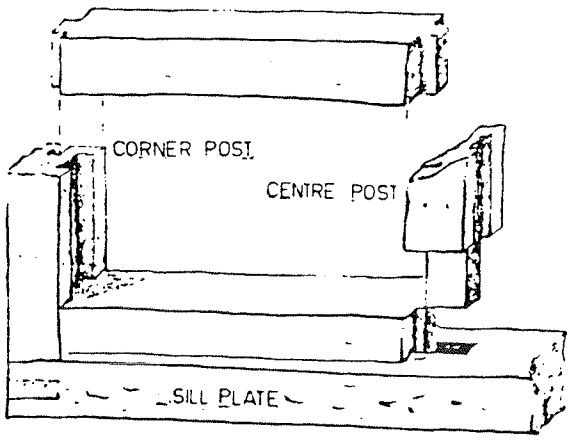
> In the year 1823, when Mr. West was leaving the Red River settlement, the school was an institution of no small importance in itself. It was the residence of the schoolmaster and his wife. It was the home of the Indian boys and girls . . . It was likewise the day school for the children of the Hudson's Bay Company officers and servants, and for those of the settlers. On Sundays church services were held in the institution.[9]
>
> West had plans for a large school house with apartments for the teachers and students, as well as classrooms. The school was begun in 1821 and finished in the fall of 1822. It was located beside St. John's Cathedral. The school consisted of three buildings, school dormitories and apartments for teachers. The school had Indian boys and girls in boarding, but also included white daytime students. The buildings were constructed of logs and clay.[10]

ST. JOHN'S CATHEDRAL at RED RIVER 1823

Western Canada Pictorial Index

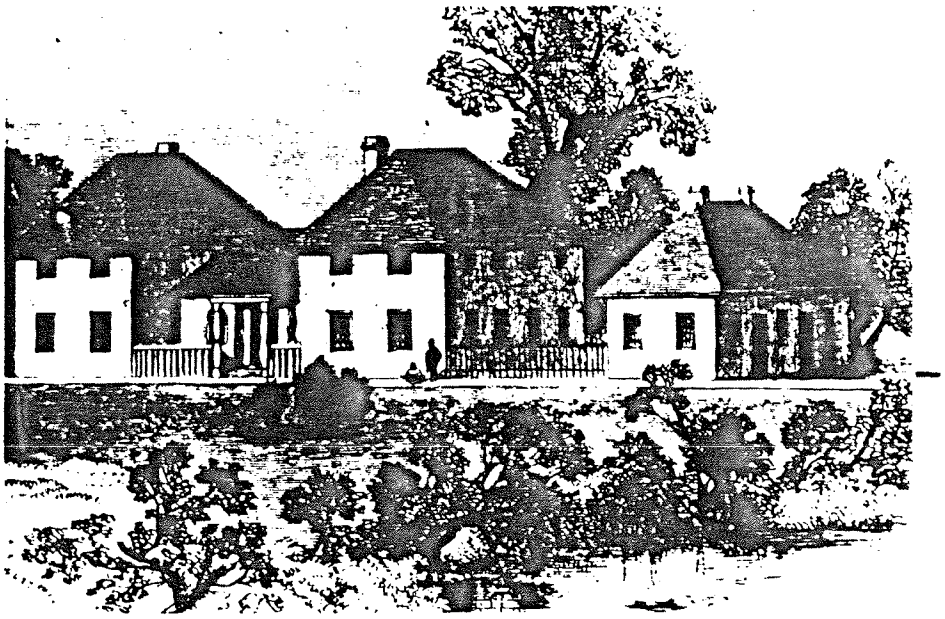
All buildings appear to be constructed in a method of log construction which became very popular in the Red River Colony. Known as Red River frame or pièce-sur-pièce this method permitted log construction even in areas, such as Manitoba, where large timbers were scarce.

The following diagram explains this method of log construction. Vertical posts at the corners and at intermediate positions between them, depending on the length of the logs available, were



set on a sill or directly onto the ground. These uprights were grooved to receive the tapered ends of logs, generally squared, which were laid horizontally within the frame.

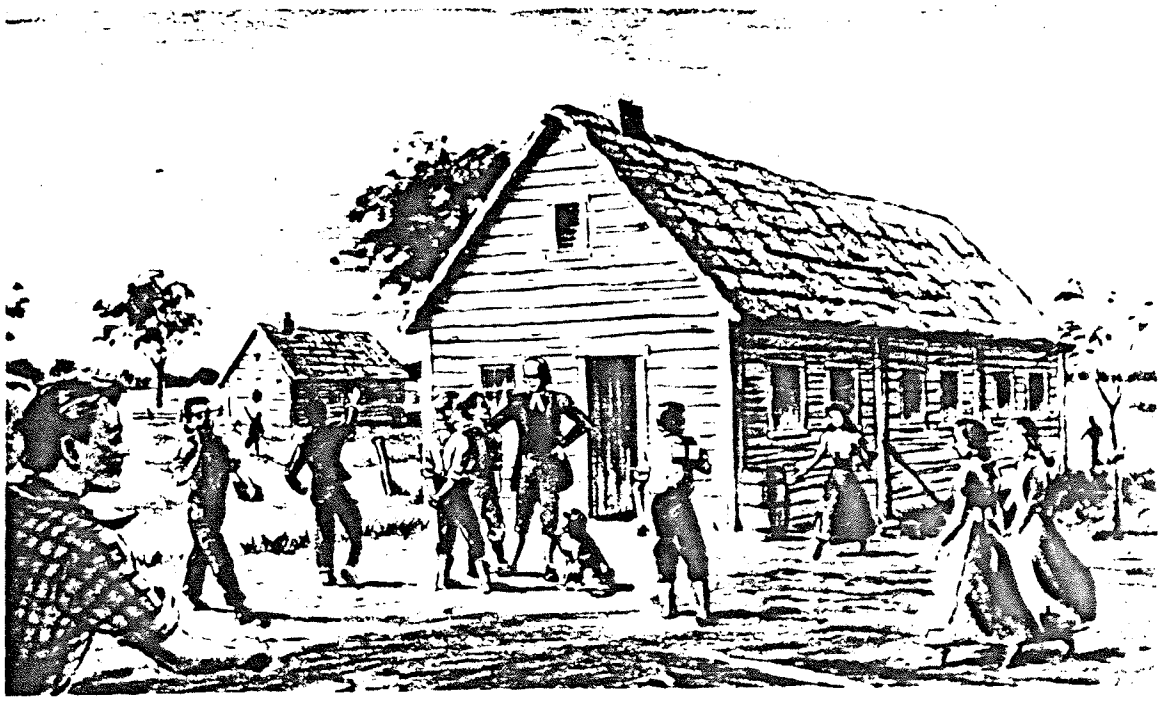
West's school later developed into a larger complex. In 1836 classical studies were offered to the sons of Hudson's Bay Company factors and traders. This school became known as Red River Academy and still later as St. John's College.[11]



Keith Wilson Collection

This illustration, labelled Red River Academy, 1852, shows three buildings. The two largest probably had classrooms on the main floor and dormitories on the second. The third and smallest building may have been a teacherage. They were probably constructed of logs and covered with a lime and clay mixture.

By 1844 four Protestant parishes, St. John's, St. Andrew's, St. Paul's and St. Peter's were offering instruction to 485 scholars.[12]



St. Andrew's Parish School

Western Canada Pictorial Index

This illustration of St. Andrew's Parish School, also built in the pièce-sur-pièce fashion, was probably the first structure built as a school in that parish. Some consideration seems to have been given to heating and ventilating the school house. Note the ventilator in the gable and the chimney.

The 1871 Report of the Protestant Board of Education states that the St. Paul's parish was still holding classes "in a church of England, a small 40' X 22', frame and stone building".[13]

In 1844 the Grey Nuns of Quebec sent three sisters to establish a school for girls in St. Boniface. By 1847 this school had been erected. It too, was a log structure built in the pièce-sur-pièce manner. It was a much larger building than those that preceded it. It contained dormitories as well as classrooms. The exterior, at some point, was covered with vertical clapboard. The interior partitions were of poplar poles set in grooves in the floor and ceiling, and were plastered with "a mixture of light clay and lime over hand-split willow lath".[14] This building exists today in its original location.

Western Canada Pictorial Index

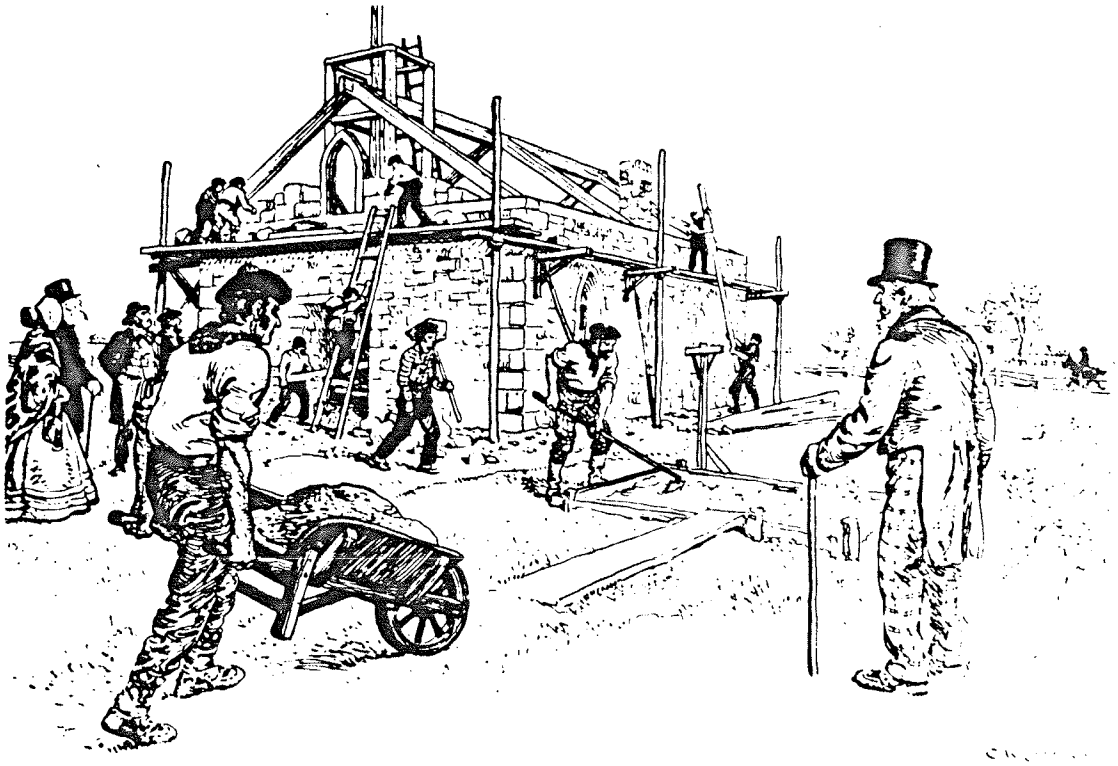
In 1850 Anglican parishes were organized at St. James, Headingly, High Bluff, Poplar Point and Portage la Prairie.[15] The St. James Anglican Church, completed in 1853, served as a school until after 1871.[16] It was built of logs floated down the Assiniboine River from Baie St. Paul, now St. Eustache, and shaped by hand on the site. The exterior is clad, probably at a later date, in tongue and groove siding.[17] The church still stands.

OLD ST. JAMES ANGLICAN CHURCH (1851)

Early Buildings of Manitoba

In 1847 the Presbyterian settlers organized a school in Kildonan. It was at first opened in a house of one of the settlers. In 1849 a log building was erected on the Kildonan property granted by Lord Selkirk.[18] Woods states "In 1864 a new stone school house was provided"[19] on this site.

The following illustration, reproduced from a drawing by C.W. Jefferys, is entitled "Building Kildonan Church".[20]



BUILDING KILDONAN CHURCH 1852

Western Canada Pictorial Index

The first Report of the Protestant Board of Education reported that Kildonan West School District was still holding classes in a 48' X 22' stone Presbyterian church in 1871. Whether these structures, the school mentioned by Woods and the church illustrated by Jefferys, are one and

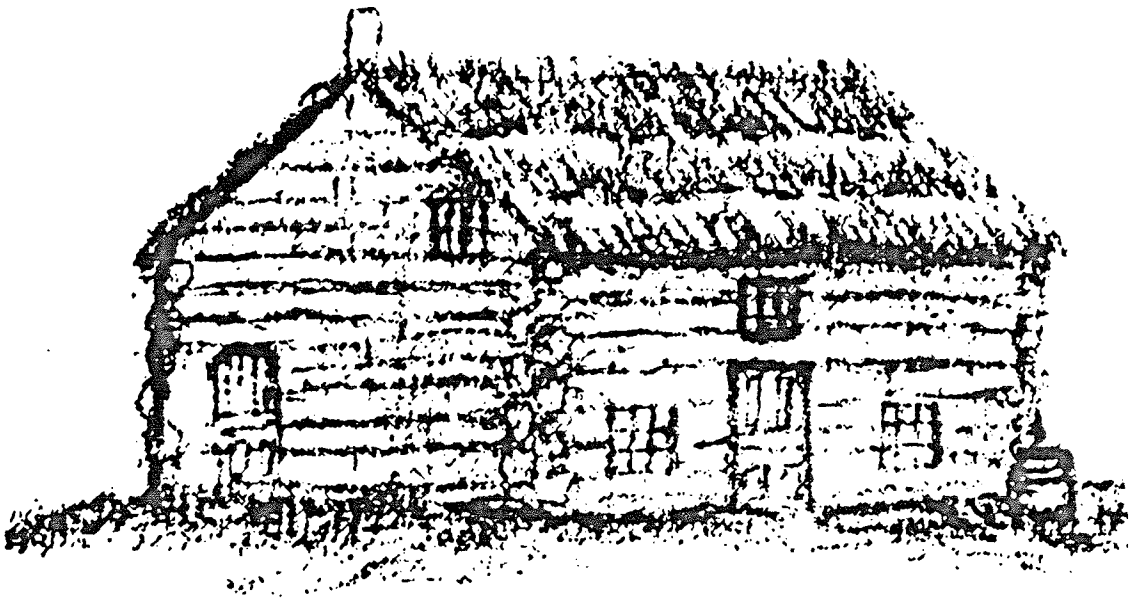
the same or whether there were two stone buildings erected on this site is not clear.

In 1857 an excellent stone building was erected on the banks of the Red River specifically as a school for the daughters of Hudson's Bay Company factors. It became known as Miss Davis' School as Miss Mathilda Davis, herself a daughter of a Hudson's Bay Company employee, was the school's first teacher. The school was built by stonemason, Duncan McRae, also builder of St. Andrew's Anglican Church. The Davis school was built along Georgian lines of random-course limestone. The floors were eight inch pine held in place with hand made nails.[21] This structure was, according to local historian Edith Paterson, only the school residence while a "wooden structure" out behind served as the school.

MISS DAVIS' SCHOOL (1857-58)
Keith Wilson Collection

By 1860 other convents were operating at White Horse Plains, St. Vital and St. Norbert. The St. Norbert Convent

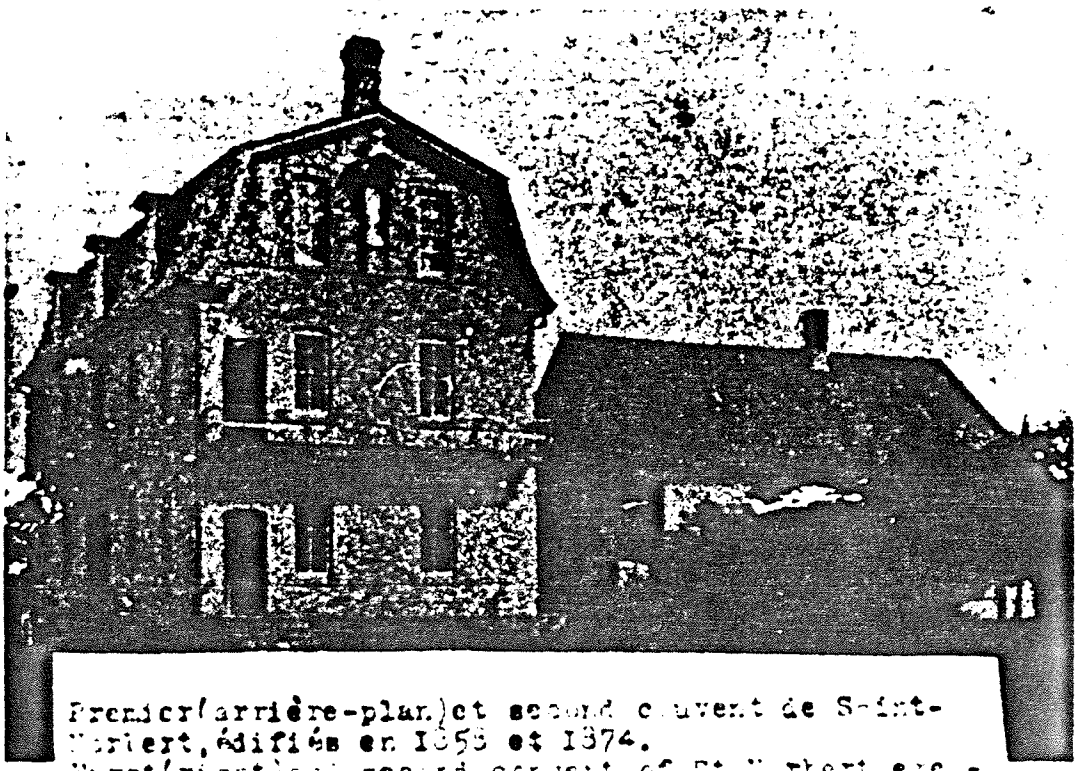
is listed as a sod building in the Western Canada Pictorial Index. The sketch of it is a crude one, but, on closer inspection it appears to be a log building. Notice the joints of the log ends at the corners. It is possible that the roof was originally sod covered.



FIRST ST. NORBERT CONVENT
Opened 1858

Western Canada Pictorial Index

In the photograph of the second St. Norbert Convent we see a smaller building to the right identified as the first St. Norbert Convent. It appears to have similar proportions to the one in the sketch. The small convent in the photograph appears to be shingled and covered with siding. It is possible these were added at a later date.



Premier(arrière-plan)et second couvent de Saint-Norbert, édifiés en 1858 et 1874.
First(right)and second convent of St. Norbert erected in 1858(first)en 1874(second).

Western Canada Pictorial In...

Conducting classes in the homes of the early settlers was a widely practised custom. In some cases, such as in the huts built by Miles Macdonnell, this was a short term measure. In other cases this practice was carried on for many years.

The Anglican parish of Portage la Prairie was organized in 1850. Newfield describes Portage la Prairie's first school:

> Here a day school was opened by Mr. Peter Garrioch as teacher, and as there had not been time to erect a building for the purpose, school was held at his own place. The room used for this purpose was really Mr. Garrioch's

> workshop and it had neither floor nor windows, the school was transferred to his kitchen for the winter.[22]

The first Superintendent of Protestant Schools, Rev. W. Cyprian Pinkham, in his first report states that classes in the Portage la Prairie district were still being held "in a house belonging to Mrs. McLean", a log building, 18' X 24', in an inferior state of repair.[23]

Later in 1875 Pinkham reports of the Westbourne School District:

> . . . no regular school house, school was kept in a little house across the river from the church. There was no stove, but a large open fireplace.[24]

Pinkham also reported that the school districts of Prospect and Burnside were also still holding classes in "private, rented, log buildings". These buildings were also probably houses.

There is little evidence that the educational philosophies of the founders of the first Manitoba schools were reflected in the designs of the school buildings. Lord Selkirk apparently referred to the Lancaster Monitorial system in one of his letters.

> Lord Selkirk wished to establish a system of parish schools on the old country model, featuring the Lancaster Monitorial System. A supervisor of education was to oversee and formulate policy and curriculum was to consist of the three Rs probably taught in Gaelic.[25]

The Lancaster Monitorial system, developed in England, was simply an educational system designed to educate many rather than a few and it paved the way for free public, tax supported schools as its costs were low. Subjects were reduced to a set of questions and answers. The master drilled head pupils (monitors) who in turn drilled junior pupils. This enabled one master to teach up to 500 students. Not only did this system reduce instructional costs but it was economical of space. A room fifty feet by fifty feet, with rows of benches (forms) with space around the edges for group recitations could accommodate 500 students. That was about ten square feet per pupil. Classes were divided into "forms" according to age or seniority. Each form was seated at a long desk and bench facing the master. The forms, by means of risers, rose gradually toward the back of the room, with the seniors seated in the highest forms.

There is no evidence that classroom floors were ever built on this riser or form principle in Manitoba. Some evidence of this influence is apparent in our use of the terms "higher" and "lower" grades. The use of raised platforms for master's desks, also from the Lancaster System, was commonly used. The practice of placing pupils' desks facing the master's desk seems to have been strictly followed for the first one hundred years of Manitoba's school history. It was considered necessary for maintaining

discipline in classrooms. The crowding of pupils into small spaces also appears to have been practiced. The earliest Protestant schools provided somewhere between twelve to fifteen square feet per pupil.[26]

The educational goals of the founders of Manitoba's first schools could be detected in the forms the buildings took. The Protestant schools tended to be small parish schools supported by the church. This followed a tradition well established in England, which up until 1870 had no public, state-supported schools.[27]

Lord Selkirk's desire to preserve the Gaelic language was another reason for the small scattered nature of the first Protestant schools.

> . . . he (Lord Selkirk) believed a difference in language would counteract any tendency to amalgamation with the Americans.[28]

For these reasons the first Protestant schools were one and the same as the parish churches or separate structures adjacent to the churches.

There is evidence that some attempts were made to broaden the curriculum beyond reading, writing, arithmetic and religion. Rev. West's first school had plots for gardening which appear to have been carefully fenced. Newfield describes this attempt to introduce the students to gardening.

> The activities of the little mission station, . . . extended its influence into the field of practical education. It had its agricultural activities.

> Little plots of ground were tilled by the native children with great delight. Gardening as a school project had its beginning in Manitoba at this time.[29]

The educational goals of the Roman Catholic schools differed somewhat from those of the Protestant schools. The Roman Catholic missions tended to place more importance on the spreading of their religious beliefs, particularly to the native population. Probably for this reason they tended to build fewer and larger schools which, particularly for native children, were generally boarding schools. The removal of children from their homes seems to have furthered these goals more successfully. Toombs makes the following claim.

> The Roman Catholic educational policy was aimed at the establishment of convent boarding schools, so that the Indian children would be removed from the native environment.[30]

The Catholic Schools also made some attempt to broaden the school curriculum beyond the basics.

> Practical arts courses for girls were introduced at St. Boniface and an agreement entered into with Sir James Simpson, Governor of the Hudson's Bay Company . . . by which the salary of two instructors in weaving should be paid by the Company.[31]

> In 1833 Rev. Georges Antoine Belcourt established an experimental school at Baie St. Paul, now St. Eustache, for the purpose of instruction in agriculture.[32]

How these two developments affected the architecture of the schools is unknown.

The earliest schools were built in settlements along the rivers. Stone and large timbers were most readily available in these locations. The use of primitive building methods was dictated by the fact that effective transportation links to more industrial centres where milled lumber or bricks were available were not yet established. The cost of importing more modern building materials into the colony was therefore not financially feasible for the earliest settlers. Frame construction was introduced in the years just prior to 1870. In 1871 there were seven schools of frame construction and one of brick, but these were built at the very end of the period under consideration in this chapter.

3.1 CONCLUSION

We may conclude that the architecture of Manitoba's first schools was influenced largely by three factors: the isolation of the colony, the poverty of the colony and the doctrines of the Roman Catholic and Protestant Churches. The isolation and relative poverty of the Red River Colony dictated the use of primitive building methods and materials. The differing goals of the churches resulted in large boarding schools in the Roman Catholic settlements and small scattered schools in the Protestant settlements.

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[1] George M. Newfield, The Development of Manitoba Schools Prior to 1870, (unpublished M.Ed. thesis, University of Manitoba, 1937), pp. 34-35.

[2] R. Bailey, A Historical Study of Public Education in West Kildonan to 1959, Winnipeg, 1959, p. 83.

[3] D.S. Woods, Education in Manitoba, Part I, Economic Survey Board, Province of Manitoba, 1938, p. 5.

[4] Western Canada Pictorial Index, University of Winnipeg, Winnipeg, Manitoba, 1980.

[5] Woods, op. cit., p. 5.

[6] ibid.

[7] Woods, op. cit., p. 8.

[8] ibid.

[9] Newfield, op. cit., p. 43.

[10] Will Berger, School Construction in Manitoba From 1811 to 1976, (unpublished essay, University of Manitoba, 1976), pp. 2-3.

[11] Woods, op. cit., p. 9.

[12] Keith Wilson, The Development of Education in Manitoba, (unpublished Ph.D. thesis, Michigan State University, 1967), p.60.

[13] The Report of the Protestant Board of Education - 1871, Manitoba Legislative Library, pp. 32-33.

[14] Early Buildings of Manitoba, Winnipeg, Manitoba, Peguis Publishers, p. 27.

[15] Woods, op. cit., p. 10.

[16] The Report of the Protestant Board of Education - 1871, op. cit., pp. 32-33.

[17] Early Buildings of Manitoba, op. cit., p. 17.

[18] ibid.

[19] Woods, op. cit., p. 11.

[20] ibid.

[21] Western Canada Pictorial Index, University of Winnipeg, Winnipeg, Manitoba, 1980.

[22] Newfield, op. cit., p.68.

[23] The Report of the Protestant Board of Education - 1875, p. 9.

[24] ibid.

[25] Bailey, op. cit., p 60.

[26] The Report of the Protestant Board of Education - 1871, Manitoba, (calculated from Table C), pp. 32-33.

[27] Morley Preston Toombs, Some Aspects of the Growth and Development of Educational Administrative Policies in Rupert's Land and the North-West Territories to 1905, (unpublished M.Ed. thesis, University of Saskatchewan, 1941), p. 15.

[28] S.E. Lang, Canada and Its Provinces, "History of Education in Manitoba", Vol XX, Edinborough: T. A. Constable, 1914, p. 422, cited by Woods, p. 2.

[29] Newfield, op. cit., p. 43.

[30] Toombs, op. cit., p. 49.

[31] Woods, op. cit., p. 7.

[32] ibid.

Chapter IV

THE YEARS OF THE DUAL SYSTEM 1871 - 1890

The first legislative assembly of Manitoba met in 1871 and in May of that year the first education act was passed. This act provided for the election of school trustees, defined their duties, set aside certain sums of public money for the partial support of public schools, and established a Board of Education which was to work in two sections, one having charge of Catholic Schools, the other having charge of Protestant Schools.

The most profound effect that the Board of Education came to have on school architecture was not through the granting of funds, as none was given for buildings, but rather through the school inspectors it was to employ.

Two of the most influential of these early inspectors were the Rev. W. Pinkham, the first superintendent of the Protestant Schools, and Elie Tasse, superintendent of Catholic Schools. Both had fixed notions about what comprised a good school building and their annual reports detailed the faults of existing school buildings. Annual reports from those years contain their numerous recommendations for improved school facilities.

Tasse was obviously familiar with the writings of Henry Barnard, a noted American expert on school architecture,[1] and his 1875 and 1877 reports promoted Barnard's theories in great detail. In these reports Tasse referred to the choice of school sites, building materials, school size, entrances, windows, lighting, ventilation, room temperature, desks and seats, apparatus and playgrounds. (Appendix B)

This concern on the part of the Province's newly appointed educational leaders was not immediately reflected in the school architecture. In spite of their zeal and their harsh criticisms of existing schools change was slow even in the oldest school districts. For many years structures designed and built for other purposes were used as schools in many districts and the school inspectors' scorn of this practice is evident in their reports.

Rev. Pinkham, 1875, wrote of the North St. Andrew District School:

> Visited July 2nd. The seats with which the school house was formerly filled, when used as a place of worship, having been removed, the room presents a more school-like appearance . . . It is high time the trustees thought of erecting a new school house, indeed, as this is one of the wealthiest districts in the country, one can scarcely understand why so much time should have been suffered to pass by without some steps being taken to erect a suitable building, the need of which everyone in the neighbourhood must admit.[2]

Inspector Tasse reported in 1875 of the Lorette East School District:

> The Rev. Mr. Quevillon . . . has removed the school to the first storey of his residence . . .[3]

The Rev. Pinkham, again in 1876 wrote of the Portage la Prairie School:

> No one who feels an interest in this thriving village can help regretting that the school of the district is very far from being what it should be. The school house, a building rented for the purpose, is badly situated, and wears an appearance of great neglect.[4]

The annual report of the Rev. Pinkham in 1877 stated the following of the St. Pauls' School District:

> School is still held in the school chapel, the furniture of which is by no means satisfactory for school purposes.[5]

He wrote again of the Portage la Prairie District in 1877:

> I visited the school on 12th September. The building then used for a schoolhouse was so unsuitable that I considered it necessary to inform the trustees that unless steps were immediately taken to secure a more suitable building I should feel bound to recommend the withdrawal of the Government grant. At the annual meeting in February last, a resolution was passed empowering the trustees, subject to sanction of the Lieutenant-Governor in Council, to borrow $200 for the erection of a good schoolhouse.[6]

As late as 1885 Inspector D. A. Stewart wrote of the Pembina Crossing School District:

> The school is held in a rented building. The trustees are preparing to build.[7]

Inspector Morrison wrote in his 1886 report that the Kerr District School was "held in a public hall: a very rough, poorly furnished building". The Rev. Walter R. Ross wrote of the Morden District School in 1886:

> It is a public hall, used for all kinds of purposes out of school hours, the result being that its condition is such, when so used, as altogether to unfit it for the work of the school.'

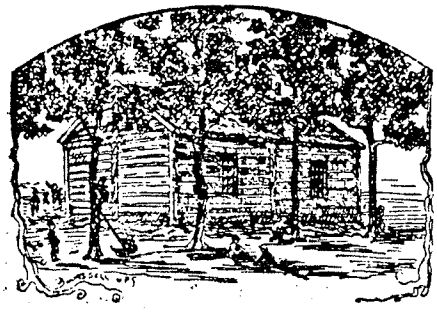
In a more tolerant mood, Rev. Pinkham wrote of the High Bluff District in 1875:

> At the last annual meeting a new school house was decided upon, but the loss of crops by grasshoppers, has for the present so disheartened the people that no steps have been taken for its erection.'

Log construction remained the most common choice for school buildings for many years. The districts received no government grants for buildings and had no organized means of tax collecting when the first schools were required. Small log buildings could be erected by volunteer labour from rough hewn logs, still in plentiful supply along rivers, for as little as two hundred dollars.

Some log school houses were built of logs just roughly peeled and squared only at the ends for dovetailing. Some reportedly had neither floors nor ceilings. Others had lathed and plastered interiors. Inspectors reported at times that these buildings were "papered". Most had few windows, as windows required milled lumber and were a major expense. Most buildings were very small, an average size being 18' X 24'.

The school inspectors initially described these log schools as snug and comfortable but their expectations soon rose and they became more critical.



FIRST PUBLIC SCHOOL OF WINNIPEG

The Western School Journal

Winnipeg's first public school, built in 1871, was a very small log building built among the trees on Point Douglas. The Rev. Pinkham reported the following:

> The room in which school is kept is well supplied with desks, but it is low.[10]

In that same report Pinkham wrote of the East Kildonan School, a larger 36' X 24' building,:

> I found that the trustees who have always been most diligent in the discharge of their duties had commenced to paper the walls of the school room. This is a step in the right direction. It will make the school house more comfortable during the winter, besides improving its appearance. I hope that suitable outbuildings will shortly be provided . . .[11]

And in his 1876 report:

> The school house is a roomy building, but the snow occasionaly drifts in at the roof, and melting, drops down in several places.[12]

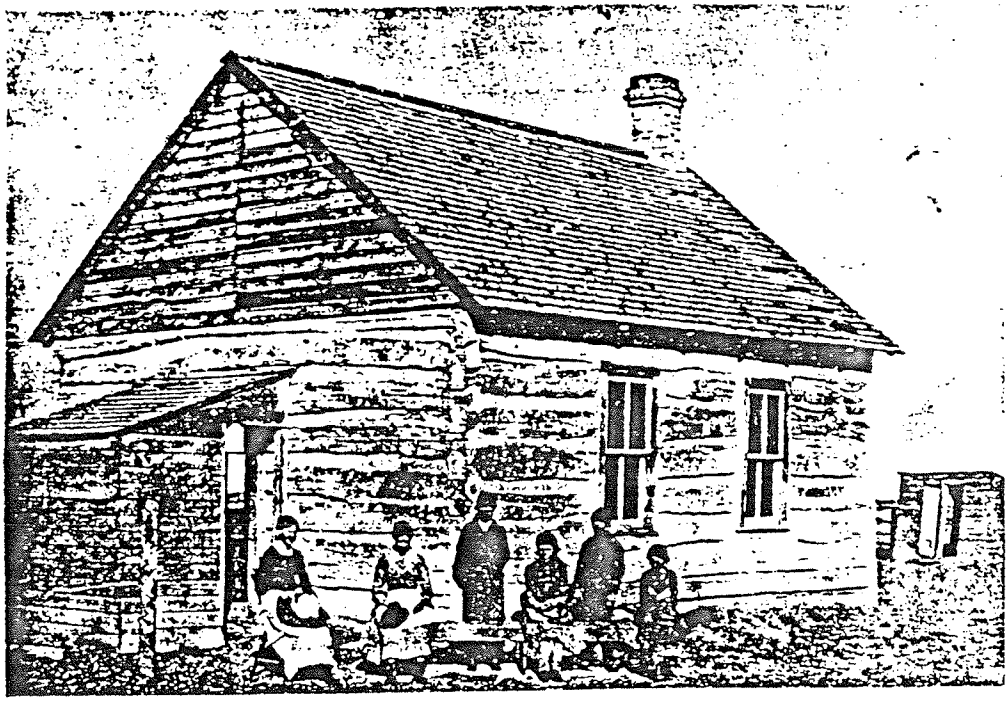
We gain some idea of the crowding of students from this excerpt from a 1877 report:

> Burnside District School, a 22' X 24' log structure- A new school-house, one of the best in the Province, was erected in this district last year. The building is log, with shingled roof. It has accommodation for fifty scholars.[13]

The Grassmere District School, also a log building, was reported to be a mere 14' X 18'.

Trustees were, it appears, not as conscientious about re-chinking these log buildings as they might have been. One inspector reported in 1876:

> Springfield District - I found the building open between the logs . . .[14]



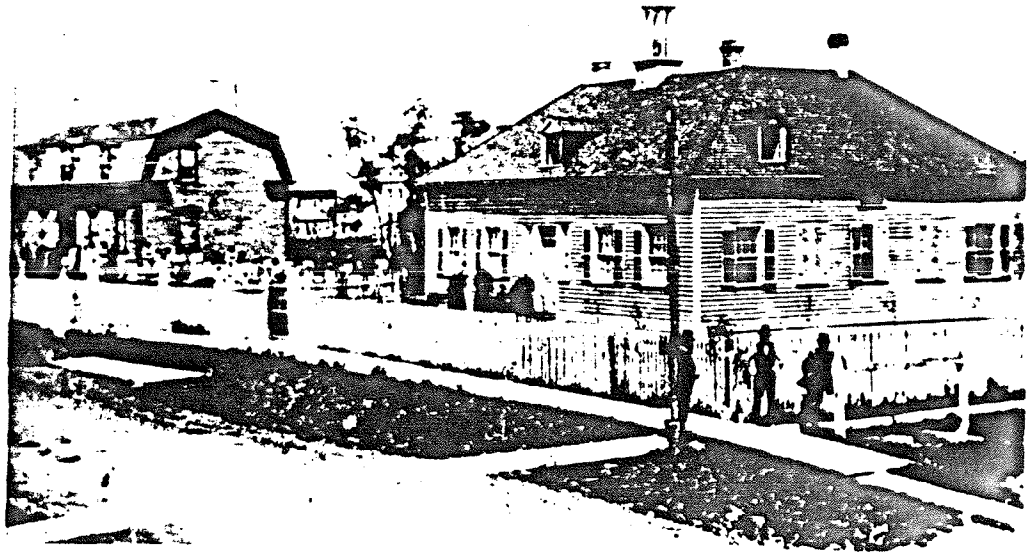
BEATRICE DISTRICT SCHOOL c. 1882

Picture Library of the Provincial Archives, Manitoba

Wood frame gradually began to replace log as the most popular form of school construction. The school inspectors applauded this as a most progressive step. They declared these new frame schools "clean", "bright", and "neat".

St. Mary's Academy, built in 1874, appears to have been a wood frame building. Tasse comments on this school:

> This institution is rapidly becoming stronger and the best evidence of its vitality is the erection of a splendid building . . . We have visited this establishment and we can vouch for its possessing all the required hygienic conditions.[15]



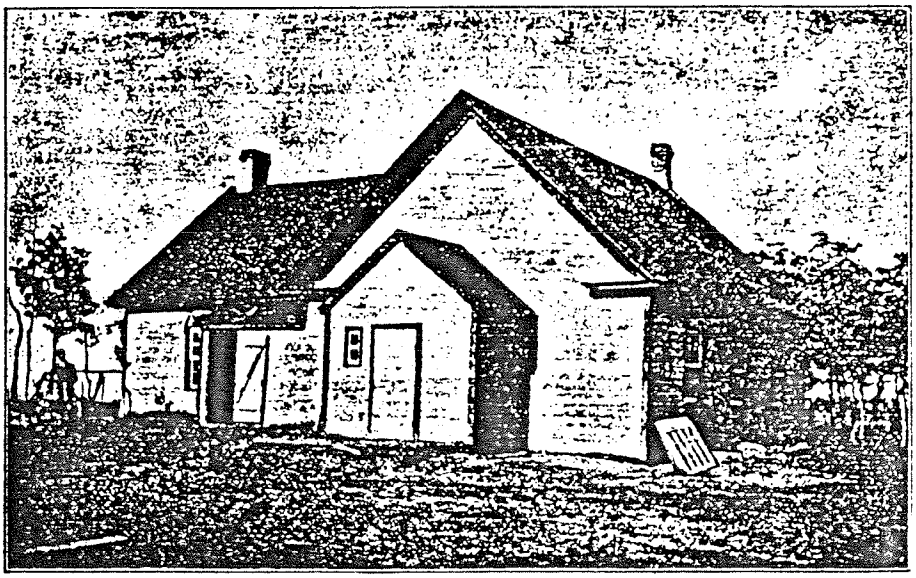
ST. MARY'S ACADEMY 1874

Western Canada Pictorial [illegible]

Headingly District School appears to have been one of the earliest public schools of wood frame construction. The Rev. Pinkham reported the following in 1876:

> At the annual meeting in the district (Headingly) in 1876, the trustees were authorized . . . to borrow $500 towards

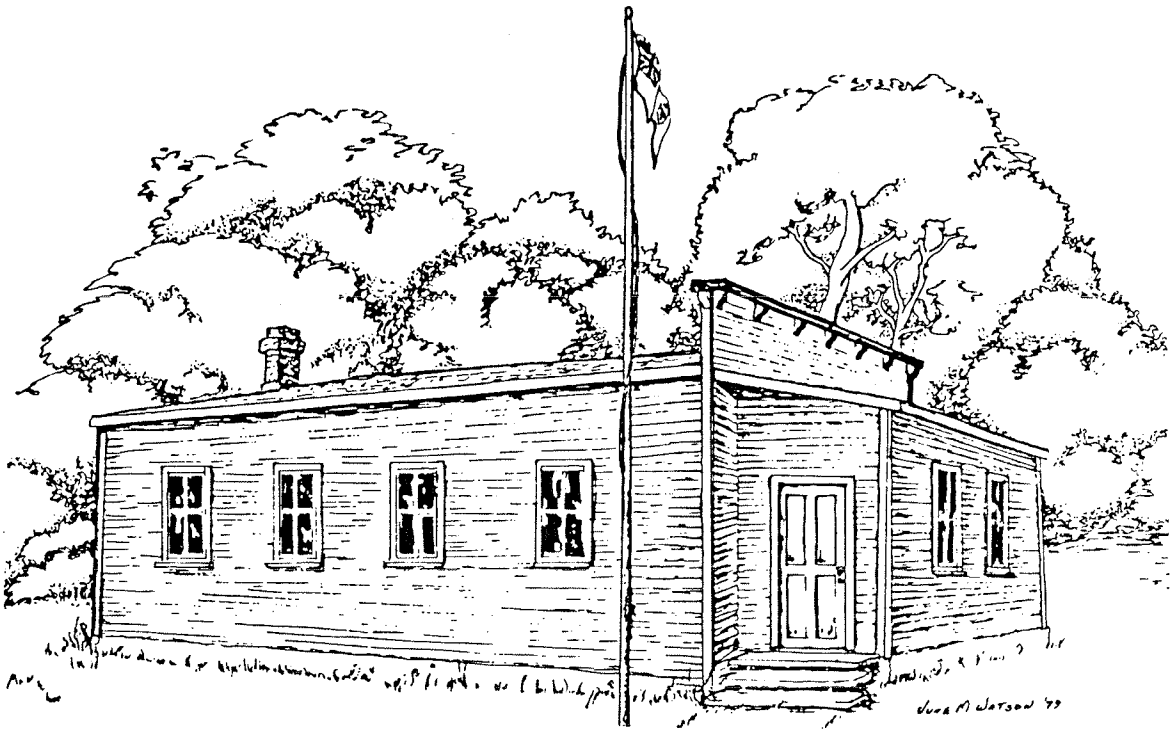
> the erection of a new school house, and I am happy to say that during the past summer the building, the plans and specifications for which were submitted to and received the approval of the Protestant Section of the Board of Education, has been erected . . . The school house requires banking up about the foundation. This would make it warmer in winter than it is.[14]



HEADINGLY DISTRICT SCHOOL 1875

Picture Library of the Provincial Archives, Manitoba

The two chimneys pictured indicate that the school was heated. It looks neither bright nor neat and its only claim to style is its returned eaves, a common classical revival detail.



BOYNE DISTRICT SCHOOL 1883

The Boyne District School dates back to this period. It is doubtful that these frame buildings were any warmer than their predecessors, the log school buildings. They did, however, generally have more and larger windows and did therefore provide better ventilation and lighting.

In 1875 the school district of Emerson erected a tiny, 12' X 16', frame school. It appears that the school inspectors had once more raised their expectations.

> The school house (Emerson) is unusually small, but comfortable. It has four nice desks for scholars, and a nice chair and table for the teacher. It is the intention of the ratepayers to

> build, as soon as possible, a school house that will harmonize with the other buildings in this ambitious little town.[17]

From its inception, it appears that the Board of Education desired some standards for school architecture. No mention is made, however, by school inspectors during this period regarding the appropriateness of school building designs for the courses of study carried on within them. Their concerns lay in the areas of safety, comfort and hygiene. Regardless of the fact that large numbers of the students that attended these schools came from primitive sod, log and frame shanties, the school inspectors continued to press for higher standards in school construction.

In 1885 the inspectors succeeded in having a set of regulations passed by the Legislature. (Appendix A) These regulations stated that no school house should be erected, loan obtained, contract tendered or furniture purchased before plans and specifications (accompanied by an architect's estimate) had been submitted to and approved by the Board of Education. The dimensions of school houses were not to be less than ten feet in height and allow not less than one hundred and fifty cubic feet of air space per pupil. Doors were to open outward, porches or vestibules were to be provided, and foundations were to be banked. Chimneys were to be of brick or cement and were to contain two flues, one for foul air to escape. Windows were to be placed along the sides of the room only and open easily at

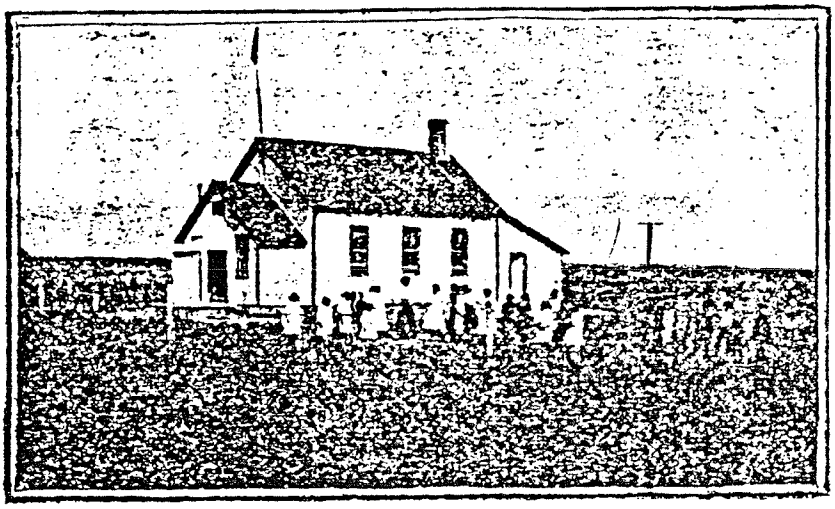
both the top and bottom. Separate outhouses for boys and girls with entrances facing in opposite directions were also to be built. Desks and seats were to be of certain heights and dimensions for various ages.

This was all very well intended, but as the Board of Education granted no funds for school construction the regulations were unenforceable. School inspectors were, according to these regulations, to be provided with copies of each school district's set of plans and specifications by the Board of Education. The inspectors were to go to the site and report back to the Board any diversions from the approved plans or from the regulations. In reality, the inspectors were at the mercy of the school trustees, and often if a district was unaware of the regulations or felt they made the cost of a school prohibitive, this step would be omitted. In such cases the school inspectors were often contacted only after classes had commenced in a building.

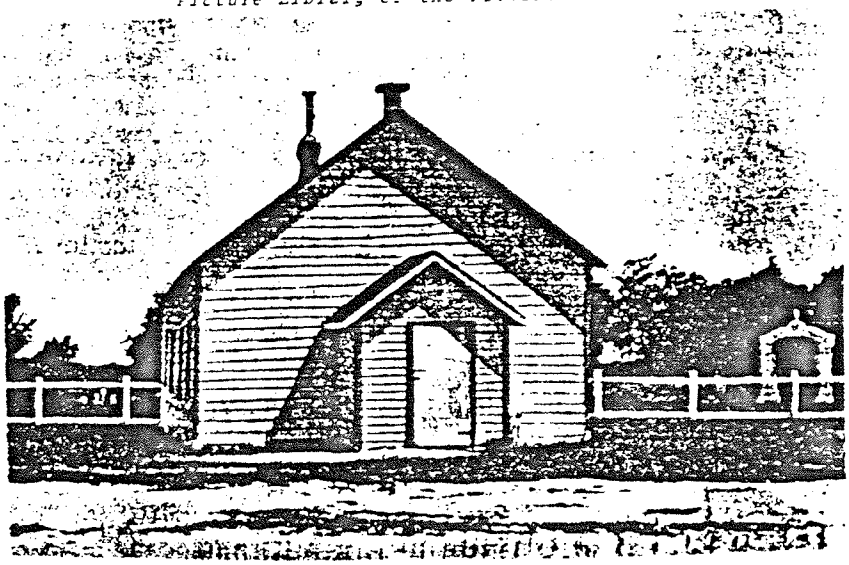
Many new school districts were anxious to meet the regulations and did so, as we see from Inspector James' 1886 report:

> Four new school houses have been erected, and are now in operation, namely, Gretna, Bow Park, Stockport and Woodmore. The last named of these is finished and furnished. It is, on the whole, a very good building. The other three are unfinished, being unpainted, unplastered, and only partially furnished with the necessary school requisites, but they are to be finished during the holidays. The school house at Gretna is 18' X 24' and 10 feet between floor and ceiling, having a

entrance porch in the gable and a neatly closed space where are kept the storm windows during the summer. The posts used in the edifice are 2 X 6 inches placed 16 inches apart which will make it very strong. The outside of the building has been first sheeted with common lumber, then covered with tar paper, then enclosed with matched lumber. It is yet to be lathed and painted.[18]



COCHRANE DISTRICT SCHOOL c. 1883
Picture Library of the Provincial Archives, Manitoba

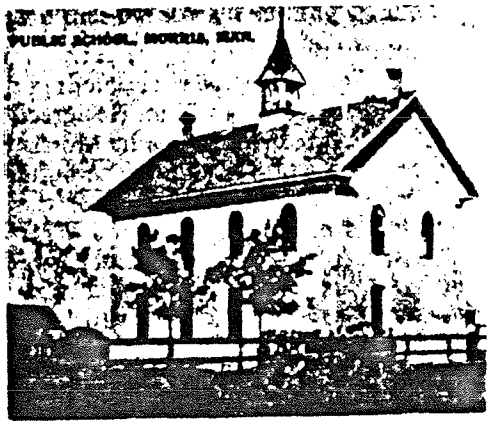


ST. ANDREWS DISTRICT SCHOOL, 1885
Picture Library of the Provincial Archives, Manitoba

Many schools surpassed these ideals. As early as 1875 an inspector's report of the Morris School District stated:

> The school house in this district is built of brick, and is the first school house of this material in the Province. It is 16 X 20 feet, and built in such a manner as to admit of enlargement, when the needs of the district demand greater accommodation.[1]

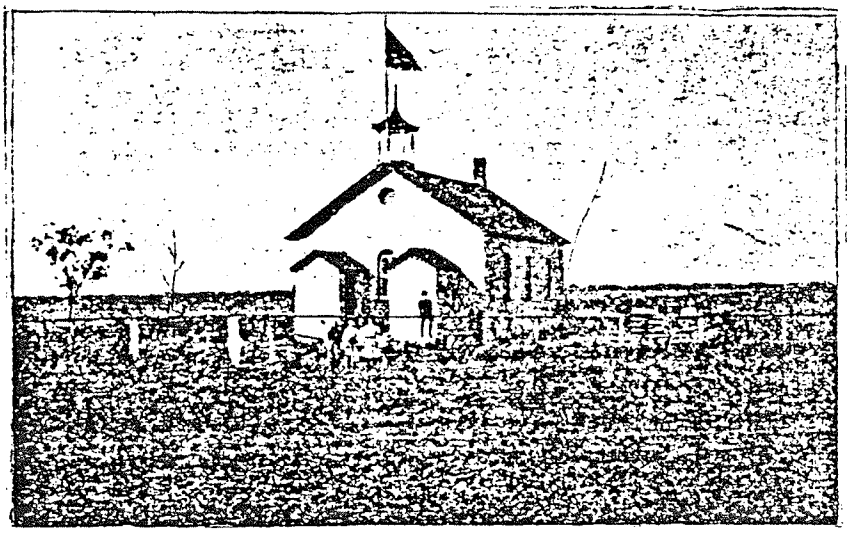
By 1882 this school had been replaced with a second structure also built of brick from a brickyard in the town of Morris. The second school was a two storey structure measuring 30' X 50'.



Furrows In The Valley

MORRIS PUBLIC SCHOOL 1882

A fine brick school was also built about 1884 in the West Poplar Point District. It appears to have had separate entrances for boys and girls. Its round-headed windows give it a church-like appearance that was common to many schools in Protestant settlements.

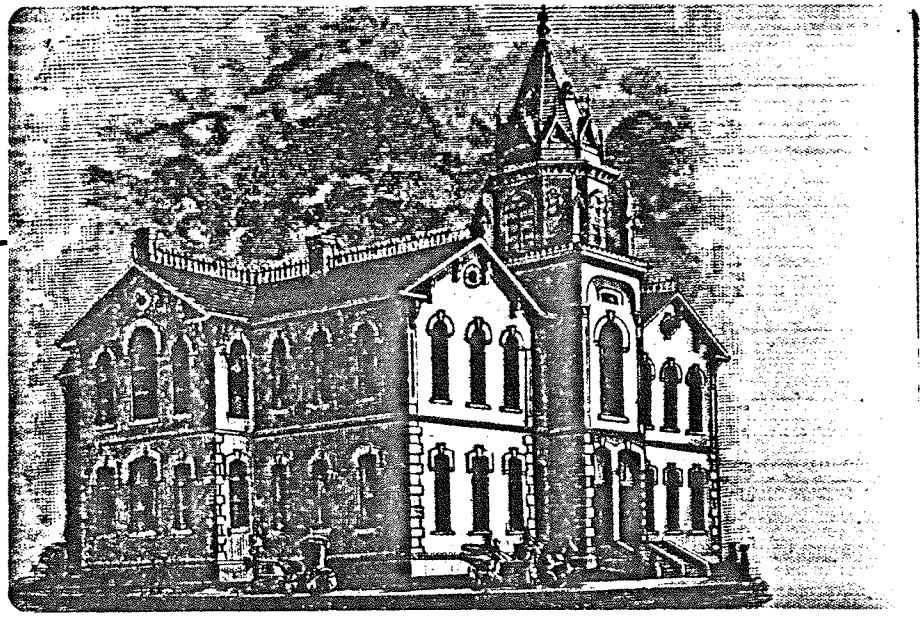


WEST POPLAR POINT SCHOOL c. 1884

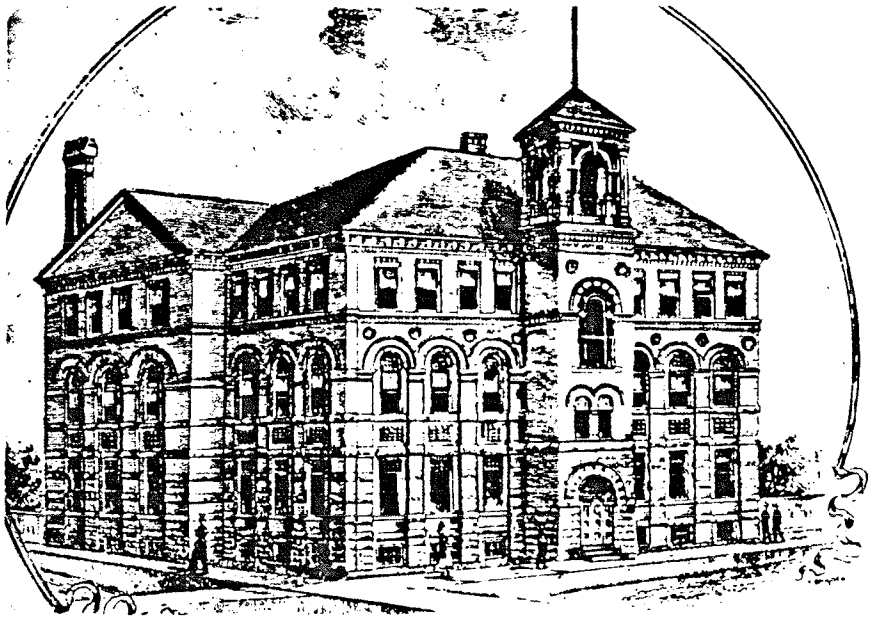
Picture Library of the Provincial Archives, Manitoba

The 1877 school inspector's report for Winnipeg Schools gave this glowing account of the progress being made in that rapidly developing centre.

> The city of Winnipeg now enjoys educational advantages of the highest order. During the past summer two large and very handsome school houses have been erected. The Central School is a T shaped building, on the plan 28 by 94 feet, with front projection 28 by 33 feet. It is two very high stories in height, and is built of brick in an American style of architecture, having over one hundred large, well proportioned circular-headed windows, one from each T opening into large lobbies, where the staircases to the upper flat are located, and entrances to each of three classrooms on the ground floor. Two of these rooms are 25 by 26 feet each, and the other one 26 by 42 feet. The upper flat is also divided into three classrooms, so arranged with folding doors that can be thrown open into one, for lectures, examinations, etc . . .



CENTRAL SCHOOL, WINNIPEG, 1883
Keith Wilson Collection



NORTH CENTRAL SCHOOL, WINNIPEG, 1883
Keith Wilson Collection

> The North Ward School is exactly the same design, having two class-rooms 26 by 28 feet each. Both buildings are provided with teachers' closets to each class-room, and are well ventilated on the most approved plan.[20]

Stone was also used for school construction in those early days where it was readily available. The West Kildonan and St. Paul's District Schools were both stone, having formerly been churches. The Stony Mountain School District erected a stone school house in 1884 - 85 and the Bruce School District was reported to have had a "neat and comfortable stone building"[21] in 1886.

During the years 1871 - 1890 the number of school districts organized grew from fifteen to 719.[22] By 1890 712 of these districts were operating schools and of those 554 had erected buildings solely for that purpose. That left only 158 school districts still holding classes in churches or other rented buildings. Of the 554 school houses erected in Manitoba by 1890 the majority, 450, were frame buildings. Only 21 were stone and only six were brick. There were 77 log schools in use at this date.[23]

4.1 CONCLUSION

The comprehensive regulations of the Protestant Section of the Board of Education respecting school sites, school houses, and school furniture passed by the Legislature in 1885 did much to heighten the awareness of trustees and rate-payers. The regulations did not, however, bring about any noticeable uniformity. A large number of the schools built under the Catholic Section still tended to be large residential schools. The large classical revival schools built in Winnipeg far surpassed the aspirations of the Board of Education while new settlements continued to build primitive structures or use facilities far below the recommended standards.

REFERENCES

[1] Barnard, Henry, School Architecture, (Edited. with introduction and notes by Jean and Robert McClintock), Teachers College Press, Teachers College, Columbia University, New York, 1970.

[2] Report of the Superintendent of Protestant Schools in the Province of Manitoba, 1875 - 76.

[3] Report of the Superintendent of Protestant Schools in the Province of Manitoba,1874 - 75.

[4] Report of the Superintendent of Protestant Schools in the Province of Manitoba,1876 - 77.

[5] Report of the Superintendent of Protestant Schools in the Province of Manitoba,1877 - 78.

[6] ibid.

[7] Report of the Superintendent of Protestant Schools in the Province of Manitoba for the year ending 31st January, 1885.

[8] Report of the Superintendent of Protestant Schools in the Province of Manitoba for the year ending 31st January, 1886.

[9] Report of the Superintendent of Protestant Schools in the Province of Manitoba for the school year 1874 - 75.

[10] ibid.

[11] ibid.

[12] Report of the Superintendent of Protestant Schools in the Province of Manitoba, 1875 - 76.

[13] Report of the Superintendent of Protestant Schools in the Province of Manitoba, 1876 - 77.

[14] Report of the Superintendent of Protestant Schools in the Province of Manitoba, 1876 - 77.

[15] ibid.

[16] ibid.

[17] Report of the Superintendent of Protestant Schools in the Province of Manitoba, 1875 - 76.

[18] Report of the Superintendent of Protestant Schools in the Province of Manitoba for the year ending 31st January, 1886.

[19] Report of the Superintendent of Protestant Schools in the Province of Manitoba, 1875 - 76.

[20] Report of the Superintendent of Protestant Schools in the Province of Manitoba, 1876 - 77.

[21] Report of the Superintendent of Protestant Schools in the Province of Manitoba for the year ending 31st January, 1886.

[22] Report of the Department of Education For the Year ending Dec. 31st, 1892.

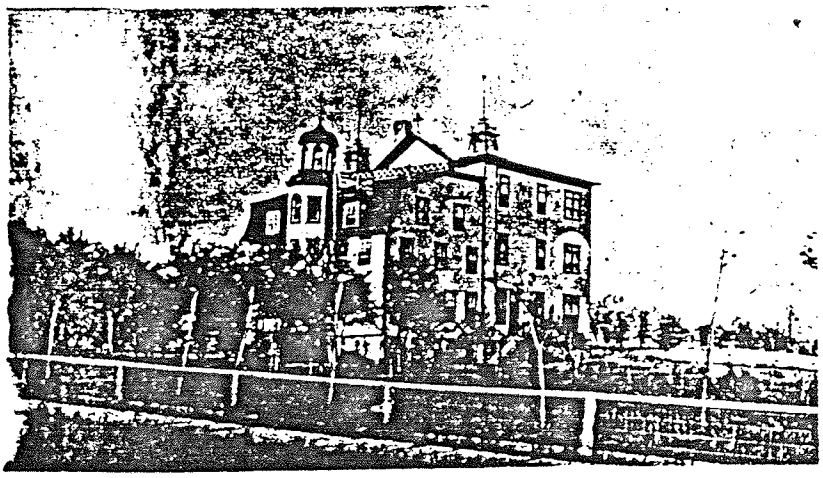
[23] Report of the Department of Education For the Year ending Dec. 31st, 1911, p. 435.

Chapter V

THE YEARS 1890 - 1906

The architecture of school buildings continued to display strong ethnic influences even after the abolition of the dual system in 1890. The age and prosperity of the settlements were two other factors which continued to influence the architecture of schools in Manitoba. Great diversity could still be found during the years 1890 - 1906.

In settlements where the majority of the people were of French extraction architectural styles prominent in Quebec were common.



ST. JOACHIM DISTRICT SCHOOL c. 1890

Picture Library of the Provincial Archives, Manitoba

A second empire style of architecture, so popular in Quebec, is seen in these examples in somewhat modified

forms. The mansard roof with projecting dormer and the central tower are both predominant features of this style. These details were commonly found on schools in Manitoba's French settlements.

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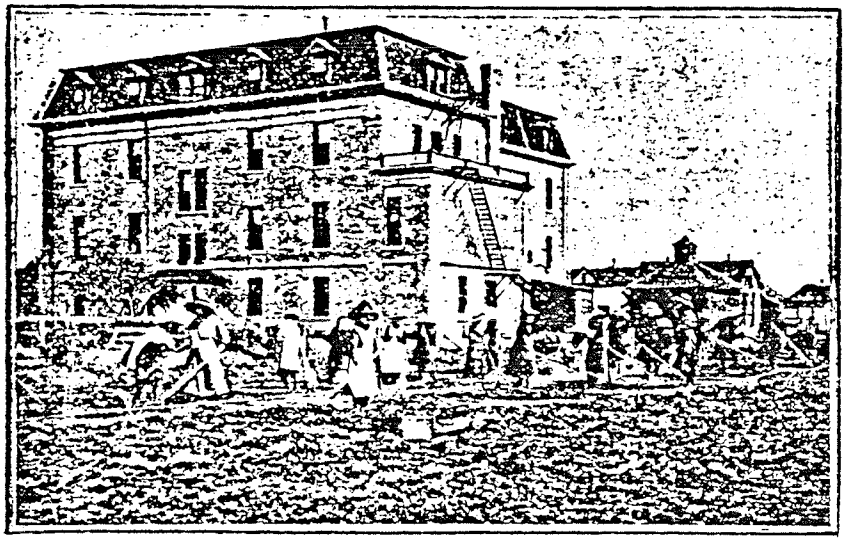
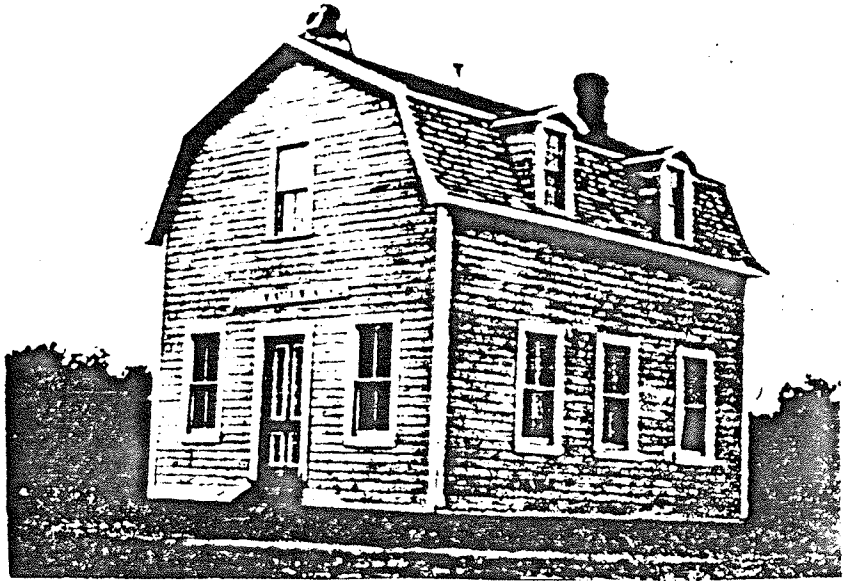


ST. JEAN BAPTISTE N. DISTRICT SCHOOL 1902



MONTCALM DISTRICT SCHOOL 1904

Picture Library of the Provincial Archives, Manitoba

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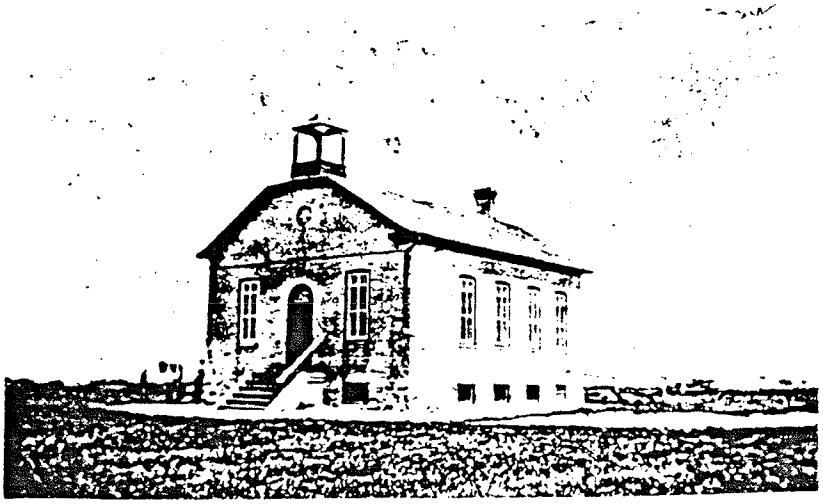
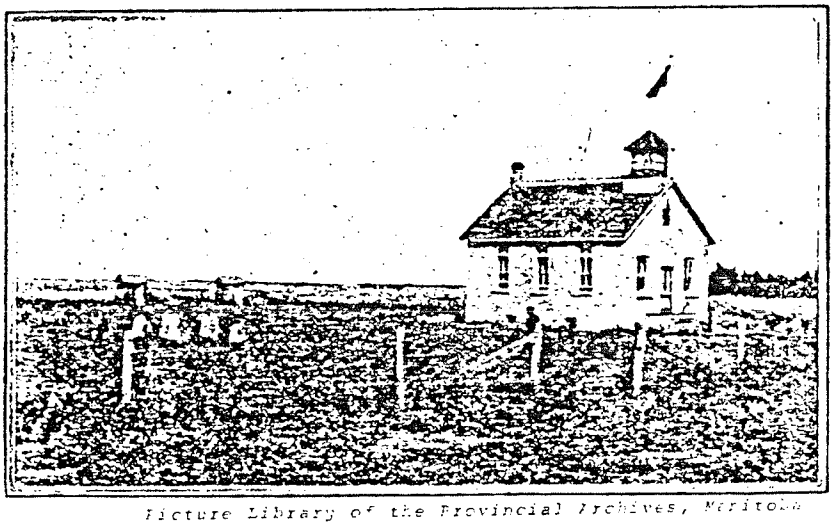
ST. BONIFACE INDIAN RESIDENTIAL SCHOOL 1895

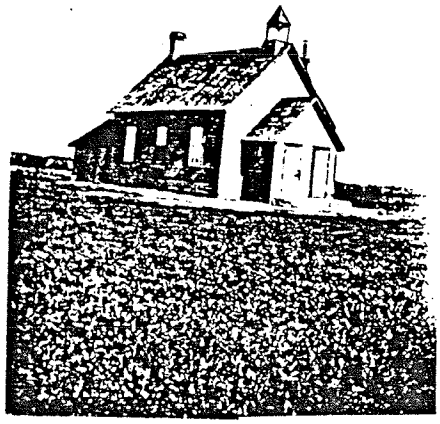
There was in some of the English speaking settlements a preference for a churchlike school. Many handsome stone and brick one-room schools were built. They invariably had rows of windows along both sides of the room. Long after the Department of Education explained the disadvantages of this cross-lighting some districts persisted in the practice. Another feature noticeable in these settlements was the inclusion of separate entrances for boys and girls. This, a carry-over from English country schools, was never advocated by the Department.

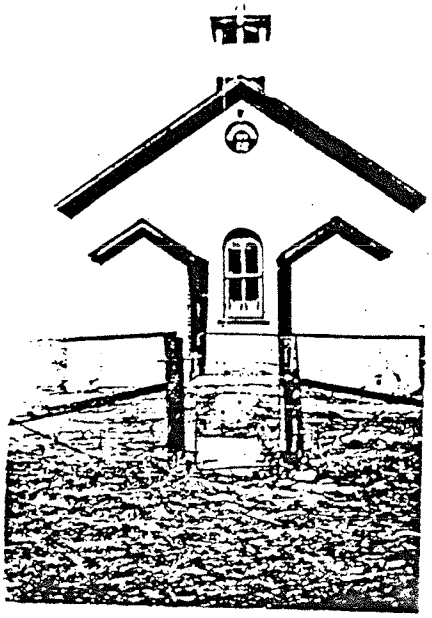


GOWANCROFT DISTRICT SCHOOL 1903



NORTH HIGH BLUFF DISTRICT SCHOOL c. 1895





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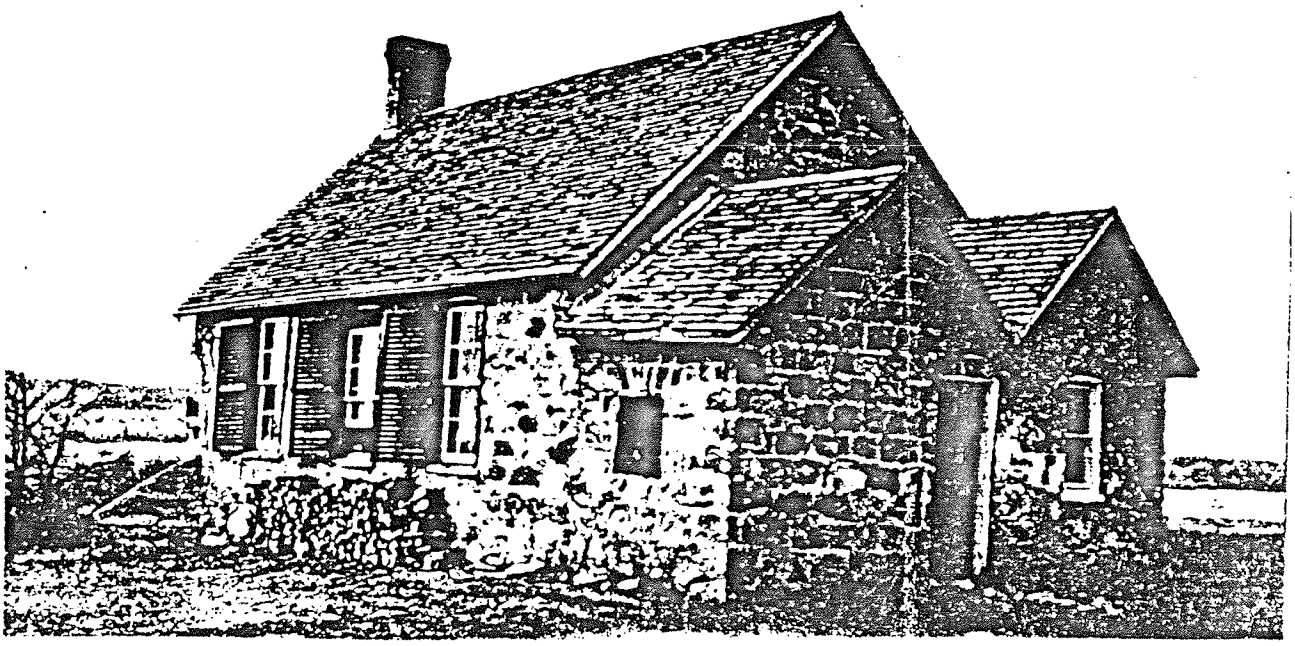
CENTREVILLE DISTRICT SCHOOL 1889

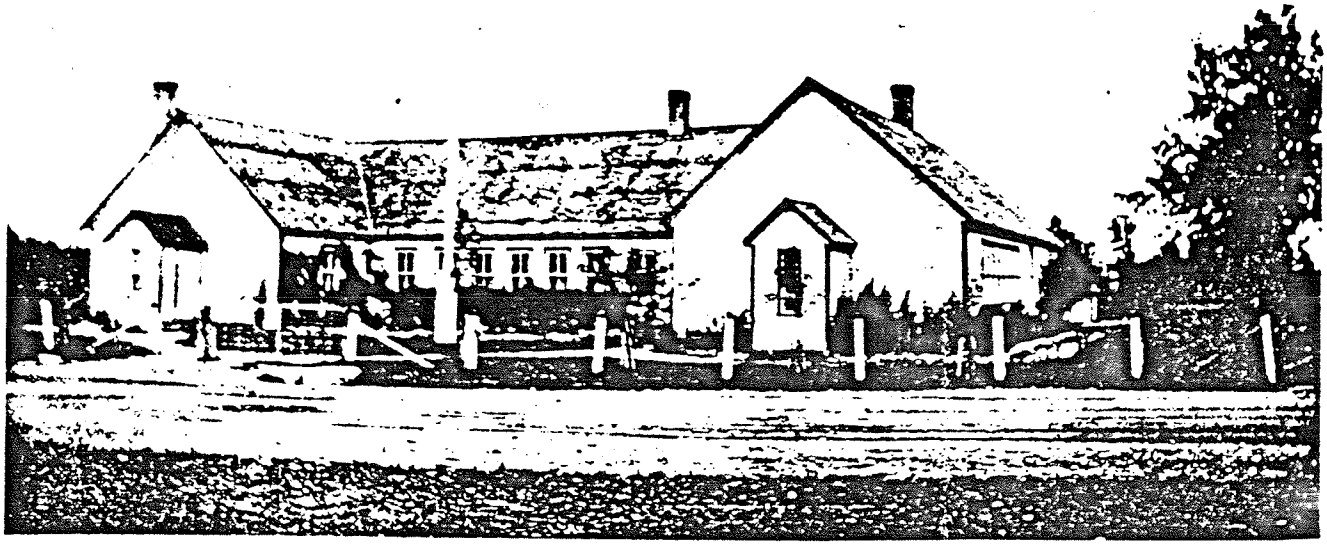
WEST POPLAR POINT SCHOOL c. 1884



RIVER VALLEY DISTRICT SCHOOL 1896

Picture Library of the Provincial Archives, Manitoba

The schools in the Mennonite settlements also had their particular style of architecture. The Mennonite schools were generally roomy frame buildings very like Mennonite farm houses. The wooden shutters, common to Mennonite farm houses, were also found on some of their schools.



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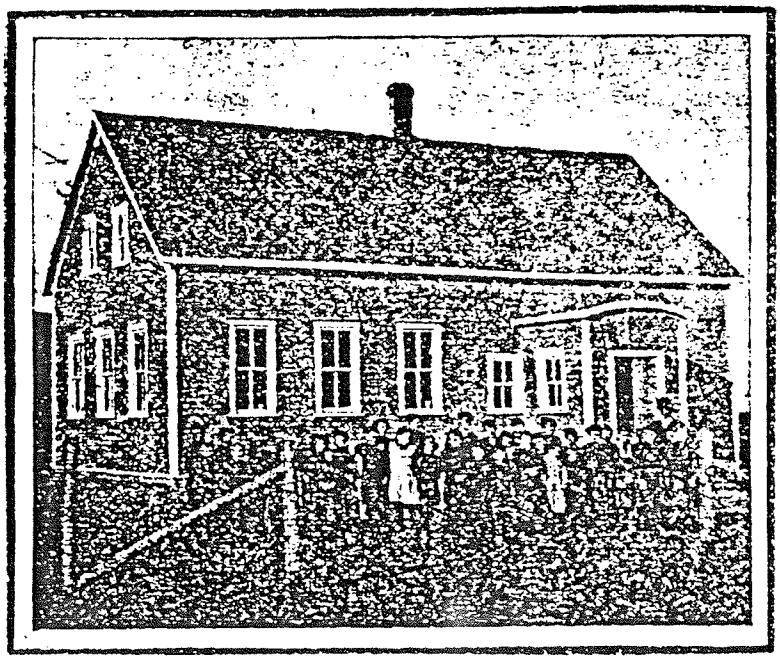
GONOR DISTRICT SCHOOL c. 1900

The Schoental School had a teacher's residence on the second floor. The presence of this residence probably indicates that a teacher had been hired from outside the community.



Picture Library of the Provincial Archives, Manitoba

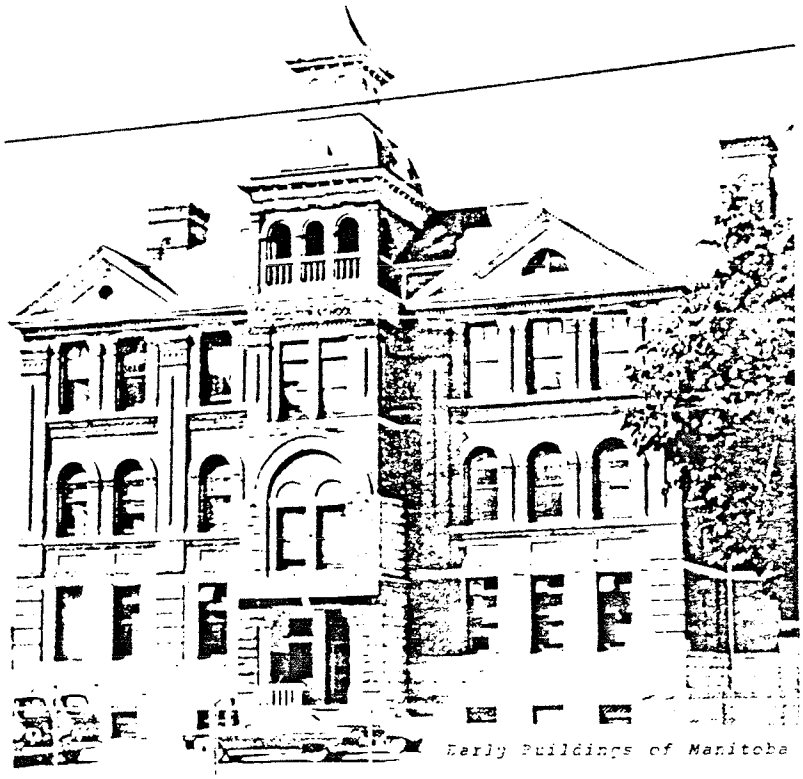
The schools in Ukranian districts were not so distinctly different, perhaps, because these districts were settled much later. The land they settled was often less fertile and their communities less prosperous. It is more this lack of prosperity that was reflected in their schools than any architectural style from their homelands.

A special school inspector was appointed for Galican schools. His 1901 report gives an interesting picture of these early settlements.

> I have learned that the idea had gone abroad among them that unless they taxed themselves to put up an expensive frame or brick or stone building the Government would not pay any grant. I was given to understand that that is one reason why they are reluctant to have schools started. I was at pain to explain that the idea was not correct; that the Government was anxious that they should not run into debt. That any building where their children could be comfortable and where work could be done to advantage would be acceptable and the grant paid. I advised, in fact, that whenever possible log buildings should be erected at as little cost as possible until settlements became more permanent and districts finally fixed.[1]

Perhaps the most noticeable difference was that between city and country schools of this period. This difference became obvious during these years and was to be of long duration.

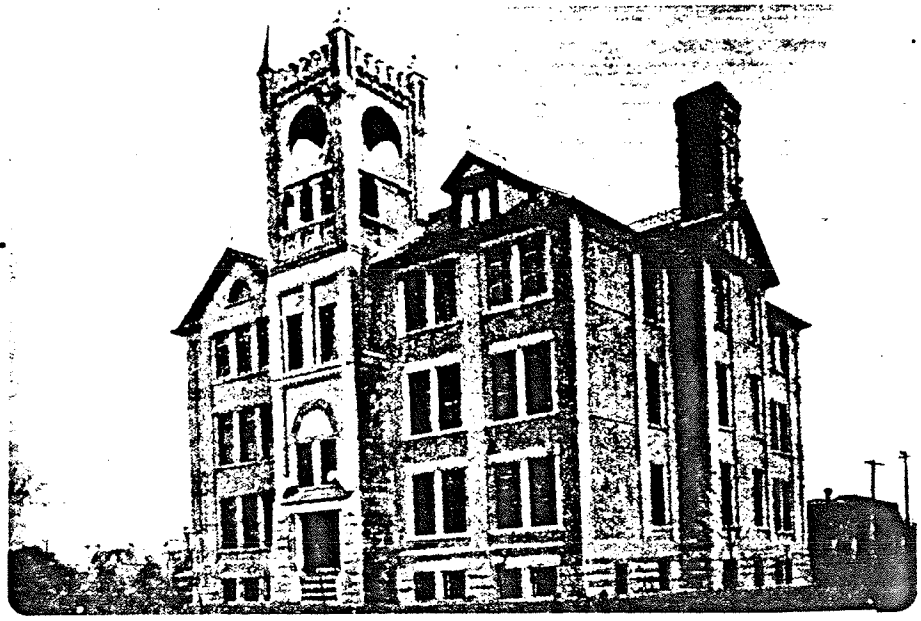
The following examples illustrate this disparity.



ISBISTER SCHOOL, WINNIPEG 1900

WELLINGTON/THORNHILL DISTRICT SCHOOL c. 1897

Keith Wilson Collection



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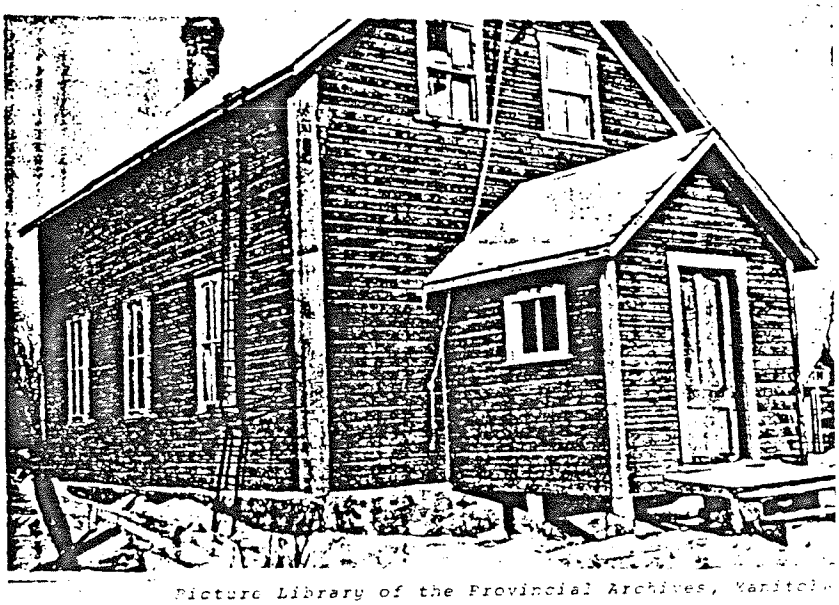
ALEXANDRA SCHOOL, WINNIPEG 1902



Picture Library of the Provincial Archives, Manitoba

ST. JEAN BAPTISTE NORTH DISTRICT SCHOOL 1901

The pressures from the Provincial Department of Education and school inspectors for higher standards in school architecture did not make any noticeable impact in the rural areas until after 1900.

Beginning in 1875 when Superintendent Tasse made his plea for "conditions of salubrity and hygiene, of comfort, order and cleanliness"[2] the annual reports of the school inspectors reiterated this plea each year.

In 1892 one inspector's report listed the "most prominent defects"[3] of rural schools. Most common were porches that were too small to store coats or lunches, ceilings too low, no provision for ventilation other than doors and windows, flues too small with openings too far from the floor, inadequate blackboard at the wrong height, and a disregard for aesthetics.

In that same year Inspector J. M. Wellwood added to that list; "too many windows which so cut up the wall that maps cannot be properly hung, not leaving the floor extended throughout, under the teacher's platform". He recommended the abolition of teacher's platforms and the provision of lunch cupboards, "placed on the wall inside and kept under the teacher's care". He queried, "Has not the time come when a little might be spent for the sake of appearances?"[4]

The following is an excerpt from an 1900 annual inspector's report:

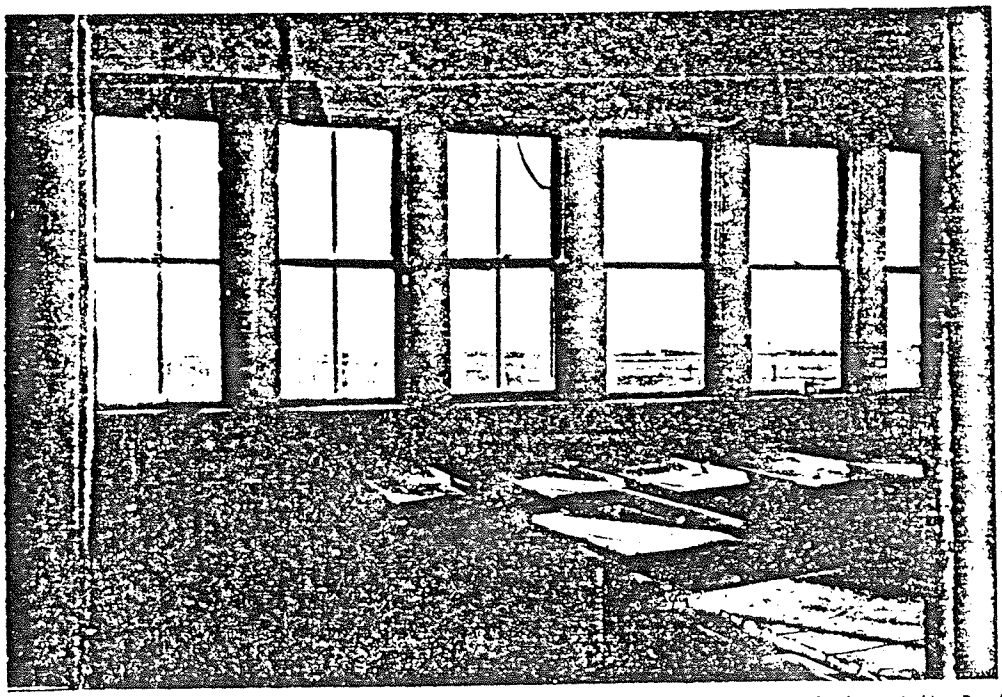
> The average school house is not a thing of beauty. It usually looks very base and bleak and uninviting, out and alone

> on the open prairie. The ugly though necessary woodpile, and the more ugly though equally necessary pair of waterclosets stand out in bold relief . . .[5]

Inspector Roger Goulet, also in a 1900 annual report, adds:

> With a view no doubt to economizing fuel the average school has small rooms and low ceilings, which render it uncomfortable and unhealthy.[6]

Some more specific complaints and suggestions concerned the lighting in the schoolrooms and the possible hazards to the eyes of the students. It was commonly believed that classroom windows should face north only to avoid having sunlight fall directly on pupils' eyes. Desks were to face east allowing the light to pass over students' left shoulders. It was believed that windows on two sides of a classroom created a cross-lighting or glare that impaired vision.



Saskatchewan Archives Board

Cross lighting in a school.

Inspector A. B. Fallis described some departures from the recommended practice.

> . . . in one district a new brick school was built last year, and in order to secure a south light turned the blind side of the school to the road. In another case the end of the school has been turned to the road in order to secure a south light. When visiting this district I learned that they were about to turn it around so as to secure an east light, while had the school been placed as it should with the door to the road there would have been a north light.[7]

Another regular complaint of the school inspectors during these early years was inadequate ventilation in rural schools. In 1900 one inspector's report included the following:

> One of the chief defects in connection with the majority of rural school buildings is a complete lack of ventilation. This is particularly noticeable in the winter months when doors and windows are closed and the attendance is at its greatest.[8]

What measures had been taken to improve ventilation were generally considered ineffective as these quotations from inspectors' reports show:

> The principle of ventilation as presented in rural schools is not effective; in some instances it does not operate at all, and in others it draws off the only pure air in the room.' and;
>
> In a number of cases furnaces have been put in instead of a stove (I refer to rural schools), and there is absolutely

> no provision for fresh air. The air is drawn off the floor down into the furnace, heated and sent into the room again.[10]

The heating of schools also became a source of complaint throughout these years. Although the incorporation of stoves had so recently been hailed as progressive as it extended the school year, it was by no means an ideal solution as the following reports show:

> Last year I visited schools where, owing to the extreme cold, very little was accomplished during the first half of the day. The children took turns at the stove, or racing through the aisles to encourage circulation, while the teacher and the inspector, as first and second stokers, endeavored to provide more temperate conditions. If we consider the loss in such cases from the unnecessary consumption of fuel, the payment of a day's wages for half a day's teaching, the hardship, the loss of time to the children, etc., The only conclusion to be reached is that the cheap, thrown-together class of school house is a painful and extravagant blunder[11]

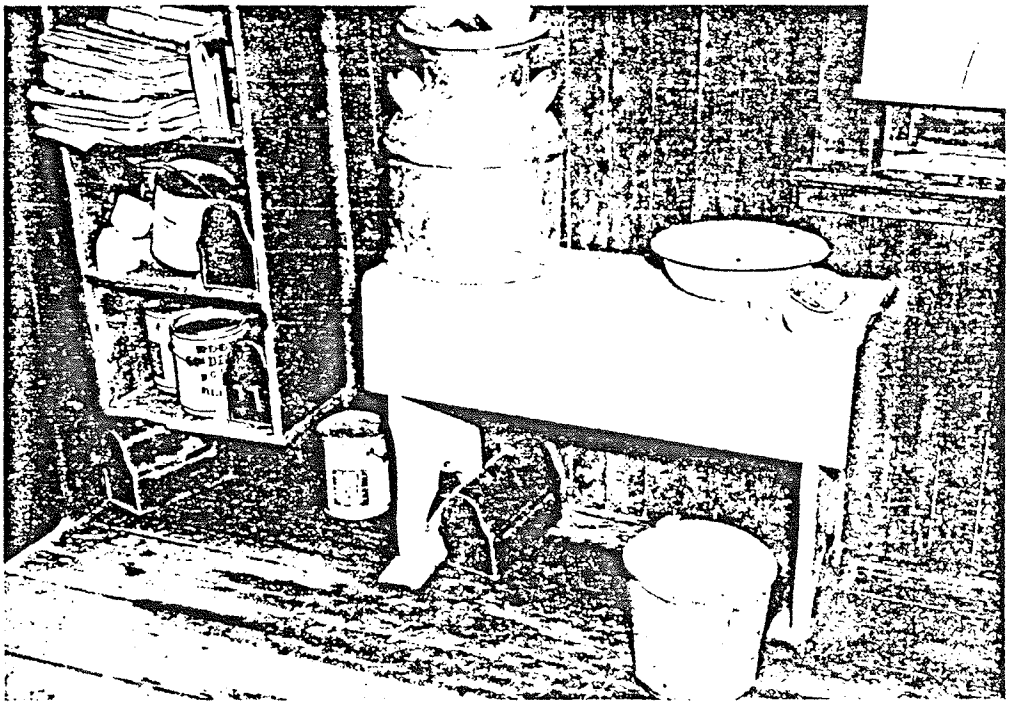
The sanitary conditions of these early schools were also much deplored by school inspectors. The sources of drinking water and provisions for toilets were probably much the same as those found in the homes of the students; however, when shared by thirty to fifty others they became a serious threat to their health. The following three excerpts from inspectors' reports reveal some of the unhappy conditions:

> The water supply is a serious problem. There is not sufficient use made of school wells to keep the water good, and unless a drive well or a bored one, can be obtained, it is better to sink a

barrel in the north side of the building and hire a man to fill it once a week, and keep it well covered.[12]

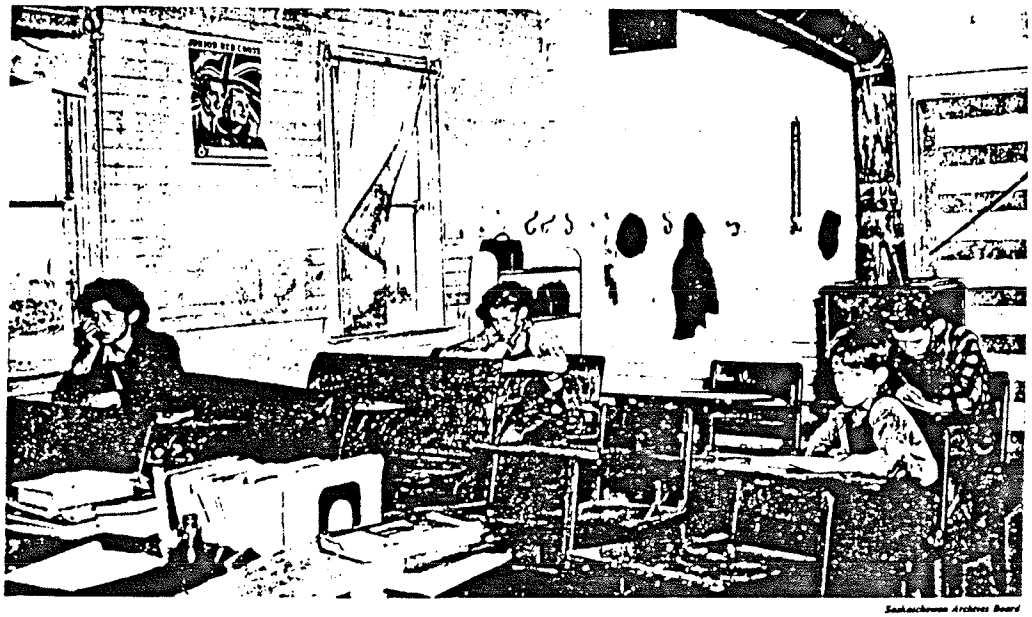
. . . outbuildings in rural districts are frequently in a most lamentable condition. Often they stand side by side with no screen between. In the winter they are generally filled with snow.[13]

One cannot feel but aggrieved when children's clothing are found to be hanging in the unheated porch during the severe days of winter. There is a cause for great discomfort to the children and a serious menace to their health. In some cases nails have been driven into the walls around the classroom, the blackboard trough not being exempt from the misplaced ornament. The inconvenience of this condition of things are many. We may mention the unpleasant appearance given to the schoolroom by that arrangement and the anti-hygenic effects of such a surrounding.[14]



Saskatchewan Archives Board

School water supply and common drinking cup.



School heated by a stove. Date and location unknown.

The school inspectors, as if in conspiracy, pressed the Department of Education for tighter controls and more effective means of influencing school design and construction. The following excerpts from their reports of 1900 and 1901 bear this out.

> The need for definite information for school trustees is becoming more evident each year. In many of the older districts, where new schools are being put up, they can afford a good building, and it is their wish to have the best that can be got, but they are handicapped for want of knowledge of the conditions to be met. They are dependent upon the local contractor and architect. His chief concern is to get a good substantial building that will look well from the outside. The consequence is that there are schools going up each year badly lighted, ventilated, and inconveniently arranged otherwise for the purpose in view, and costing anywhere from $500 to $1000 each.[15]

> In connection with the erection of new school buildings I find that the trustees, as a rule, are anxious to put up a school which will be a credit to the district, but considerable difficulty is experienced in securing accurate and definite information in regard to the requirement of a modern school house.[16]

> It is desirable that the Department should cause printed circulars to be issued and distributed to the districts about to build; the circulars to give plans and specifications of school houses adapted to the average rural school district.[17]

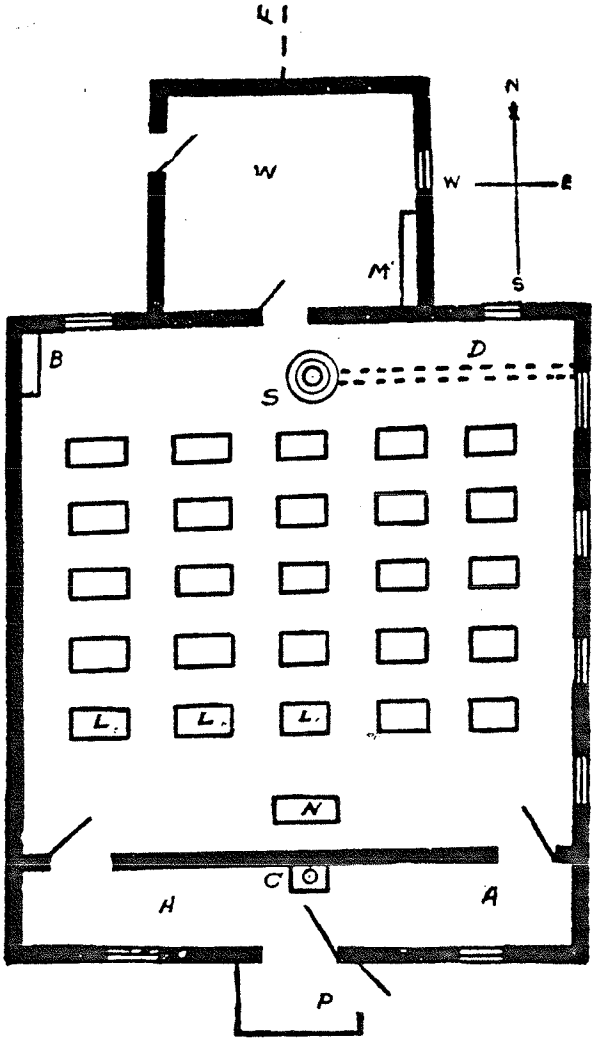
> The heating, lighting and ventilating of the rural school are matters of too great moment to be left to the decisions of ignorant or unscrupulous contractors.[18]

> A number of school buildings . . . do not come up to the standard required by the Department of Education, but I have been slow to condemn them as I feel it is the duty of the Department to supply trustees with such information as will ensure the erection of school houses properly located on the school ground, well lighted, well ventilated, etc.[19]

It appears that teachers also became involved in this campaign for improved school buildings. This article appeared in the Educational Journal of Western Canada, in 1901.[20]

A MODEL SCHOOL-ROOM WANTED.

The following rough plan for a one-roomed school has been handed in for criticism. Will our teachers kindly suggest improvements. It is not necessary to make a new plan, but a statement on any one point would be most acceptable.



PLAN OF RURAL SCHOOL HOUSE.

BUILDING.—28 ft. x 32 ft. (To seat 35 pupils.)

A—Anteroom, 5ft. wide.

P—Winter porch (movable.)

W—Woodshed.

M.—Case for storing storm sash.

LIGHTING.—Light admitted from East and North sides. Window sills at back 4 feet from floor. Height as great as the school wall will permit. Window space equal to ⅛ of floor space.

VENTILATION.

S.—Stove on furnace principle.

D.—Duct communicating with outside air.

C.—Chimney, enclosing heavy stovepipe, for ventilation purposes. Duct leading to the chimney commencing at the floor (not shown in cut.)

BLACKBOARDS.—South and West walls reserved for blackboards. Each blackboard 22 inches from floor.

L.L.L.—Single seats—aisles 2½ ft. wide—pupils facing South wall.

B.—Closet for supplies, upper portion for school library.

F.—High fence going to back of school grounds.

One duct was to feed outside air to the stove so that the oxygen in the classroom would not be drawn off by the fire. The duct surrounding the chimney created a ventilating flue that served to draw off impure air near the floor.

It also appears that the requests of the school inspectors for a set of plans and specifications that could be circulated to school district trustees were granted.

Three plans for one room schools, designed by a Winnipeg architect, Samuel Hooper, appeared in the Western School Journal in 1906. As many examples of these plans were built in Manitoba it is likely that these are the plans referred to by many school inspectors in their annual reports from this date.

Inspector T. M. MacGuire in his 1906 report writes:

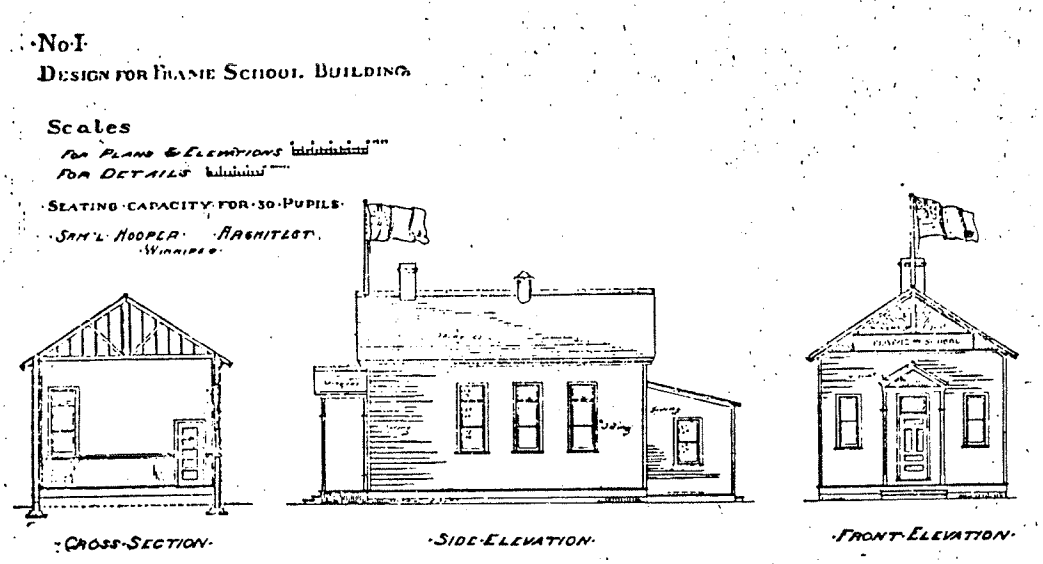
> With regard to the building of new schools, the plans and suggestions issued by the Department of Education a year ago are helpful when trustees are disposed to follow them.[21]

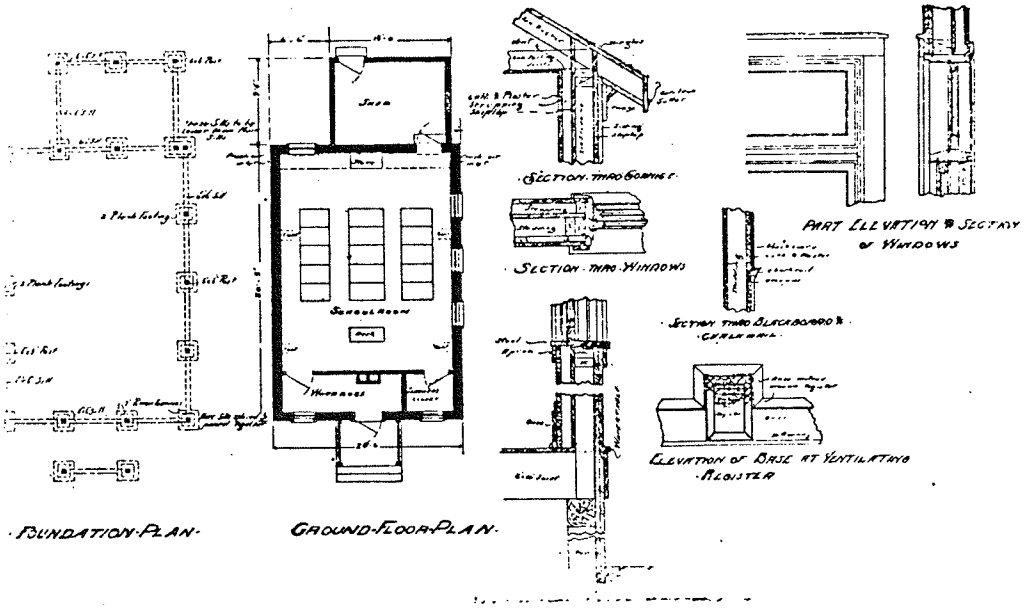
Many modifications were no doubt made to these plans by the various school districts. Inspector E. E. Best, an advocate of such plans, did not rest with their publication. He felt that further improvement could be made:

> For the benefit of those about to build, I would advise a modification of the given model. (I presume Plan No. 2) There are too many partitions, corners and box stalls in the plan. The cloakroom with one of its windows might be dispensed with, and the "teacher's room" - a sort of catch all for old maps, broken globes, etc. - should be changed to an entrance for girls. These changes would add much to the appearance and usefulness of the room without increasing the cost.[22]

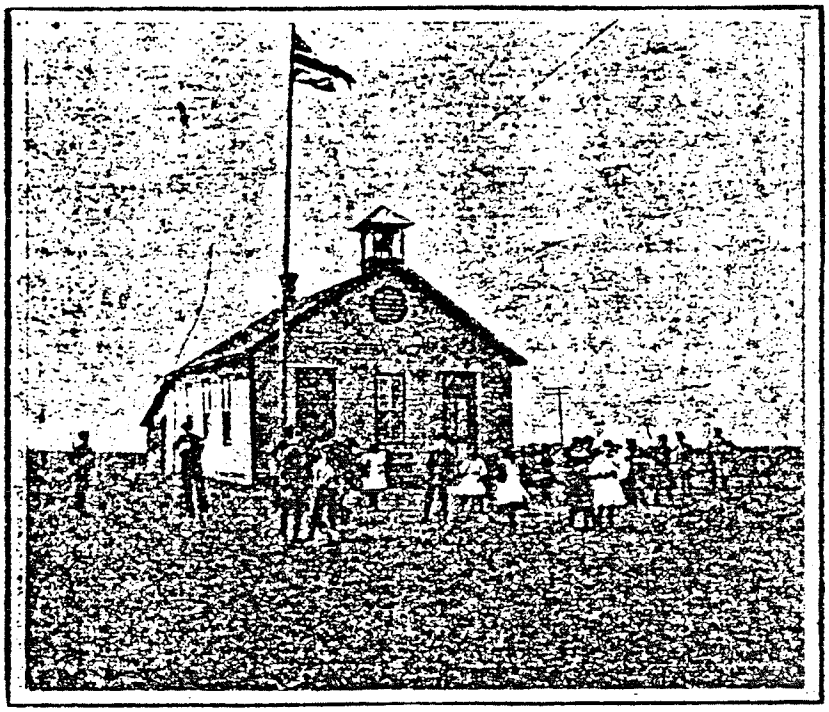
Plan No. 1, a thirty by twenty-six foot building still had provision for a stove in the classroom. Stovepipes appear to have run the length of the classroom as the stove was positioned at the rear while the chimney was at the front. The teacher's platform has been eliminated and a

porch and heated cloakroom incorporated. Vents along the outside walls are specified as well as a roof ventilator, and all windows open at both the top and bottom and are placed along one side of the classroom only.



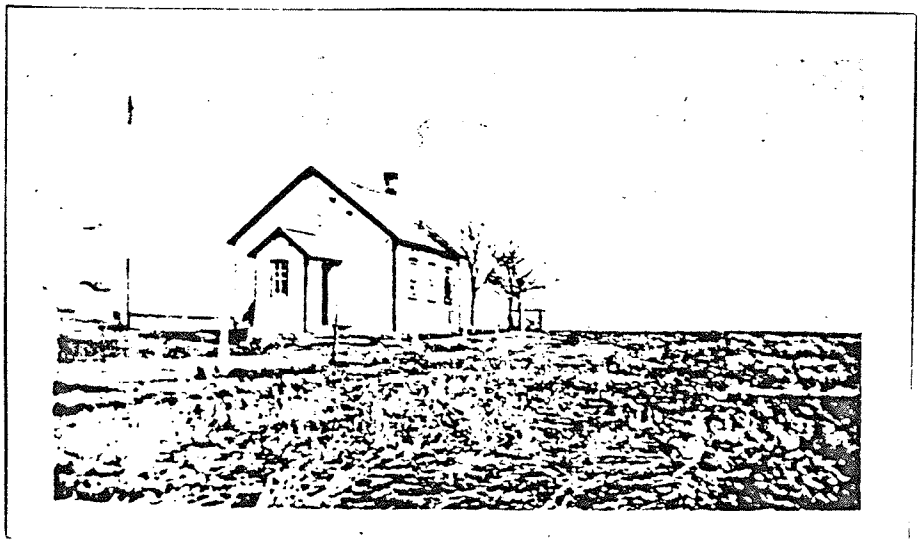


Examples of Plan No. 1:



EAST PROSPECT DISTRICT SCHOOL 1909

Picture Library of the Provincial Archives, Manitoba



RICHVIEW DISTRICT SCHOOL

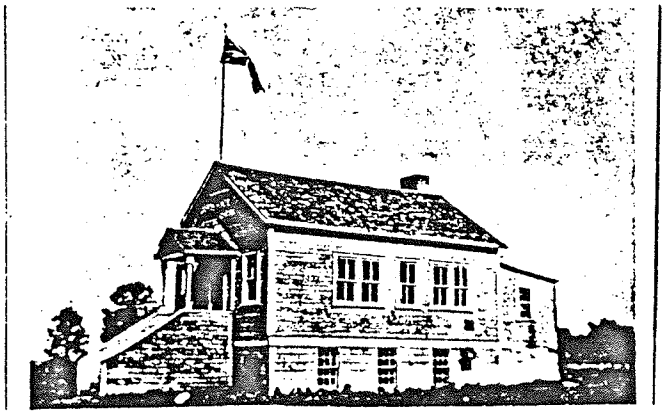
Picture Library of the Provincial Archives, Manitoba

TREESBANK DISTRICT SCHOOL

Picture Library of the Provincial Archives, Manitoba

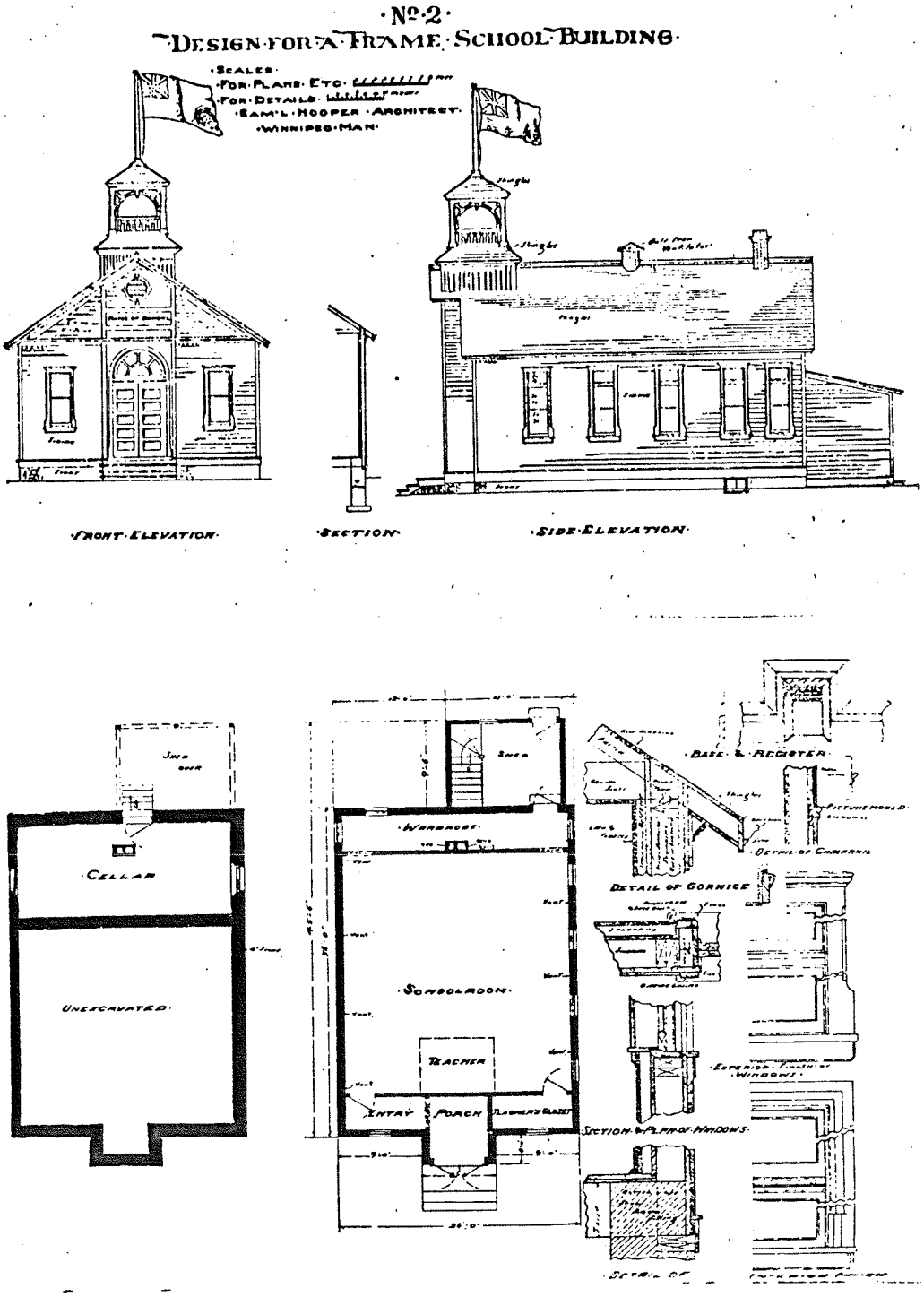
These examples of Plan No. 1 do not appear to have the windows opening at both the top and bottom as specified by the Department. The awnings on the Treesbank School were obviously an attempt to rectify this omission.

Laufas School is an example of the Plan No. 1 set upon a basement, perhaps to provide a playroom or second classroom.



LAUFAS DISTRICT SCHOOL

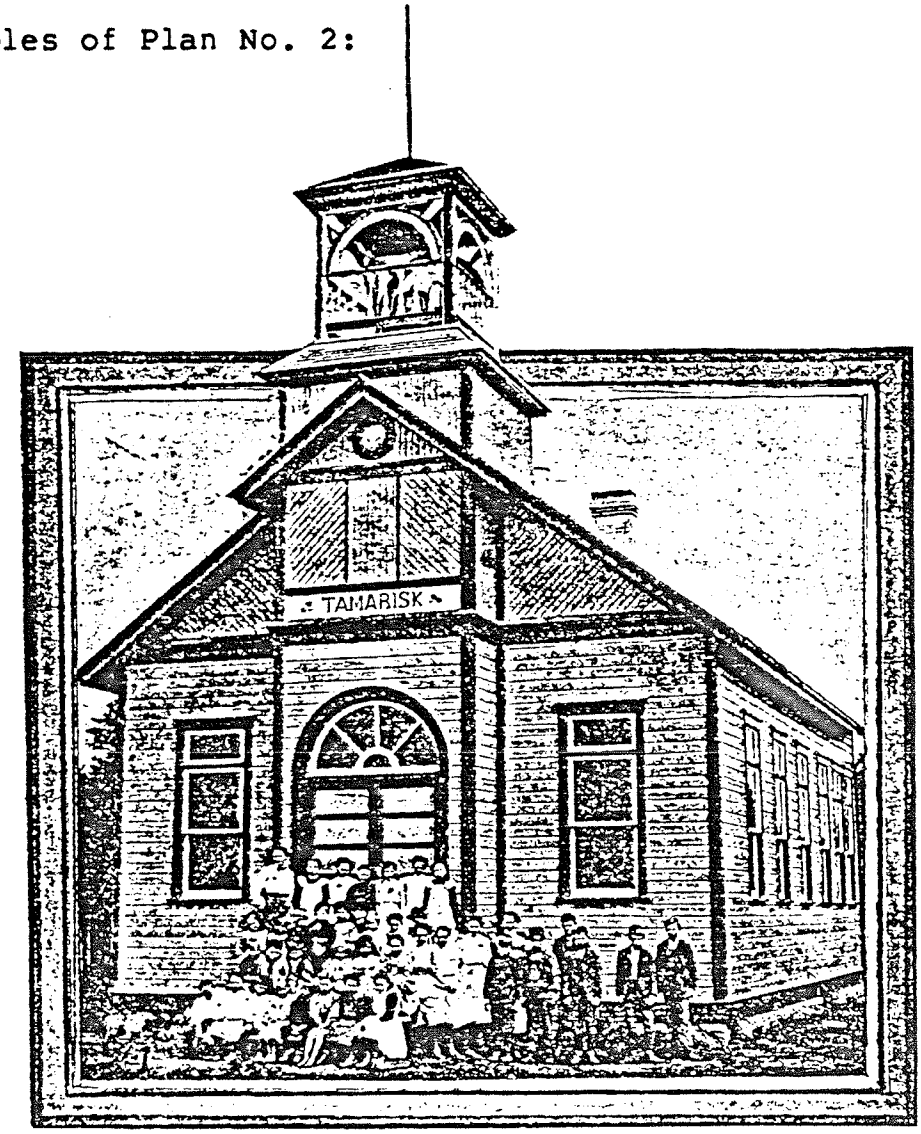
Picture Library of the Provincial Archives, Manitoba



Plan No. 2, a larger thirty-six by twenty-six feet, has a stone foundation and partial basement for a furnace and fuel

storage specified. It has an optional teacher's platform. The porch or double entry serves to trap the cold air before it enters the classroom and the cloakroom is in the heated area. Registers from the furnace are placed at the base of the outside walls.

Examples of Plan No. 2:



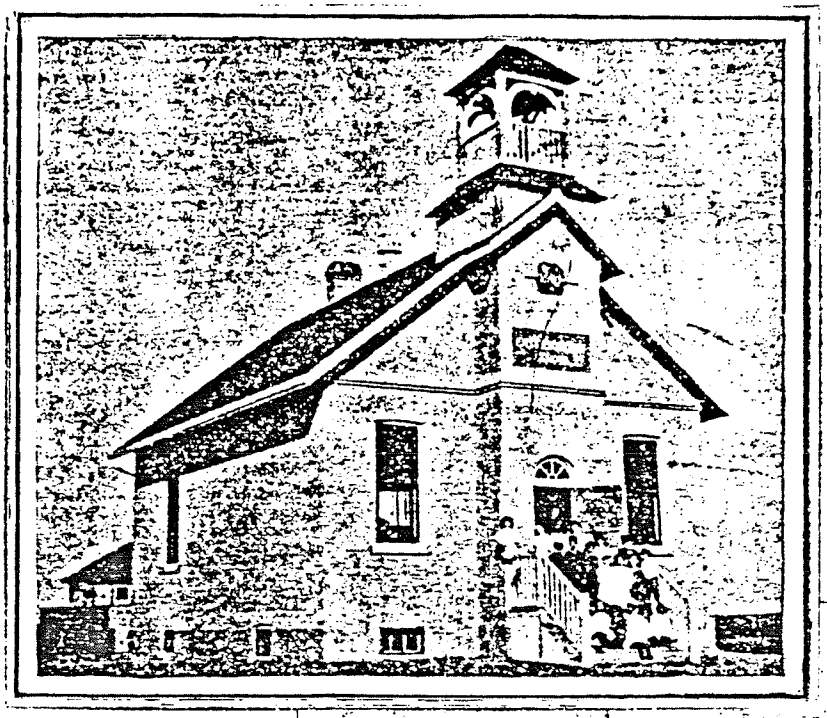
TAMARISK DISTRICT SCHOOL c. 1912

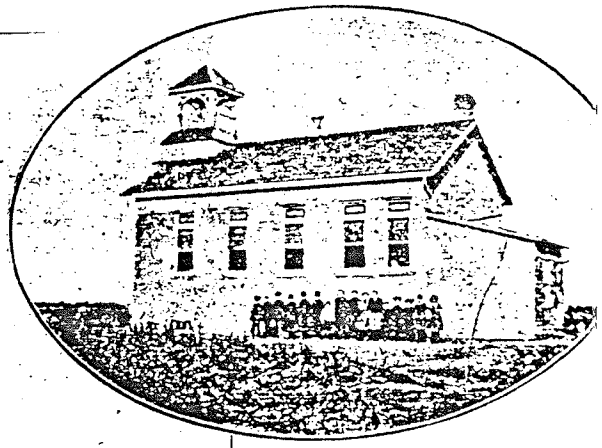
Picture Library of the Provincial Archives, Manitoba

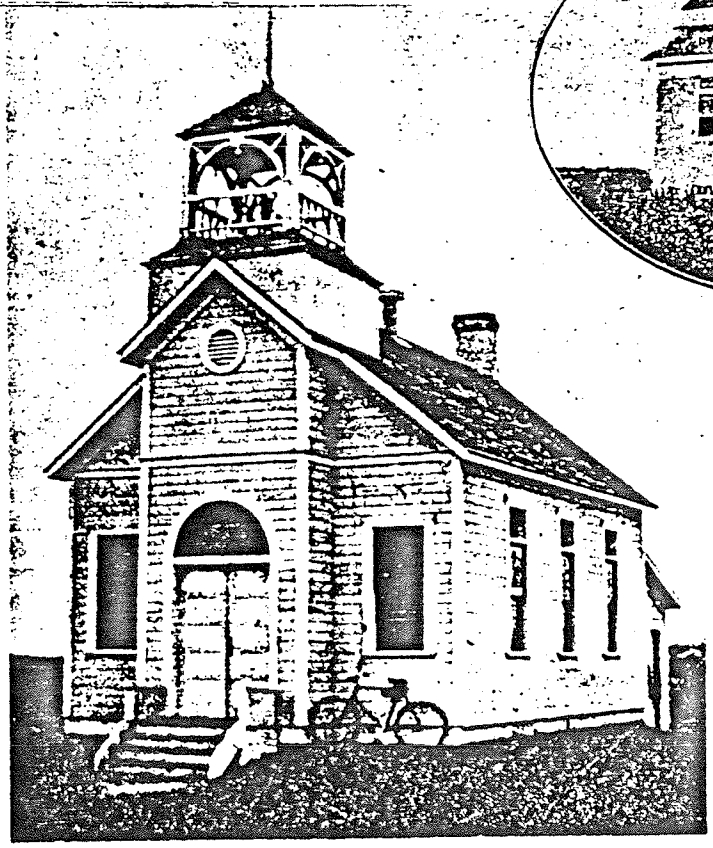
EAST PROSPECT DISTRICT SCHOOL c. 1910

ELMWOOD DISTRICT SCHOOL c. 1910

SILVER PLAINS DISTRICT SCHOOL c. 1911







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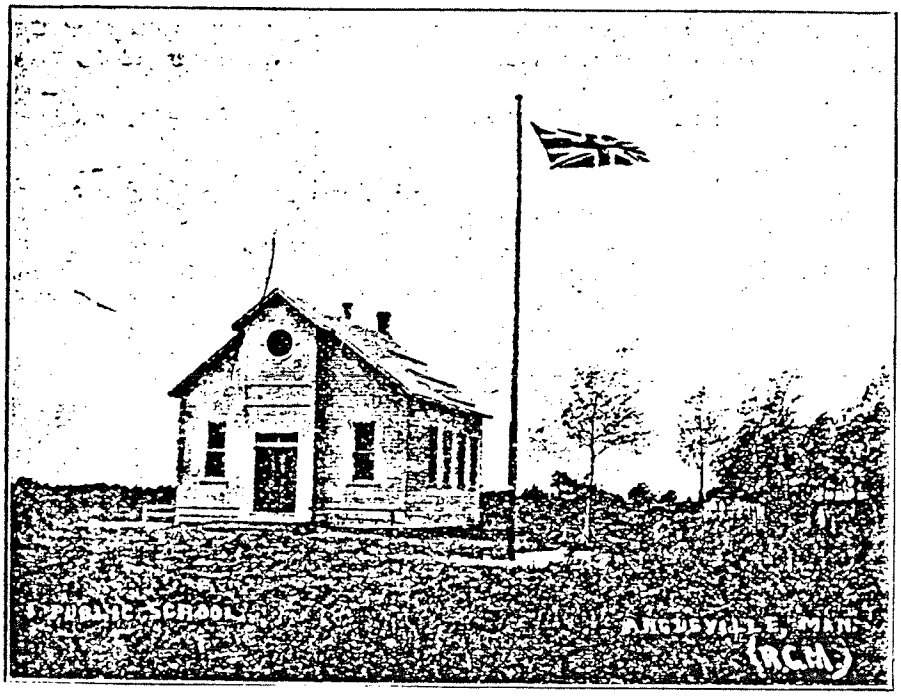
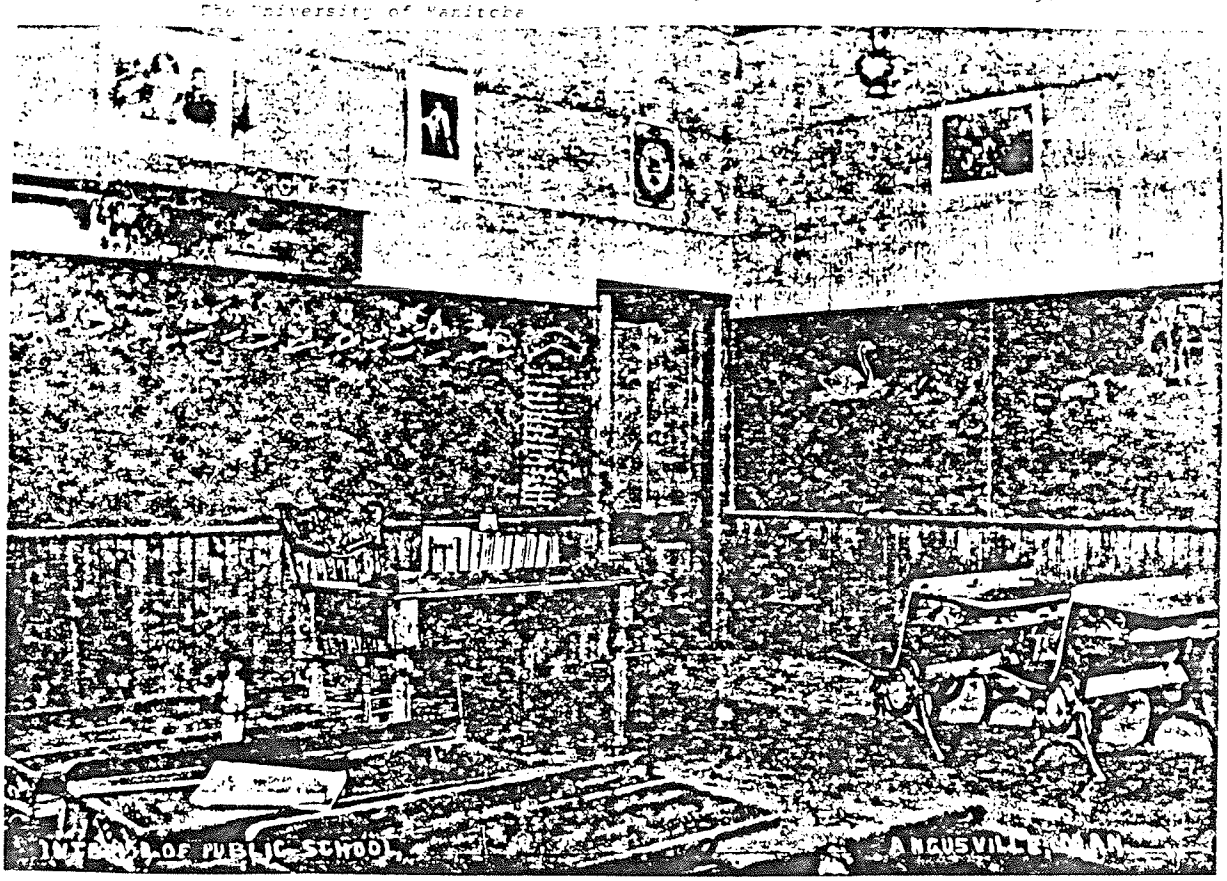


ANGUSVILLE DISTRICT SCHOOL

The Archives and Special Collections Dept., Elizabeth Dafoe Library, The University of Manitoba



ANGUSVILLE DISTRICT SCHOOL (interior)

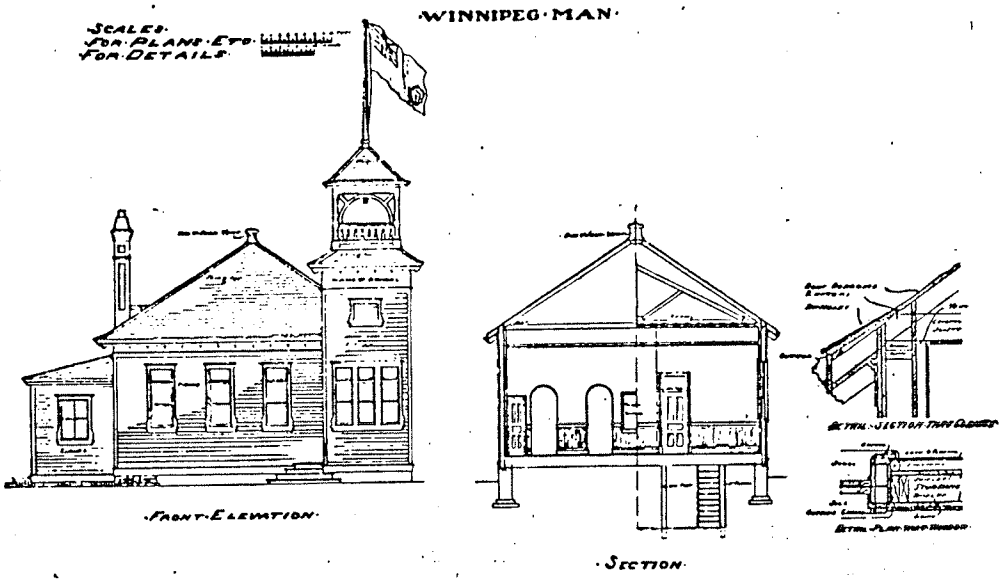
The Archives and Special Collections Dept., Elizabeth Dafoe Library, The University of Manitoba

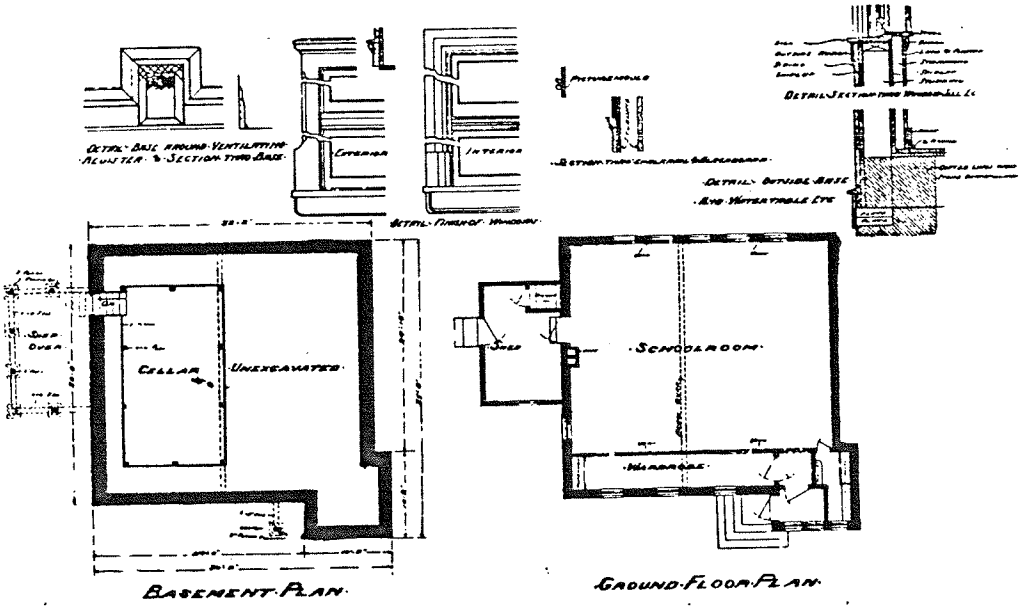
·No 3·

·DESIGN FOR A FRAME SCHOOL BUILDING·

·SAM'L HOOPER ARCHITECT·

·WINNIPEG MAN·





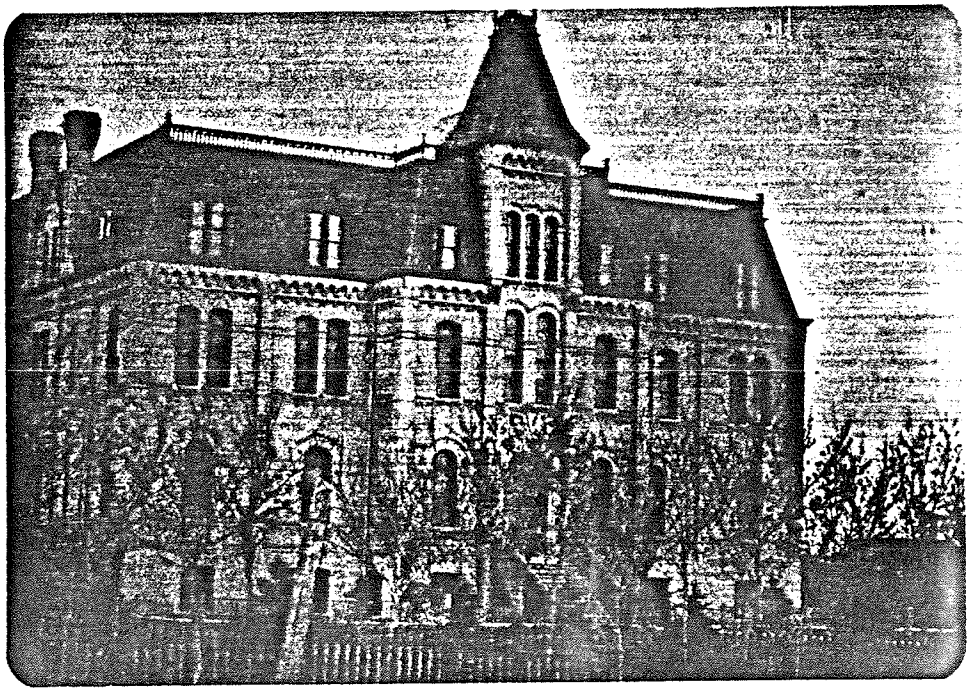
An example of Plan No. 3:

UNION POINT DISTRICT SCHOOL

During the years 1890 to 1906 the demand for secondary schooling grew. This demand resulted from the maturing of the Province and the success of its first schools. Once communities had become established and livelihoods assured one of the first luxuries they afforded themselves was more education for their children. Greater prosperity meant older children could be spared from work to stay in school. Improved school architecture also contributed to longer school careers; schools that were properly heated could remain open throughout the winter. Proper ventilation and improved sanitary conditions meant fewer days lost through illness. Generally, more comfortable schools heightened the desire of children to attend more regularly and for more years. Improved school buildings attracted more qualified

teachers who remained for longer periods. All these factors resulted in more learning, more preparation, and more desire for higher education.

Prior to 1890 so few students continued on to high school that they could easily by accommodated within the elementary schools in collegiate departments under a teacher with some higher qualifications. As early as 1892, however, Winnipeg School District had enough high school students to warrant building a special high school, the Winnipeg Collegiate.



Keith Wilson Collection

WINNIPEG COLLEGIATE INSTITUTE 1892

The following information is from an 1892 inspector's report:

Winnipeg Collegiate Department:

(formerly occupied upper flat of Central School) located Kate, Bannatyne, Lydia, and William 2 acres

Contract for building	$22,793
Heating, ventilation, closets (Smead-Dowd)	2,755
Fire escapes	1,000
Furniture 500 desks @ $4.00	2,000
Laboratory	400
Teachers tables, chairs, etc.	100
	29,089
Site	8,000
	$37,048

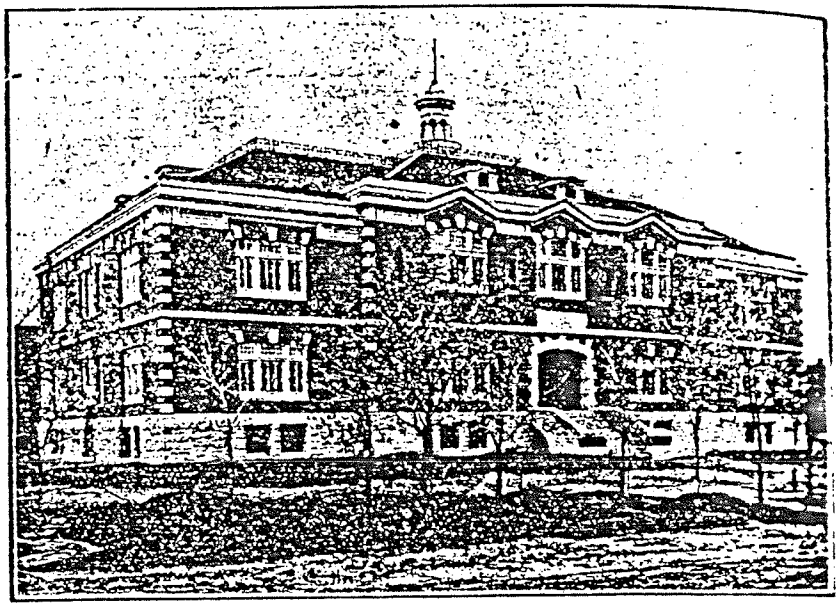
Dimension 88 X 66 feet

The building has a basement utilized for heating apparatus and storage rooms, with four large exercise rooms, two for boys, and two for girls.
The ground floor and first floor contain four classrooms thoroughly lighted and ventilated each accommodating 50 pupils. The halls are very wide and airy; and the passages for cloaks and caps convenient for ingress and egress of scholars.
The upper flat of the building contains two classrooms, which will probably be used for science classes, and there is also a good sized hall suitable for public gatherings.[23]

Both Brandon and Portage la Prairie had collegiate departments in their schools by 1892 and special collegiate buildings by 1904.

An 1892 inspector's report:

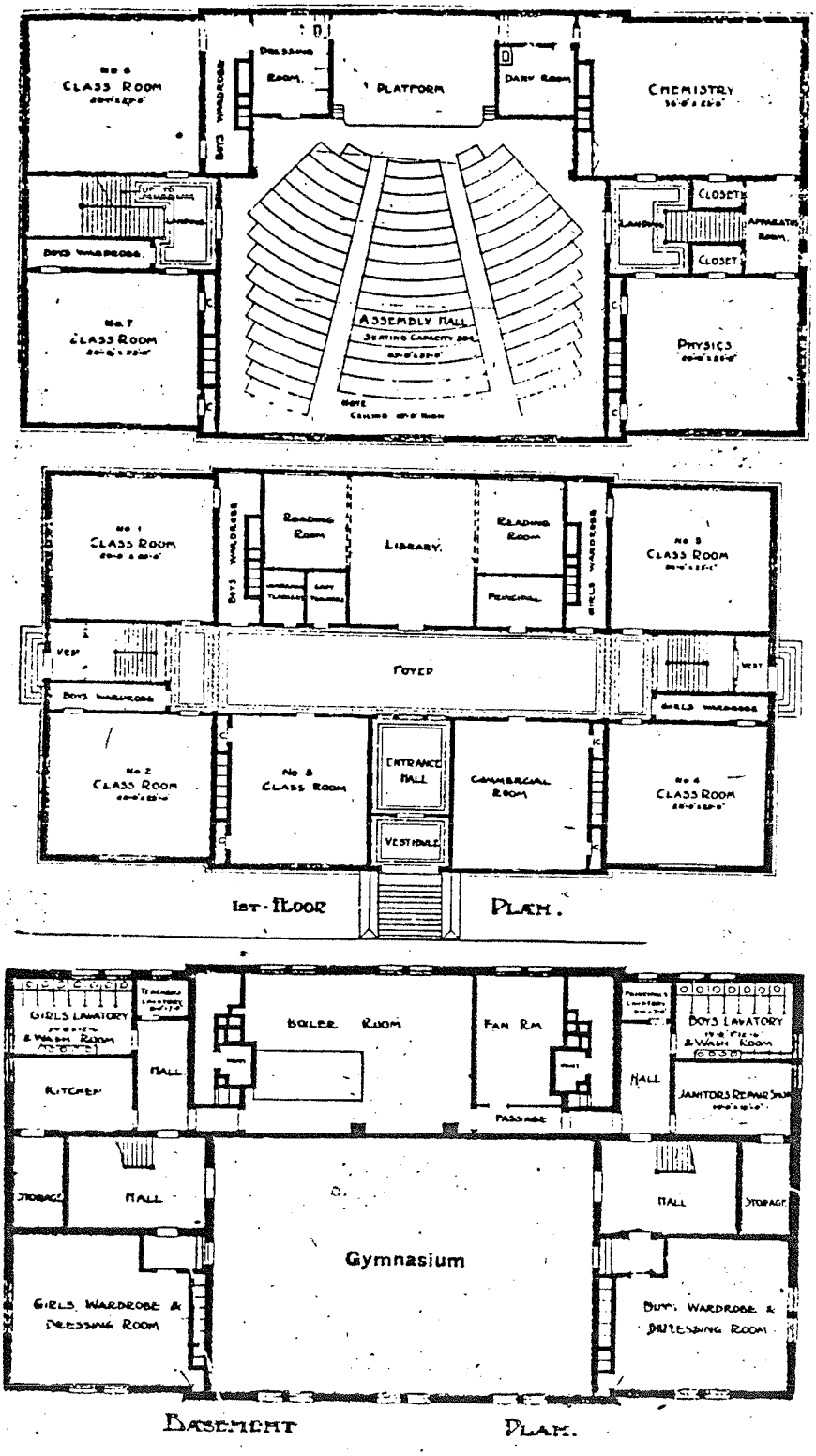
> Brandon . . . capacity 500 pupils . . . The new school building of which the stone foundation is already built, and which is intended to accommodate the Collegiate Department as well as the lower grades, is being erected on a lot costing $10,000. The building will cost $35,000, will contain sixteen rooms, and be thoroughly fitted up: the Smead-Dowd system being used. It reflects credit on Brandon to have undertaken so commodious and suitable a school building.[24]



BRANDON COLLEGIATE INSTITUTE 1904

Picture Library of the Provincial Archives, Manitoba

BRANDON COLLEGIATE INSTITUTE



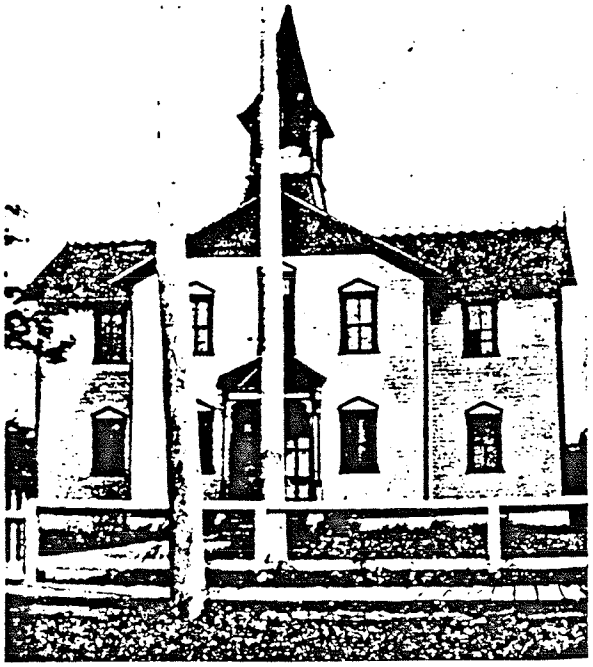
Picture Library of the Provincial Archives, Manitoba

Not all of the Province's first intermediate or high schools were as grand as Brandon's first collegiate but they were generally larger and more monumental than elementary schools had been. They were, as a rule, two or three storey buildings of solid brick or brick veneer over frame construction with high stone basements. Invariably some classical architectural features were incorporated into the facades.

The Miami District is reported to have added two rooms to its intermediate school in 1903.[25]

MIAMI INTERMEDIATE SCHOOL c. 1895

The Hills Of Home



GRETNA INTERMEDIATE SCHOOL 1892

Picture Library of the Provincial Archives, Manitoba

5.1 CONCLUSION

During the period 1890 to 1906 school architecture in Manitoba lost much of its picturesque but primitive style and became considerably more sophisticated. School construction peaked during these years with some 275 schools being erected between 1895 and 1900. Despite the Department of Education's progress in upgrading standards in school design, safety and hygiene, dramatic disparities developed between older and larger centres and the newly settled rural districts. By 1906 school architecture had plainly begun to reflect the success of Manitoba's first settlements and the ambitions of their civic leaders.

REFERENCES

[1] Report of the Department of Education for the year ending Dec. 31st, 1904.

[2] Report of the Superintendent of Catholic Schools in the Province of Manitoba, 1874 - 75.

[3] Report of the Department of Education for the year ending Dec. 31st, 1892.

[4] ibid.

[5] Report of the Department of Education for the year ending Dec. 31st, 1900.

[6] ibid.

[7] ibid.

[8] ibid.

[9] ibid.

[10] ibid.

[11] ibid.

[12] Report of the Department of Education for the year ending Dec. 31st, 1892.

[13] ibid.

[14] Report of the Department of Education for the year ending Dec. 31st, 1906.

[15] Report of the Department of Education for the year ending Dec. 31st, 1900.

[16] Report of the Department of Education for the year ending Dec. 31st, 1901.

[17] Report of the Department of Education for the year ending Dec. 31st, 1900.

[18] ibid.

[19] Report of the Department of Education for the year ending Dec. 31st, 1901.

[20] "A Model School Wanted", Educational Journal of Western Canada, April, 1901, Vol. III, No. 2, p. 40

[21] Report of the Department of Education for the year ending Dec. 31st, 1906.

[22] ibid.

[23] Report of the Department of Education for the year ending Dec. 31st, 1892.

[24] ibid.

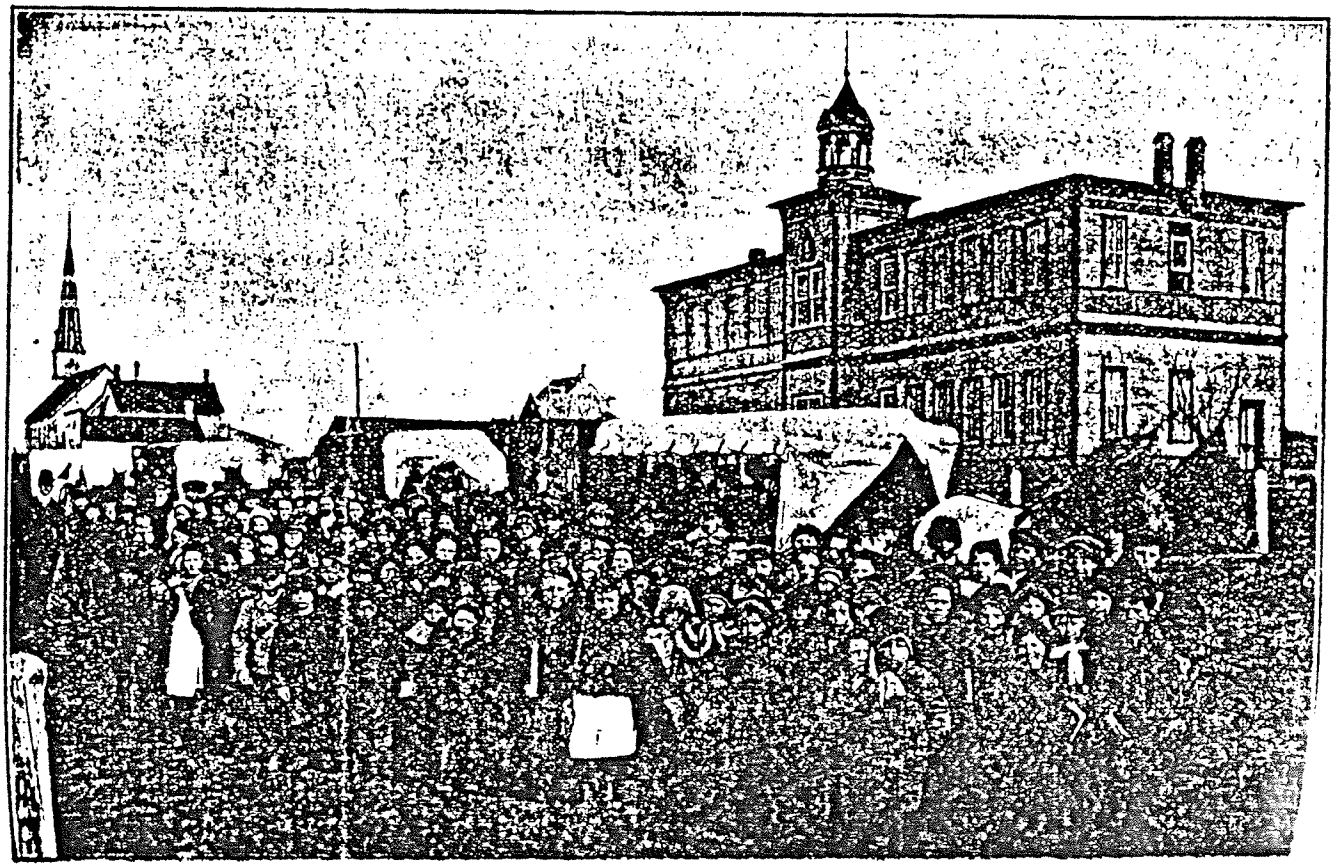
[25] Report of the Department of Education for the year ending Dec. 31st, 1903.

Chapter VI

THE YEARS 1907 - 1959

The period 1907 to 1959 may be defined as the period of the consolidated school. The first consolidated school districts were formed in 1906-07. By 1959 the first unitary divisions were formed ushering in another era of school architecture.

Both the growing demand for higher education and the movement to consolidate small rural school districts had profound effects upon school architecture. Both developments brought to rural Manitoba larger, more monumental buildings with more complex plans and varied spaces. Much of the disparity between city and country school facilities disappeared.



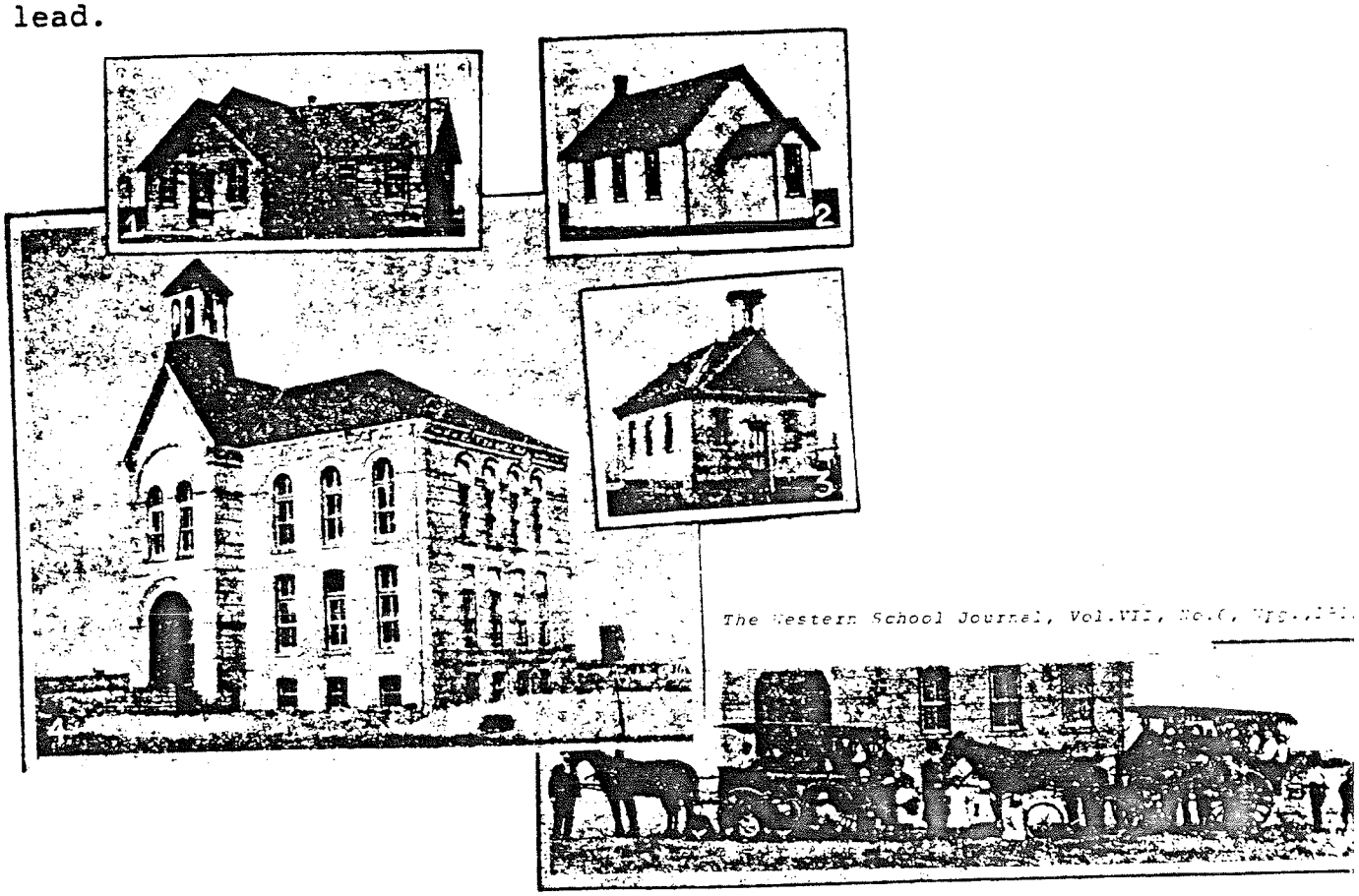
HOLLAND CONSOLIDATED SCHOOL WITH VANS 1906

Picture Library of the Provincial Archives, Manitoba

The first districts to test the feasibility of consolidation were the rural districts of Holland and Dawson. Four school vans were hired and children were driven as far as six miles to school in the village of Holland. After four years the consolidated experiment at Holland was assessed. It was agreed that attendence had been more regular although the school still had to be closed each spring when roads broke up. No savings were made. The following excerpt from that area's school inspector's report attests to this:

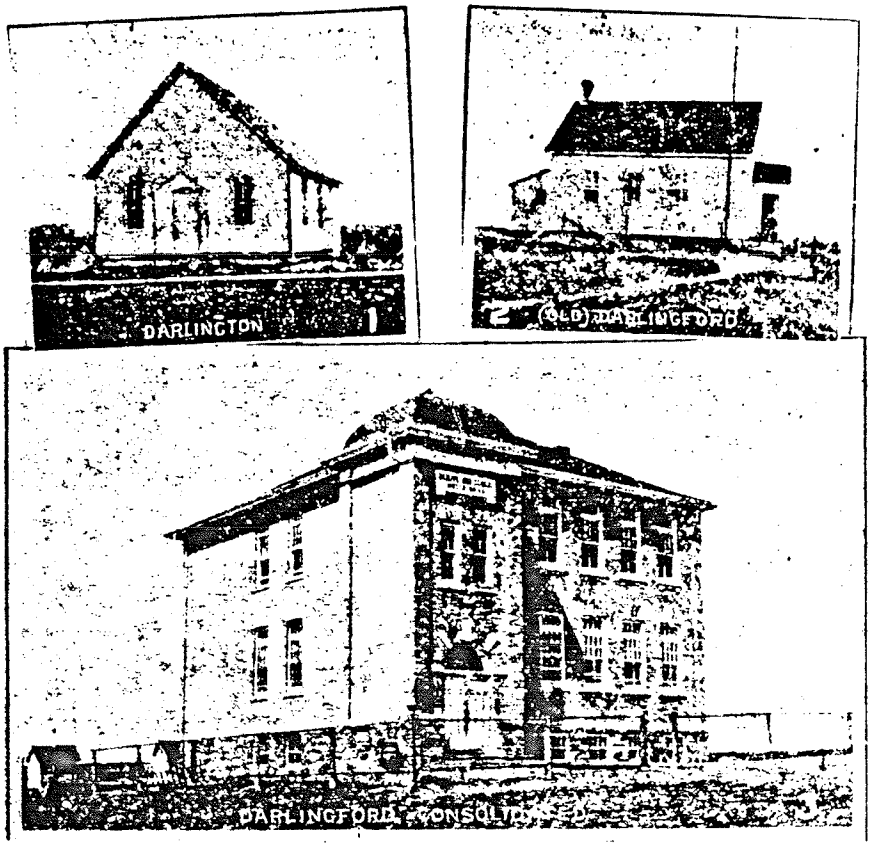
> Consolidation has made the school (tax) rate higher, but only a little. Within three years we expect to see a first class school building in Holland, then the people will be still better satisfied with the principle of consolidation.[1]

School inspectors promoted the positive aspects of consolidation and soon other districts followed Holland's lead.



SNOWFLAKE CONSOLIDATED SCHOOL (4)

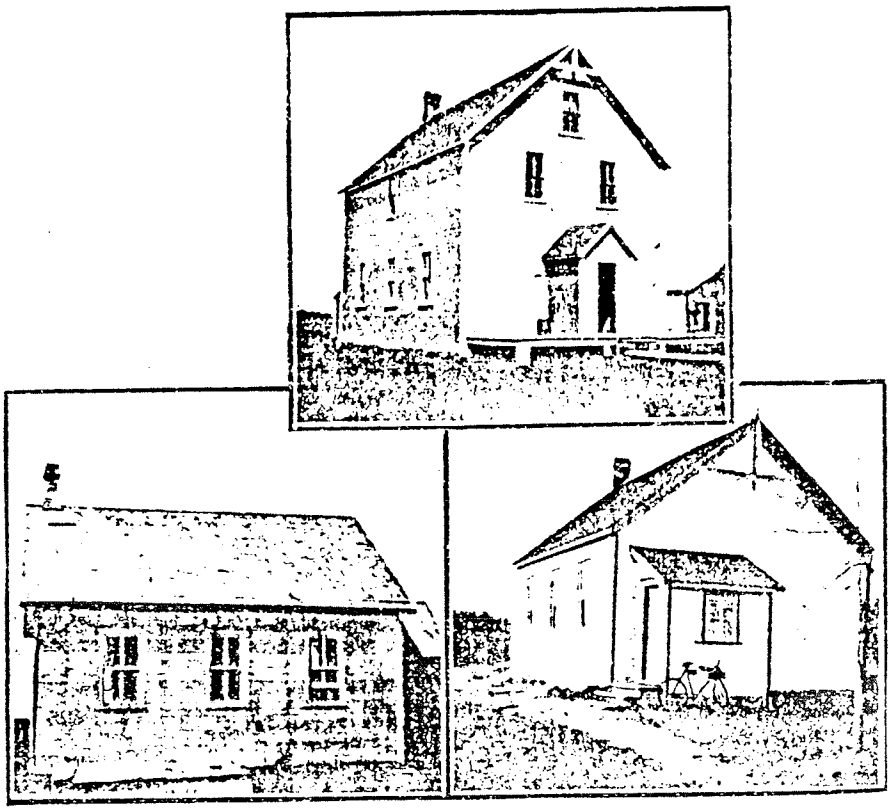
also shown (1) Old Snowflake School, (2) Carthage School, (3) Prairie City School, the schools it replaced and the vans it required.



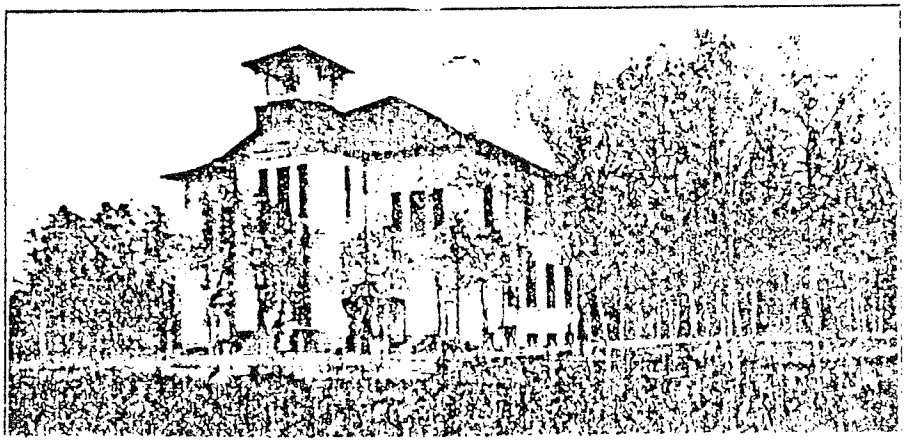
Illustrated above is the Darlingford Consolidated School and the two one-room schools it replaced. Illustrated below are the school vans that this consolidation required.

The Western School Journal, vol.VII,no.6,Wpg.,June 1912

DARLINGFORD CONSOLIDATED SCHOOL 1906

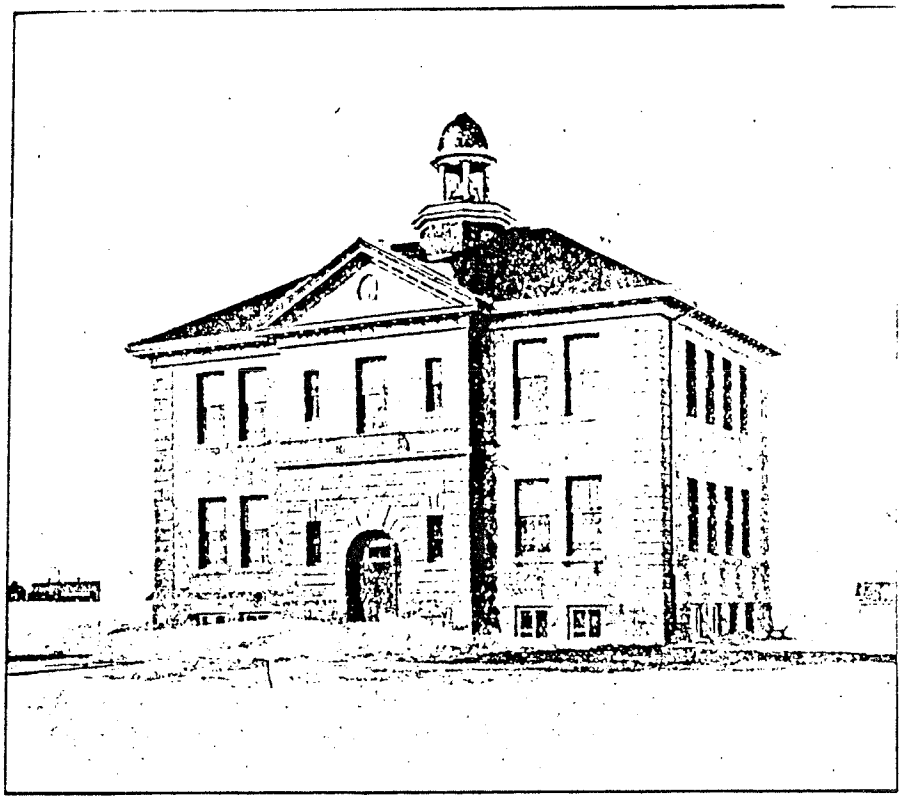


Pictured above are (1) Starbuck School, (2) Kinlough School and (3) Holyrood School. All were abandoned when Starbuck Consolidated school was built.



STARBUCK CONSOLIDATED SCHOOL 1910

The Western School Journal, Vol.VII, No.6, Dec., 1912



PILOT MOUND CONSOLIDATED SCHOOL c. 1906

Picture Library of the Provincial Archives, Manitoba

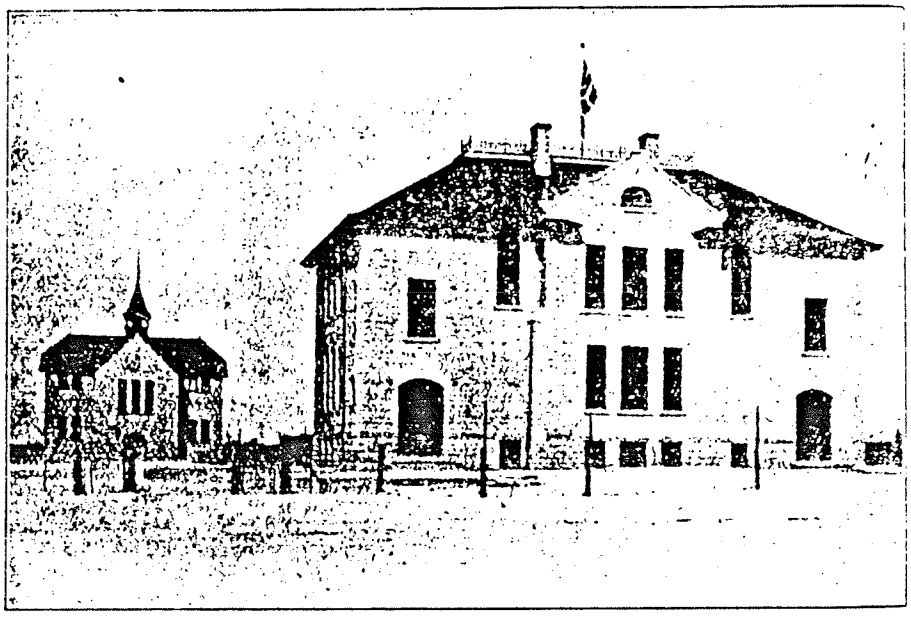
There can be little doubt that the impressive new school buildings that were the result of the combined efforts and resources of a number of small school districts played an important part in promoting the principle of consolidation throughout the Province.

In towns where multi-room schools already existed consolidation of surrounding districts generally resulted in the building of new intermediate or high schools. The older structures which had accommodated all grades often became the elementary schools. The new consolidated schools, whether housing all grades or only higher levels all tended

to be rather impressive two and three storey brick or stone buildings. They rose in towns and villages as symbols of the town's progress. The Classical Revival styles declared the importance the district gave to education and the pursuit of culture. The rusticated stone bases of these schools were imitative of the great Italian palaces. The high segmentally or round headed windows were examples of the then popular Italianate style. The high steps to the entrance, high towers, cresting along roof ridges and decorative galleries all helped to give a certain monumentalism to these buildings. In most small towns and villages these schools were by far the finest buildings erected and a great source of pride to their promoters.

BALMORAL CONSOLIDATED SCHOOL c. 1913

Picture Library of the Provincial Archives, Manitoba



STONEWALL ELEMENTARY SCHOOL (left) 1901 and

STONEWALL HIGH SCHOOL (right) 1907

Picture Library of the Provincial Archives, [illegible]

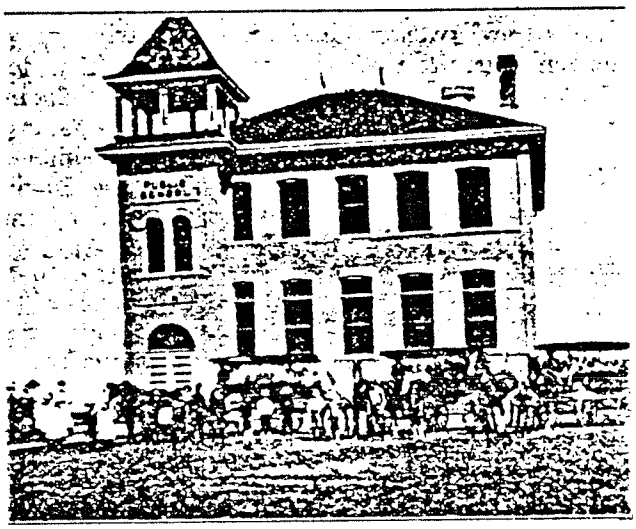
As an indication of the pride these new buildings instilled in the people of rural communities, the following account, written by a Stonewall High School student, was quoted in a 1910 inspector's report:

> It is with pleasure we think of the growth of our schools. Previous to 1882, school was held in an old building south of the village. In that year a stone school was built. In 1901 a brick building of four rooms was built, and an intermediate department, that afterwards turned out many graduates, was opened. The people were very proud of their achievement and thought the building was settled for all time, but in 1907 a larger and better building was erected. This building is up to date in all respects and one of the finest in the town. For many miles out in the country our school can be seen towering over all others. Fifty names are enrolled in the

> high school register. Thus in a quarter of a century our school has changed from an old dwelling house, with one teacher and a few pupils, to two fine buildings, one of brick and the other of stone, with seven teachers and two hundred and fifty pupils.[2]

These larger consolidated schools permitted a grading system that allowed a greater degree of specialization of teachers and was believed to encourage a greater degree of competition among students. The new buildings boasted high basements for modern furnaces and ventilating ducts, inside water closets, and playrooms for physical training. Some schools even had showers installed and drinking fountains became common. Teachers' rooms with a view of the playground were found in most. In the larger centres nurses' rooms for medical inspections were incorporated as well as classrooms fitted up as science laboratories and manual training shops. Almost invariably some sort of assembly hall, often with a stage, was included in the basement or top floor. These halls were put at the disposal of the entire community and made the new school buildings more attractive to taxpayers.

The advantages the new consolidated schools offered did not always include safety. Some were still two storey frame buildings and many were wood frame with brick veneer.

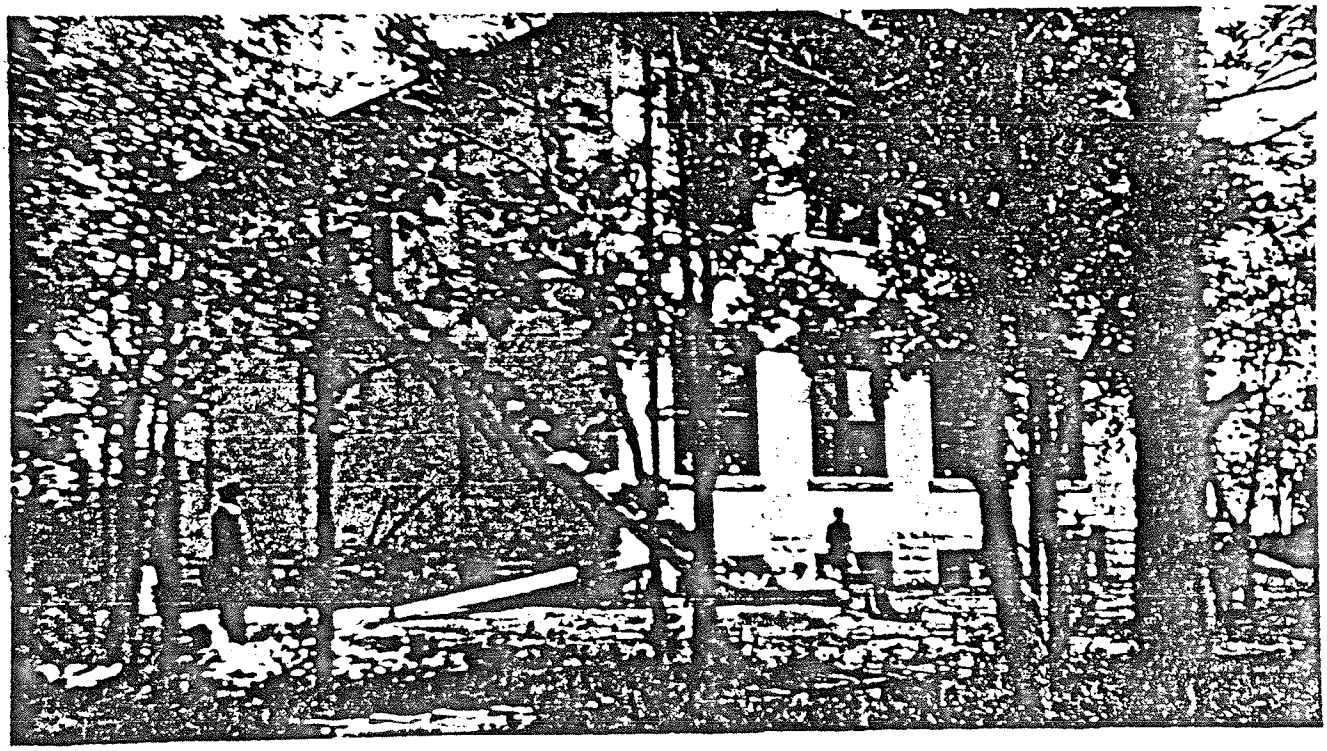


SPERLING CONSOLIDATED SCHOOL
1910

Picture Library of the Provincial Archives, Manitoba

An example of brick veneer was the Sperling district's first consolidated school. It burned to the ground in 1924. After a tragic fire in 1908 in Swan Lake School where nine lives were lost, fire fighting equipment and escapes were added to most schools.[3]

[3]



FIREDRILL at STARBUCK CONSOLIDATED SCHOOL 1911

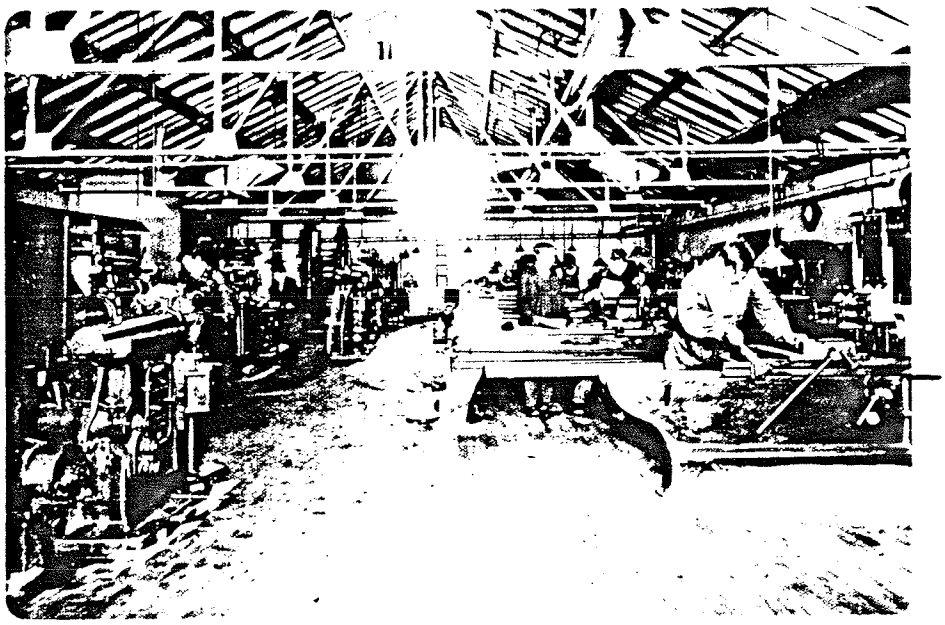
Picture Library of the Provincial Archives, Manitoba

An advertisement from The Western School Journal, c. 1910.

The larger, multi-classroom schools that resulted from the consolidation of small school districts made possible a broader curriculum in rural areas.

The desire to broaden the curriculum was due to influences creeping into Manitoba from other parts of the world. In 1902 the annual school inspectors' reports refer to a leave of absence granted to Inspector S. E. Lang to visit "educational institutions in Great Britain, Germany and the United States".[4] In 1903 W. A. McIntyre, principal of the Provincial Normal School, visited a "few typical schools in American cities and the educational exhibit in the city of St. Louis".[5] The 1906 annual report described some of the model school experiments in eastern Canada where rural school districts had been consolidated and programmes offering domestic science, manual training and gardening had been implemented with a view to better preparing students for country life.

The importance given to music and art programmes, the experimental approach to teaching science, the vocational courses and physical training methods in the schools visited influenced educational ideals in Manitoba. While the majority of students attended one-room schools little progress towards a broader curriculum was made. The larger consolidated schools began to incorporate special facilities for manual training, domestic science, science laboratories, and physical training prior to the first world war.



Keith Wilson Collection

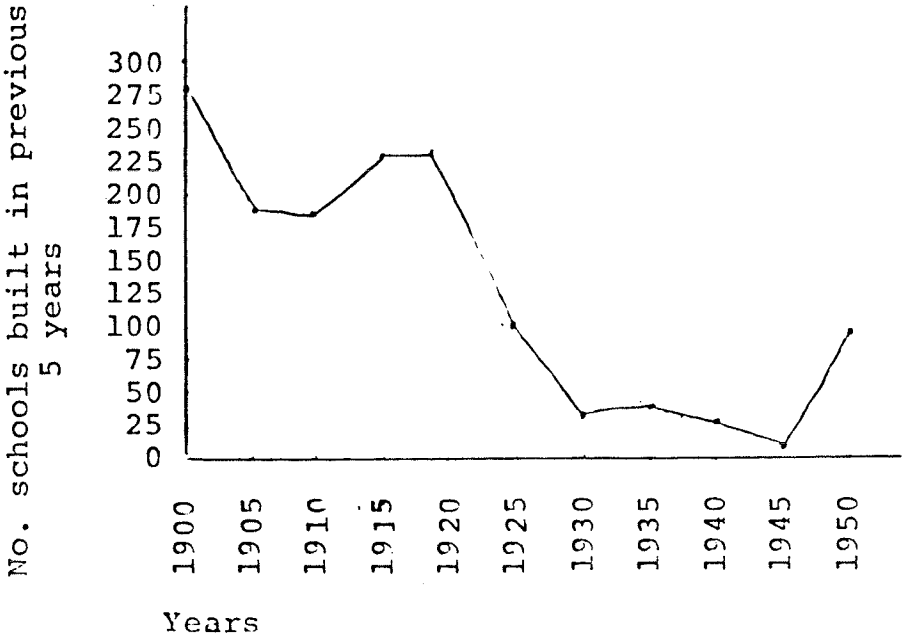
ST. JOHN'S TECH. SCHOOL, WINNIPEG, c. 1910, (interior)

Plans for schools could no longer be simply collections of identical classrooms. A new complexity was required.

There was a boom in school construction which peaked in Manitoba between 1895 and 1900. Some 278 school buildings were erected in the Province during that five year period. This building boom continued through until 1920 with an average of forty new schools being built each year. After this period the rate of school construction dropped dramatically each year reaching its lowest point during the second world war. During the period 1940 - 1945 the number of school buildings increased by only 8, slightly more than one a year.

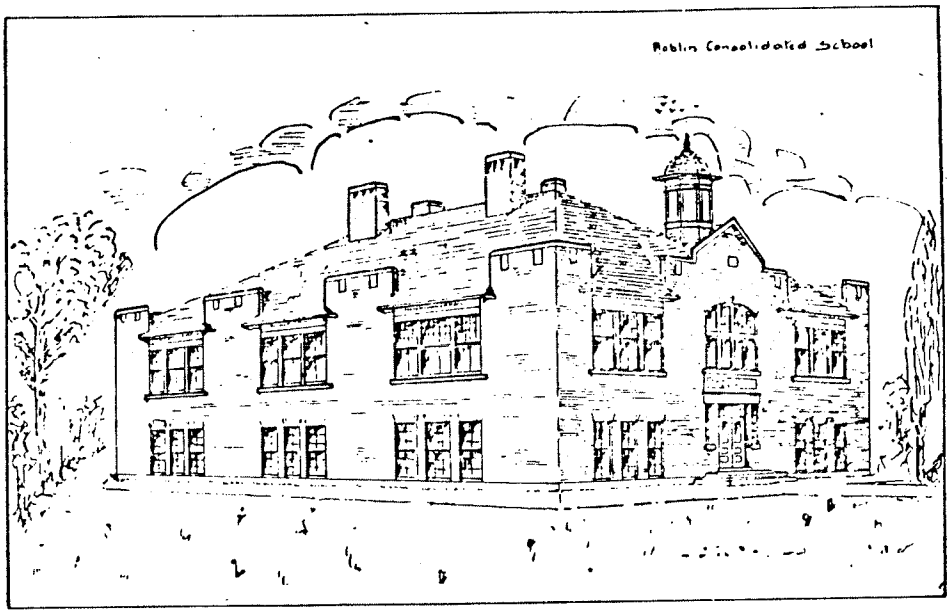
THE NUMBER OF SCHOOLS BUILT DURING A FIVE YEAR PERIOD

1895 - 1950[6]



During the years 1936 - 1944 there were no new schools built in Winnipeg School Division, No. 1.

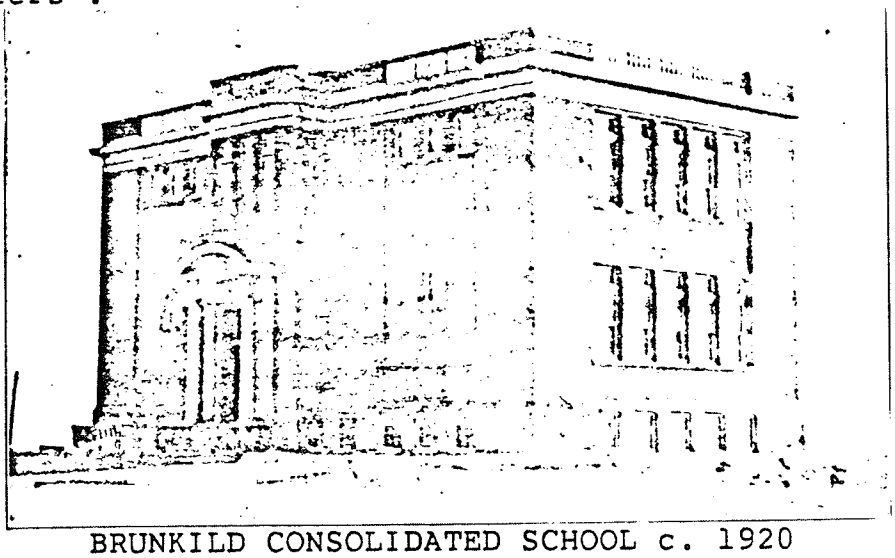
Following are some examples of consolidated schools built in later years.



ROBLIN CONSOLIDATED SCHOOL c. 1920

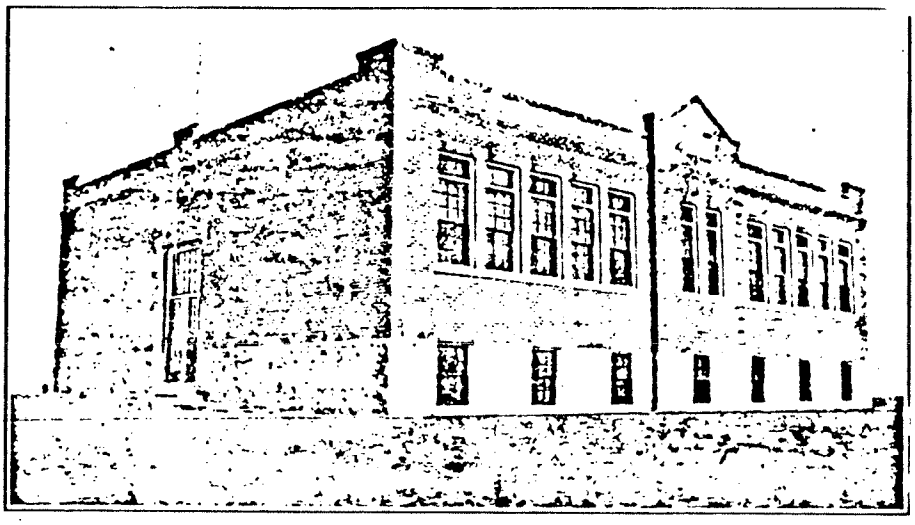
Picture Library of the Provincial Archives, Manitoba

The consolidated school district of Roblin erected this six room, brick building about 1920. It provided for "manual training, sewing, domestic science, and a kitchen and dining hall for hot lunch provided for the 200 van travellers".[7]



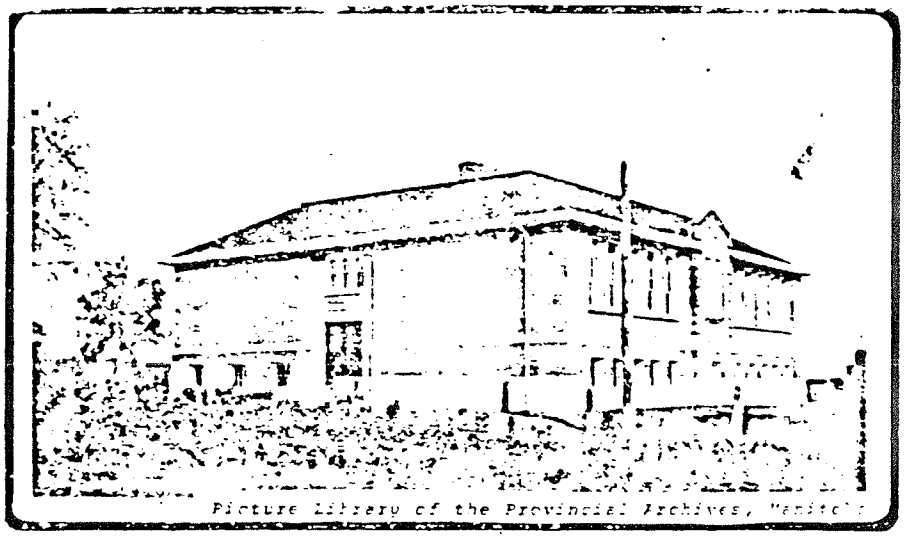
BRUNKILD CONSOLIDATED SCHOOL c. 1920

Picture Library of the Provincial Archives, Manitoba



SPERLING CONSOLIDATED SCHOOL c. 1924

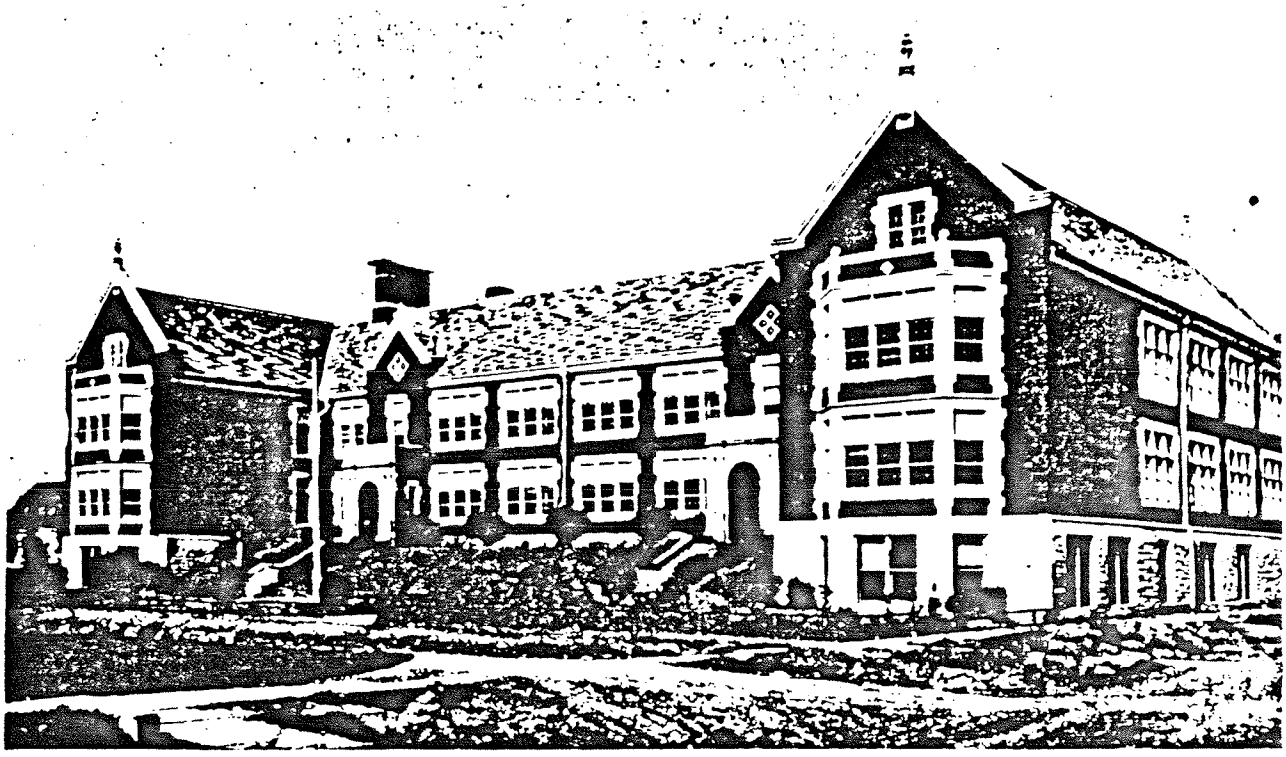
Picture Library of the Provincial Archives, Manitoba



NINETTE CONSOLIDATED SCHOOL c. 1925

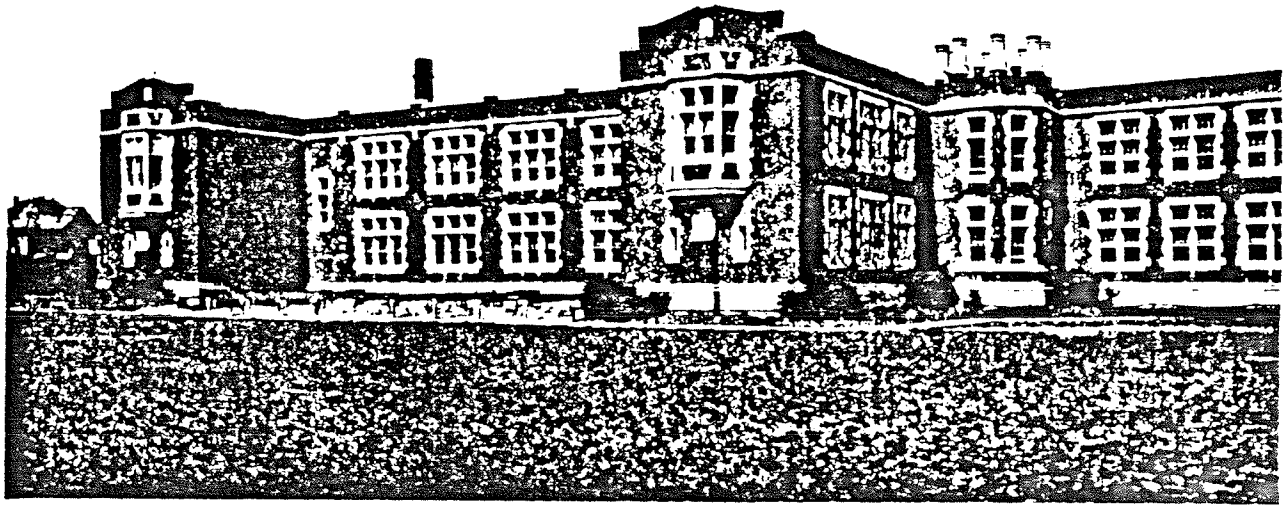
During this period, 1907 - 1959, the architectural style of school buildings underwent some noticeable changes. Schools built in the early years 1907 - 1920 were generally built in eclectic Victorian styles. This borrowing of architectural details from various periods was typified in schools such as Isbister School in

Winnipeg. This eclecticism persisted well into the period under consideration but as years went on fewer and fewer details from the past appeared on new school buildings.



ISAAC NEWTON JUNIOR HIGH SCHOOL, WINNIPEG, MAN.
J. N. Semmens, Architect

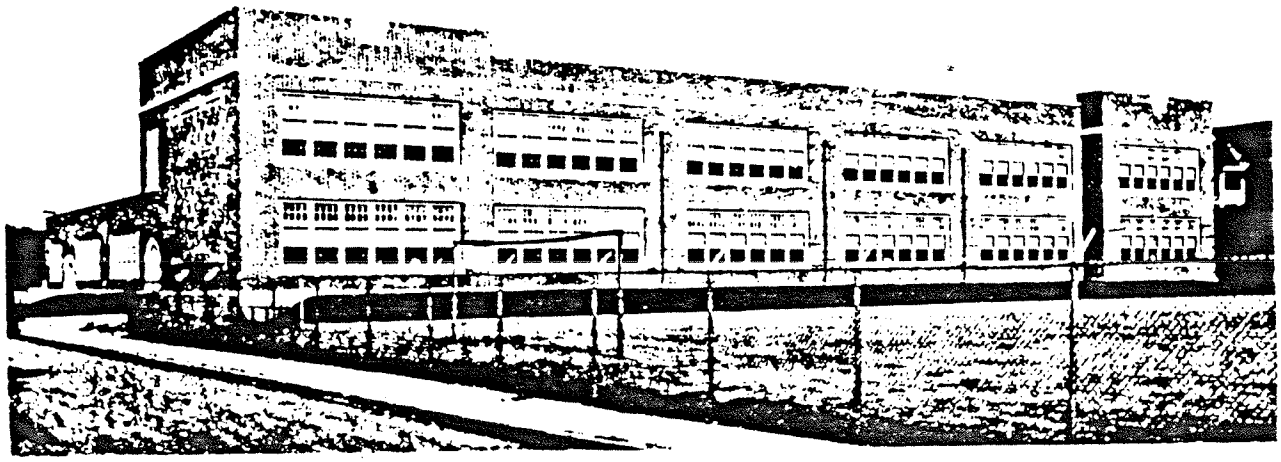
Isaac Newton Junior High School built in Winnipeg in 1921 maintained a number of details from the eclectic period; the romanesque, heavy, masonary base; the sharply pitched gables with finials; and label window surrounds. It departed, however, from the solid square mass to a grouping of masses in plan.



SOUTH ELEVATION, DANIEL McINTYRE COLLEGIATE INSTITUTE, WINNIPEG, MAN.
J. N. Semmens, Architect

THE JOURNAL ROYAL ARCHITECTURAL INSTITUTE of CANADA

Daniel McIntyre Collegiate, built in 1923, has even fewer classical details. Gone were the massive rusticated base and steeply pitched roof. There were still some gothic revival details but they were modest in proportion. The bay windows with crenellation or battlements at the top, the grouping of the chimneys to form a tower were such details. The windows retained the popular surrounds but were grouped to admit more light into classrooms.



GORDON BELL JUNIOR HIGH SCHOOL, WINNIPEG, MAN.
C. W. U. Chivers, Architect

THE JOURNAL ROYAL ARCHITECTURAL INSTITUTE of CANADA

The architect C. W. U. Chivers, designer of Gordon Bell Junior High School, eliminated almost all traces of classical architecture in his 1925 design. Only a very sleek form of crenellation can be seen along the roof line.

Although traces of classical architecture can still be found in the three Winnipeg schools last referred to they were truly a radical departure from previous schools.

There were a number of reasons for this drastic change in architectural design at this time. The demands of economy, the broadened curriculum, uncertainty of the future, new concerns for health and safety, new developments in building technology, and a new sensitivity to scale and proportion on the part of architects all influenced these new school designs.

Writing in an architectural journal in 1927 Semmens states:

> No change in the institutions of modern life has been more quickly or more completely made than that which has been effected in educational methods. New elements have shifted the emphasis of consideration. Health, the fundamental operations, manual skill, citizenship and the worthy use of leisure have caused a revolution in public education, in school design and construction.[8]

During and immediately after world war I the depressed economy prohibited large monumental building. A great many one storey, temporary structures were built. Although most of these were poorly built they did offer a number of advantages. They eliminated the costly excavations for basements, were well lit, used space efficiently and proved that full basements were unnecessary for efficient heating and ventilating systems. These features were applied to new schools. A system of concrete posts and beams, crawl spaces and corridors only to mechanical rooms below grade were all utilitzed. It was also found that only when more than eight classrooms were required was it more economical to build two storey buildings.[9]

The uncertainty of the future made plans designed to be built in segments and allowing for future expansion popular. The grouping of masses in this new architecture solved this problem beautifully.

The broadened curriculum required a greater variety in the size of classrooms and changed the rigid lighting from

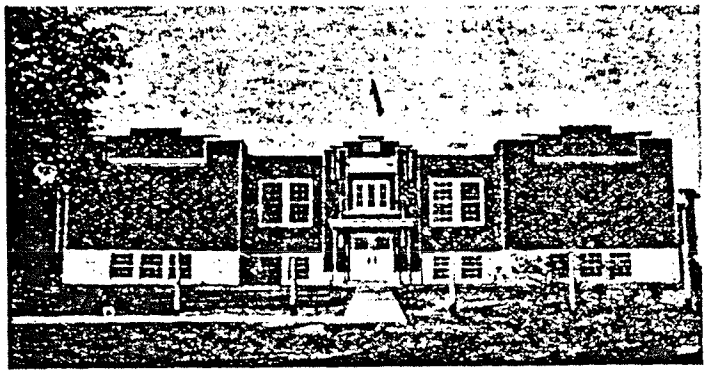
only one side. Libraries, shops, laboratories, sewing rooms and gymnasia were better served with lighting from two or more sides. These special facilities demanding spaces of different dimensions could not be easily stacked one above the other. They were more easily arranged in separate wings.

Daniel McIntyre Collegiate was fireproof, faced with brick and limestone and constructed of concrete post and beam. The segmented plan allowed for more exits. The elimination of basement classrooms and third storey reduced stairways which had proved dangerous in times of fire.

The reduced height of these buildings was due to still another development. There was a growing sensitivity to scale and proportion on the part of architects. Semmens expressed an intention to conform the height of these schools to the residential environment in which they were built.[10]

On a much smaller scale similar developments were taking place in rural Manitoba. The school built by the Altona School District in 1938 was described in the Department of Education Annual Report for that year.

> Altona completed a fine modern five room school admirably adapted for community purposes, as well as for practical and extra-curricular activities . . . The building has an auditorium, a science laboratory, rooms for practical work for boys and girls, a library, a teachers' room, spacious halls, modern lavatories, and an air condition plant.[11]

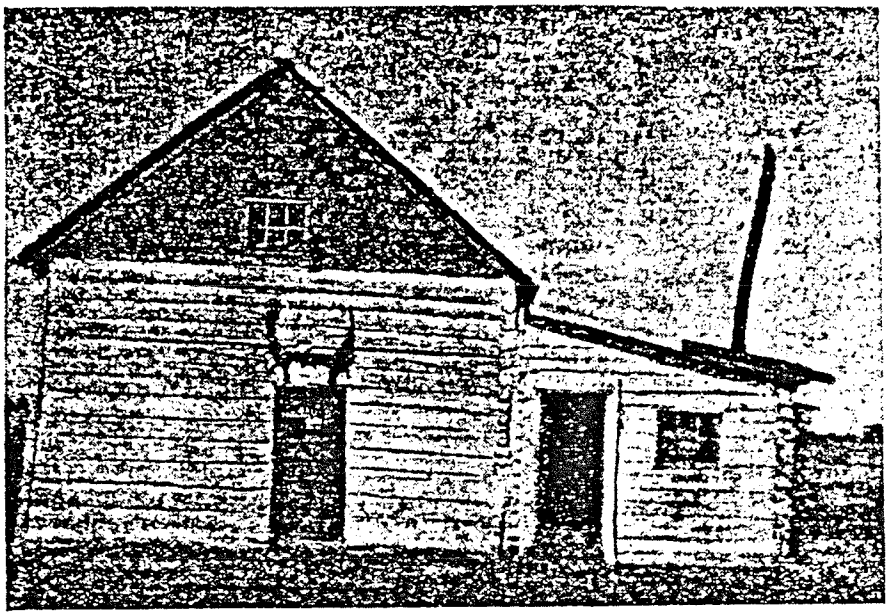


ALTONA SCHOOL—BUILT 1938.
Picture Library of the Provincial Archives, Manitoba

Not all rural areas were able to follow Winnipeg's lead. Many areas of the Province were not settled until the 1930s. Some of the new settlements continued to build their first schools of logs during these years.

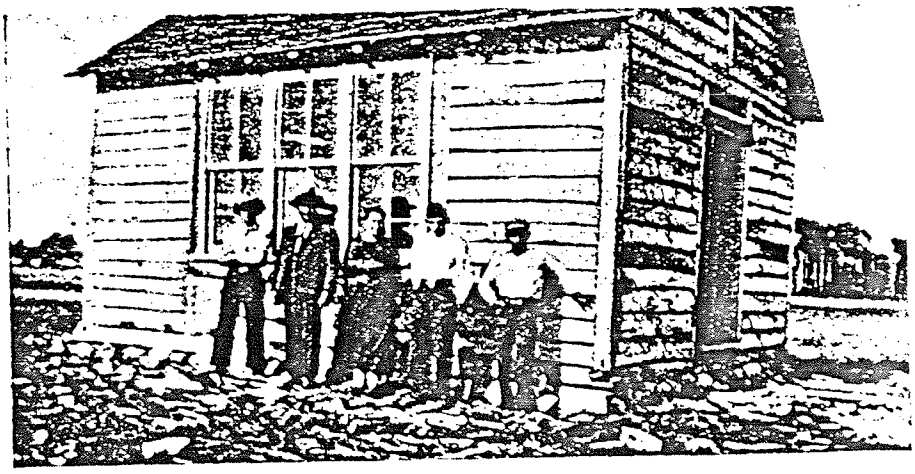
Many schools were built in Manitoba during the 1930s under the "Co-operative Plan". Under this plan the Department of Education supplied the cost of the materials, shipping the milled lumber, windows, etc. to the district where buildings were erected by volunteers. This plan enabled new settlements to provide schooling without incurring any debt to the community.

Big Black River School, Crane River School and Asham Point School are examples of the schools built under the Co-operative Plan during the 1930s.



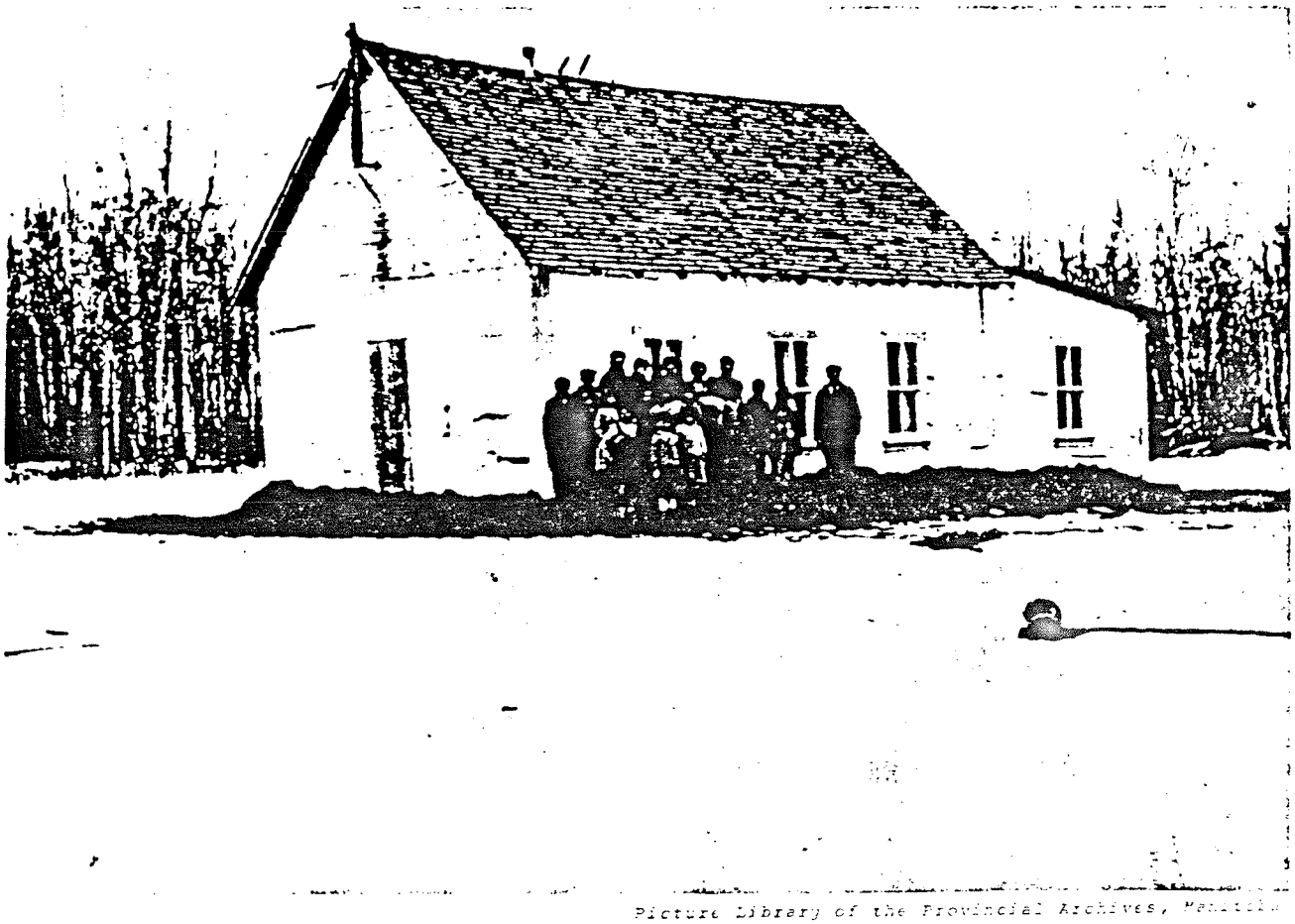
BIG BLACK RIVER SCHOOL 1934

Picture Library of the Provincial Archives, Manitoba



CRANE RIVER SCHOOL 1935

Picture Library of the Provincial Archives, Manitoba



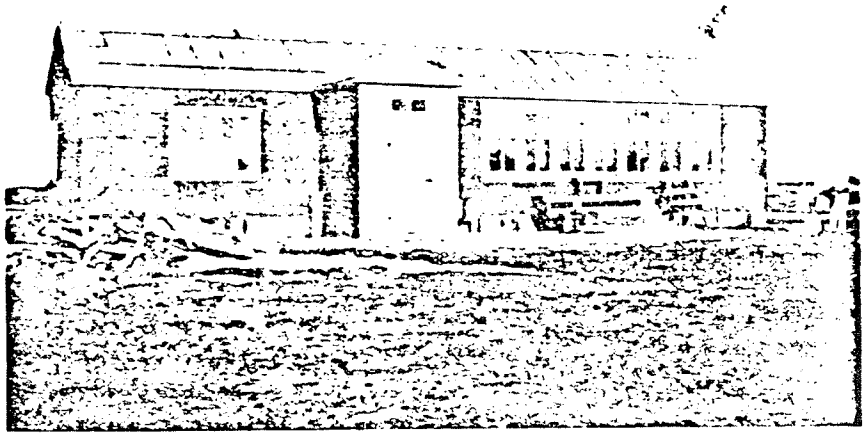
Picture Library of the Provincial Archives, Manitoba

ASHAM POINT SCHOOL 1930

The years 1930 to 1945 saw not only a decline in the building rate of schools but also a decline in the quality of construction. The cost of building with brick and stone was often beyond the resources of even older settlements. Schools built in the latter part of this period were characteristically devoid of architectural ornamentation.

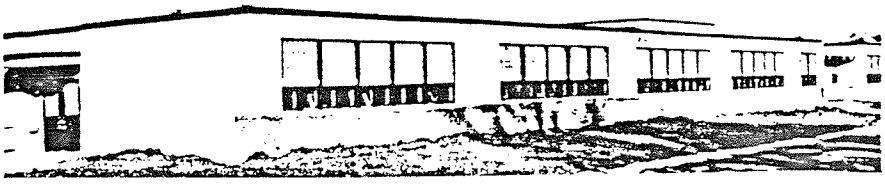
The examples of schools from this period that are illustrated here show the common use of stucco as an

exterior finish, glass blocks in fenestrations and flat roofs. Many of these features, which were characteristic of the German Bauhaus school of architecture, became popular during this period of economic uncertainty because of their relatively low costs.



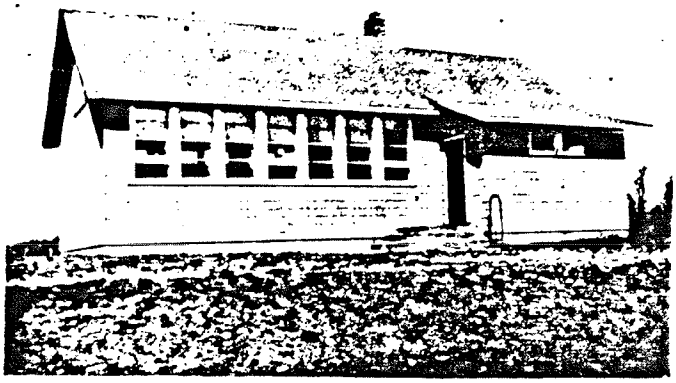
CHURCHILL SCHOOL *(under construction)* ERECTED BY THE COMMUNITY FROM MATERIALS SUPPLIED BY THE DEPARTMENT OF EDUCATION 1934

Picture Library of the Provincial Archives, Manitoba



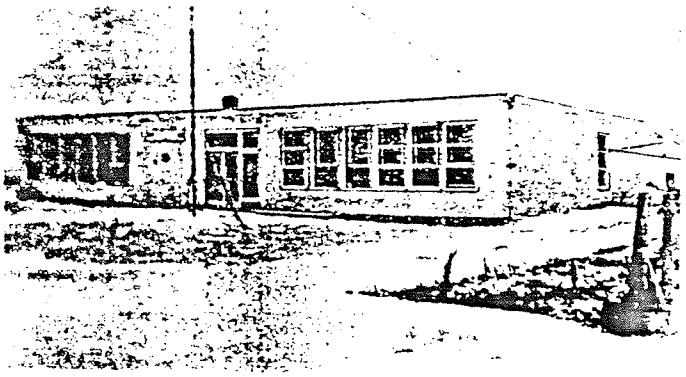
MIAMI ELEMENTARY SCHOOL 1951

The Hills Of Home



NEW ARMOUR SCHOOL 1952

Furrows In The Valley



ST. HYACINTHE ELEMENTARY SCHOOL,
LA SALLE 1959

Picture Library of the Provincial Archives, Manitoba

LOWE FARM HIGH SCHOOL 1955

Furrows In The Valley

WOODHAVEN ELEMENTARY SCHOOL, ST. JAMES 1956

Winning Architecture: The Red River Settlement 1822 - 1960

6.1 CONCLUSION

Many of the years under consideration in this chapter were not progressive ones for school architecture in Manitoba. Naturally over such a long space of time changes in school architecture can be seen. The one room school, although still in evidence, no longer dominated school construction. Consolidation of small school districts produced larger schools with a greater variety of spaces. Architectural trends toward clean-lined functional building types reached Manitoba. In the latter years poor economic times dictated simple styles and cheap building materials and methods. The monumental school buildings which characterized the beginning of this period were gradually

replaced with humbler, more utilitarian school buildings at its close.

REFERENCES

[1] Report of the Department of Education For the Year ending Dec. 31st, 1906.

[2] Report of the Department of Education For the Year ending Dec. 31st, 1910.

[3] Report of the Department of Education For the Year ending Dec. 31st, 1906, p. 468.

[4] Report of the Department of Education For the Year ending Dec. 31st, 1902.

[5] Report of the Department of Education For the Year ending Dec. 31st, 1903.

[6] Report of the Department of Education For the Year ending Dec. 31st, 1900, 1905, 1910, 1915, 1920, 1925, 1930, 1935, 1940, 1945, 1950.

[7] Report of the Department of Education For the Year ending Dec. 31st, 1920, p. 30.

[8] J. N. Semmens, "Typical Schools of Western Canada", The Journal Royal Architectural Institute of Canada, Nov. 1927, pp. 401-415.

[9] ibid.

[10] ibid.

[11] Report of the Department of Education For the Year ending Dec. 31st, 1938-39.

Chapter VII

THE YEARS FOLLOWING THE MACFARLANE REPORT

In 1959 a second school building boom began in Manitoba. This acceleration of school construction had many contributing factors: the provincial government began to grant much larger grants for construction costs; the children of the post war baby boom were entering high school; new school divisions were being formed; and the labour market was demanding more highly trained school graduates.

Evidence of this school construction boom could be seen as early as 1960. In that year B. Scott Bateman, then Deputy Minister of Education for Manitoba, reported:

> From July, 1959 to June, 1960 24 divisions secured authorization from their electors to issue debentures in the total amount of $16,155,000 to build 49 high schools or additions to existing high schools containing 1,015 classrooms and classroom equivalents. The formation of consolidated school districts gave rise to the construction of new elementary schools; 9 such schools are included in the authorization to 28 school districts to build elementary schools. The total authorization for this purpose was $2,739,500 which provided 192 classrooms and classroom equivalents.[1]

If we compare the total debentures issued for that year, $18,894,500 to the total issued in 1955-56, $4,443,150, and

for 1949-50, $4,621,350, we have further evidence of the building boom.[2]

The building of elementary and secondary schools became so extensive that a Building Projects Committee was established by the Department of Education. This Committee was established in the spring of 1960 to:

> consider all implications of the building programme of each school district and school division, and if necessary to make recommendations for changes in the programme or its financing.[3]

N. T. Osler, B.Arch.,M.R.A.I.C. became part of this committee as Supervisor of Buildings. In 1967 Osler was replaced by Mr. J. Donner, Architect[4] and in 1968 control over building standards was tightened further:

> Steps were taken to establish procedures for the guidance of trustees, superintendents, and architects in order that building proposals might be presented to the Schools Building Project Committee in a standard effective form.[5]

In 1969 a further change was made.

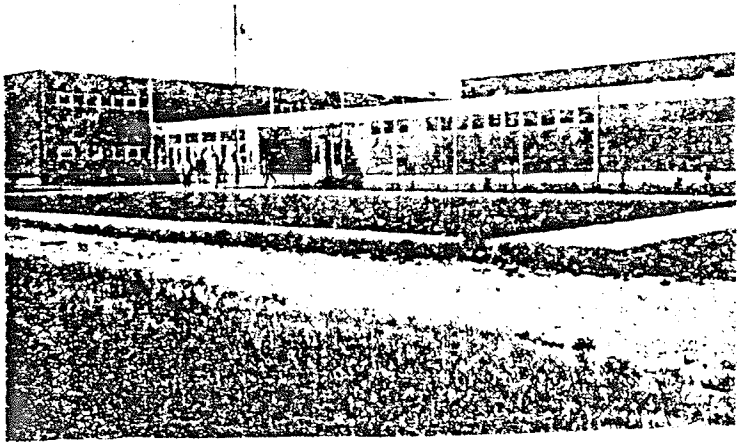
> Two committees in place of one were formed: "Building Projects Educational Committee" and "Building Projects Review Committee". Both of these committees now make recommendations to the Public School Finance Board which makes recommendations to the Minister.[6]

In 1962 a new Manitoba Institute of Technology was built with seventy-five per cent federal assistance. This multi-million dollar structure offered two year post high school programmes in the technologies and became the home of

the provincial trade schools. The completion of this institution provided strong incentives for high schools to offer preparatory vocational courses.

Schools built with the facilities for vocational courses were generally larger and built of better materials than were their predecessors. They, of course, offered a greater variety of spaces than those they replaced.

Stonewall Collegiate, built in 1961 at a cost of $177,660, is an excellent example from this period. It contained fourteen academic classrooms, two science labs., a library, a combination auditorium/gymnasium, a staff room, two offices and a board room.[7]

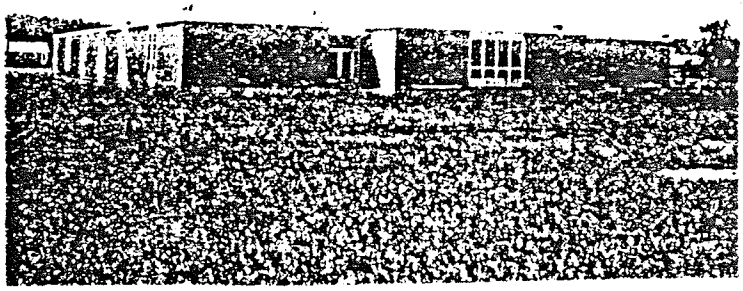


STONEWALL COLLEGIATE 1961

Picture Library of the Provincial Archives, Manitoba

Warren Collegiate is a smaller version of the Stonewall Collegiate. It contained only eight academic classrooms, three science labs., an auditorium/gymnasium, a library, a multi-purpose room and two offices.[8] Both the Stonewall

Collegiate and the Warren Collegiate were designed by the architectural group, Smith, Carter, Searle, Assoc. Both were basically concrete and concrete block structures with bonded roofing and brick faced exteriors. The trend to fewer windows, windows for visual release rather than for illumination can be seen in the Warren Collegiate.



WARREN COLLEGIATE 1961

Picture Library of the Provincial Archives, Manitoba

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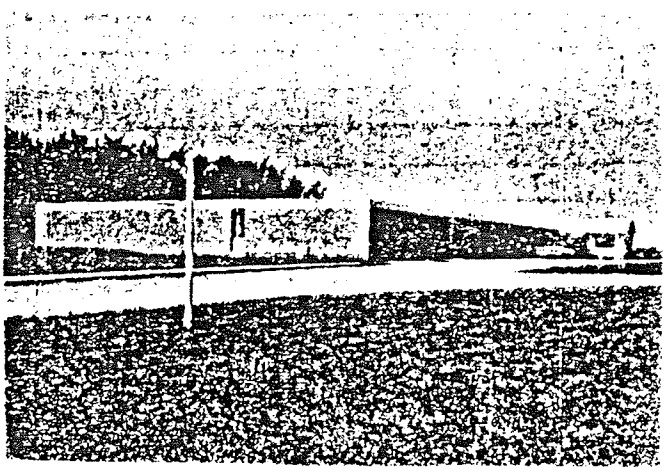
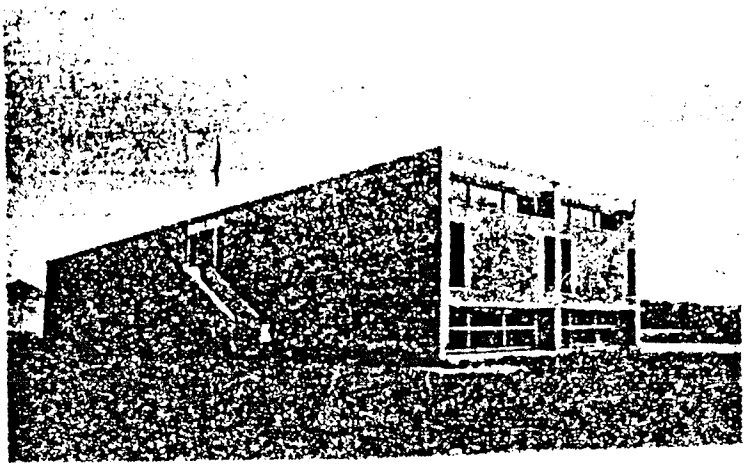


RIVERTON COLLEGIATE 1960

Two other examples from the early sixties are Riverton Collegiate and Inwood School. Both were designed by the architectural firm of Libling and Michener, and are basically concrete block structures with



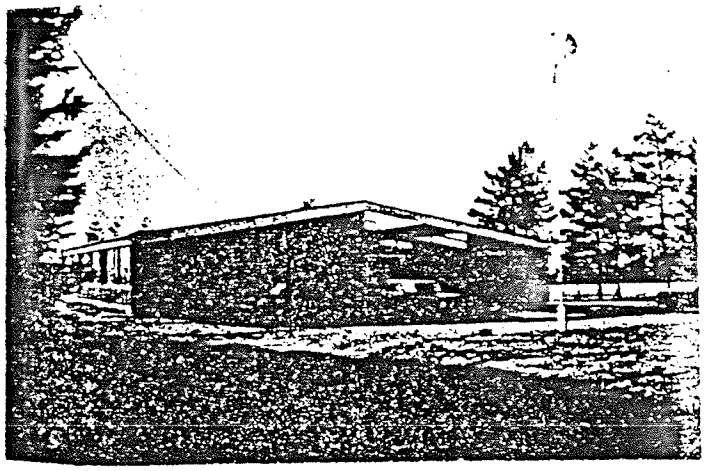
INWOOD SCHOOL 1962

Picture Library of the Provincial Archives, Manitoba

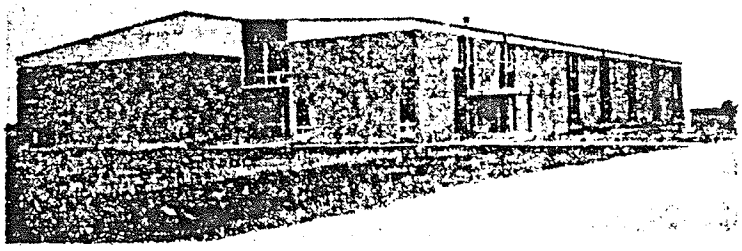
brick facing and bonded roofing.'

Happy Thought Elementary School designed by Peter Langes and Altamont Elementary School are both examples of the use of steel joists.[10]

Picture Library of the Provincial Archives, Manitoba



ALTAMONT ELEMENTARY SCHOOL 1960



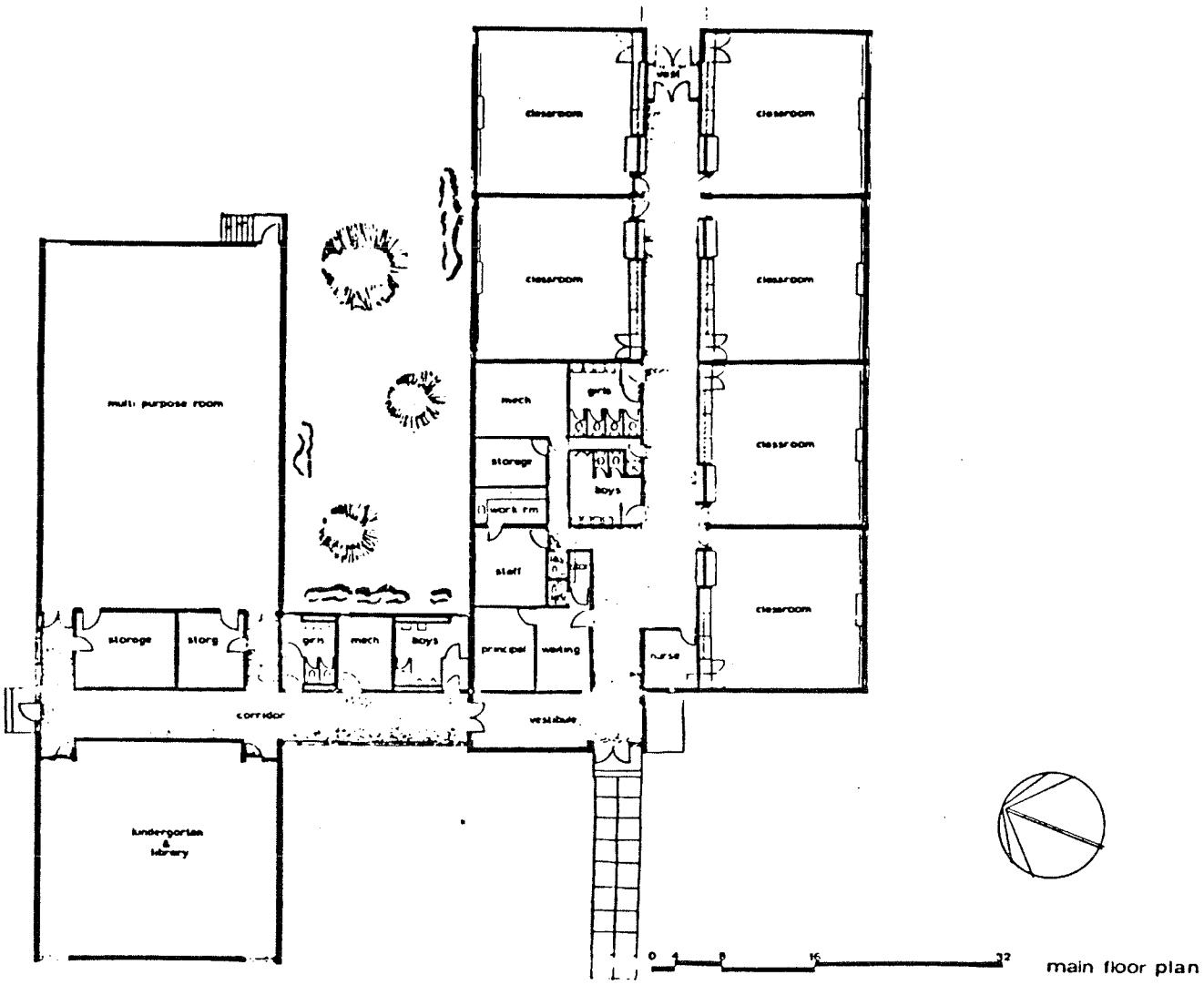
HAPPY THOUGHT ELEMENTARY SCHOOL 1966

Picture Library of the Provincial Archives, Manitoba

The new grants system which expressed the government's concern about inadequate educational facilities did not result in a revolutionary new school architecture. As a result of more generous government funding many new buldings were erected of new materials such as concrete block, concrete slab and steel joists, but they followed traditional school plans. Classrooms remained much the same size with windows to one side but with a heavier reliance on artificial lighting. The science laboratories and libraries were very often just classrooms with sinks or shelving. Gymnasia retained the hardwood floors but usually had no natural lighting. Wooden floors were gone from classrooms and hallways replaced with vinyl linoleum over concrete. As a result buildings were more fireproof. The only significant departure from traditional school design was the zoning of gymnasia in such a way as to isolate them from the remainder of the school. This practice allowed classrooms to be locked off from the areas of the schools used by the community after school hours. Also, designs more noticeably took future expansion into consideration.

Agassiz Drive Elementary School is an excellent example of this new zoning and consideration for expansion of the classroom wing.

AGASSIZ DRIVE ELEMENTARY SCHOOL c.1965



7.1 CONCLUSION

Clearly the early 1960s was a very active time for school construction in Manitoba. The school architecture that resulted was an improvement upon the old in many ways. A greater homogeneity was achieved across the Province with even the most remote areas erecting architecturally designed

schools under the supervision of the Building Projects Committee. These new schools displayed a more honest use of materials and were generally safer and more easily maintained. Because they were larger than the schools they replaced larger staffs could offer more specialized instruction. The zoning of most allowed community use of auditoria/gymnasia, washrooms and kitchens without intrusion into classroon areas. Classroom wings were generally designed to allow expansion without detracting from the exterior appearance or the interior function of the buildngs. In other ways the resulting architecture was disappointing. A certain sameness resulted. This, coupled with the fact that so many small communities had their schools closed greatly diminished the pride rural people had had in the architecture of their schools. In most cases these new schools failed to offer the special facilities needed to broaden the curriculum. Science laboratories and libraries often had only minimal facilities. The reduced window area common to most required more artificial lighting. On the whole the new schools did provide a greater equality of opportunity across the Province than those they replaced.

REFERENCES

[1] The Annual Report of the Department of Education 1960, p.20.

[2] ibid.

[3] ibid.

[4] The Annual Report of the Department of Education for the Year Ending 1967, p.18.

[5] The Annual Report of the Department of Education for the Year Ending 1968, p.18.

[6] The Annual Report of the Department of Education for the Year Ending 1969, p.12.

[7] Local Government Boundaries Commission School Survey, Manitoba, 1967, p.1c.

[8] ibid, p.32b.

[9] ibid, pp. 19b, 38b.

[10] ibid, pp. 8, 10.

Chapter VIII

THE OPEN PLAN ERA

Manitoba school architecture underwent a dramatic change in the late 1960s. For the first time in its history there was a noticeable departure from the traditional classroom plan.

It was felt by many educators that traditional classrooms hindered or made impossible the implmentation of a continuous progress system of instruction. It was reasoned that a new architecture, one where walls no longer divided classes, was required to cater successfully to individual differences and to implement a non-graded programme.

There was no consensus about the advantages of the continuous progress system or open plan schools among educators even though both had forerunners in Europe and the United States. In a special issue of the Manitoba Journal of Education devoted to continuous progress education the mood of the times was expressed in opinions such as:

> . . . the affect toward CPE (Continuous Progress Education) expressed by the majority of the authors is one of cautious approval.[1]
>
> Are we, the educators, truly striving for the realization of individual potential, or are we again bumbling through an unthought-through mammoth experiment?[2]

In that same issue of the Journal Peach and Pelletier expressed this opinion:

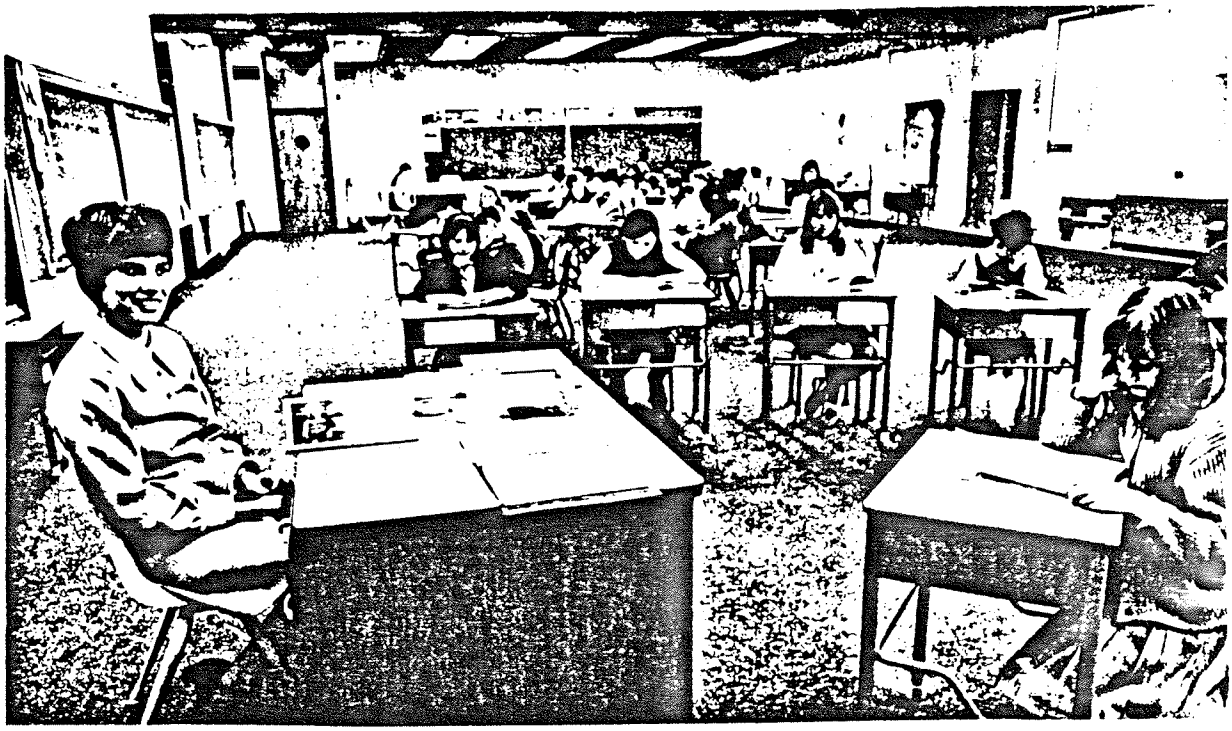
> If grouping is to be truly flexible, it follows that the open area classroom provides the most suitable environment. Adjacent groups can provide greater possibilites for the movement of pupils among groups than do neighboring classrooms. And if learning is to be truly continuous, ample space must be provided to store instructional materials so they are readily available to pupils. Learning centres or instructional materials centres are a natural and necessary ancillary to the nongraded program in the open area learning space. Despite its obvious disadvantages, the open area permits more flexible pupil arrangements plus easier access to supplementary or additional learning materials . . . The necessity of providing resource materials and study space is underscored by Brown (1963) who believes the library should be able to seat from twenty-five to fifty per cent of the school's enrolment at any one time . . . In addition space must be provided for individual study. School staffs located in nonmodern buildings, should be provided with funds to renovate the facilities when they decide to adopt the continuous progress plan in order to permit more flexibility. New buildings should be planned on a modular basis so adaptation of the building to changing needs can be quickly accomplished.[3]

In 1967-68 open plan schools and open area additions began to appear in Manitoba. One of the earliest was an open area addition to Dufferin School in School Division #1. The 1967 Annual Report of the Winnipeg School Division explained this new school architecture to the Board:

> The development of new patterns of classroom organization demand building resources that contribute to greater

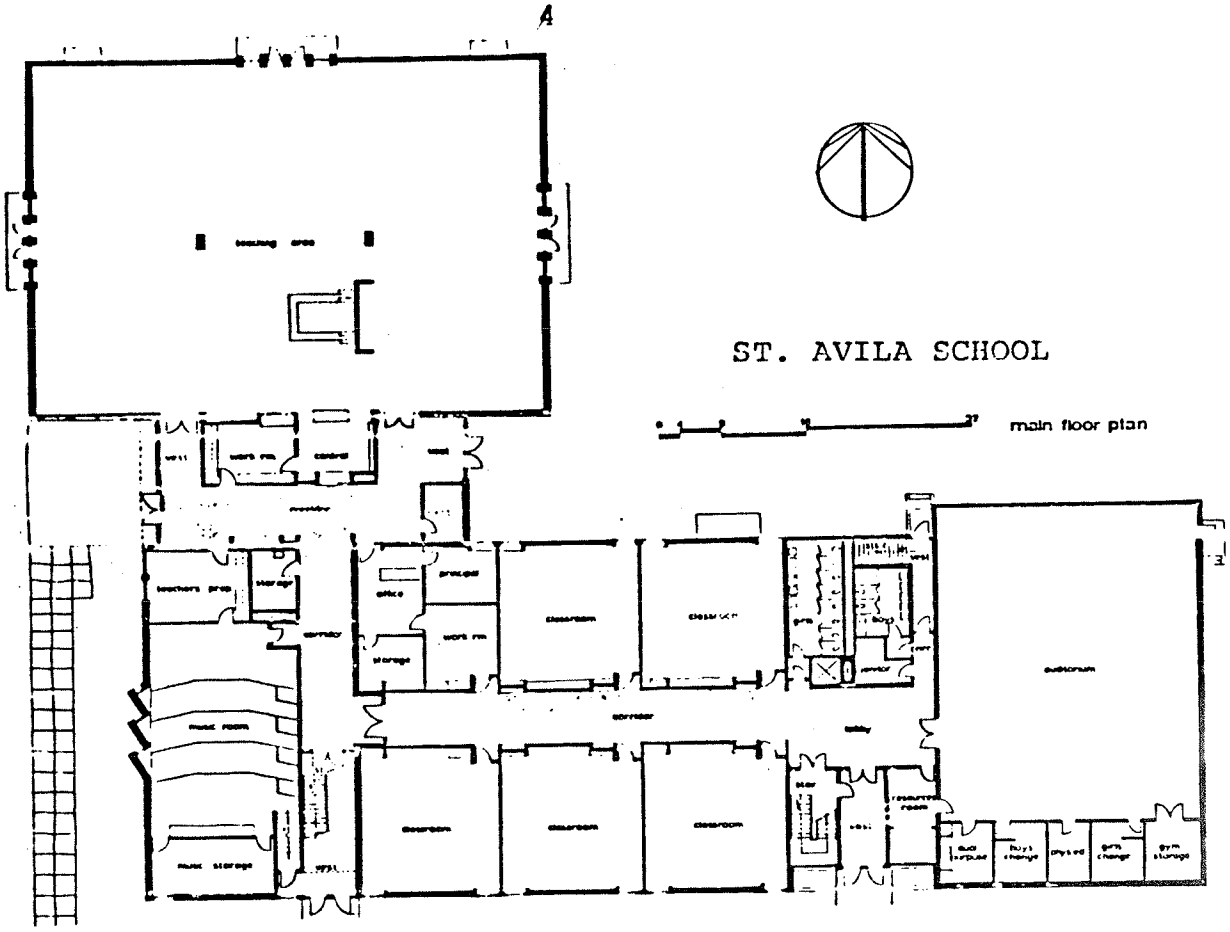
flexibility in instructional practices. The addition to Dufferin School and new building proposals projected for the immediate future contain the open space concept of classroom design. The multi-group instruction area encourages new enterprises in educational activities.[4]

The Winnipeg School Div. #1

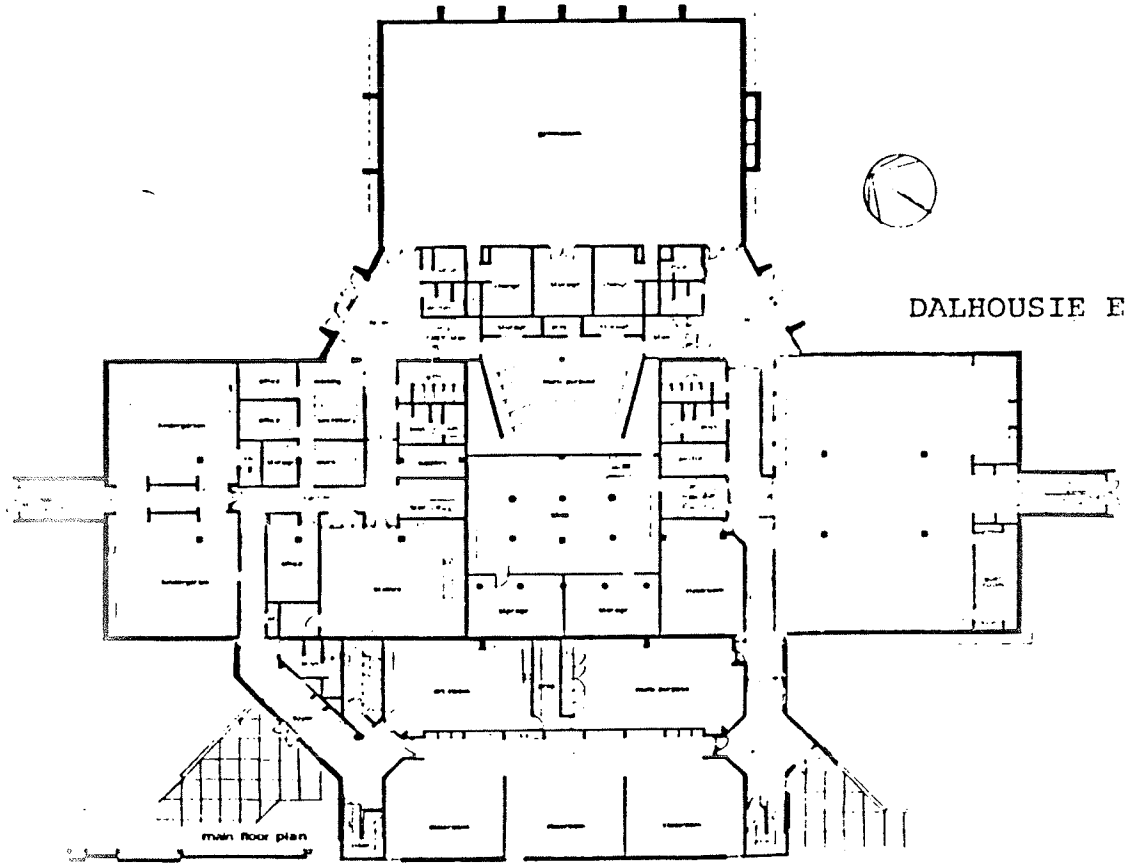


DUFFERIN SCHOOL 1967 open area classroom for three classes

The addition to Dufferin School included an open area classroom (pictured above), a multi-purpose room located below the combination auditorium-gymnasium, a dental clinic, an isolated area for kindergarten and nursery rooms and an outdoor play area for the nursery class.



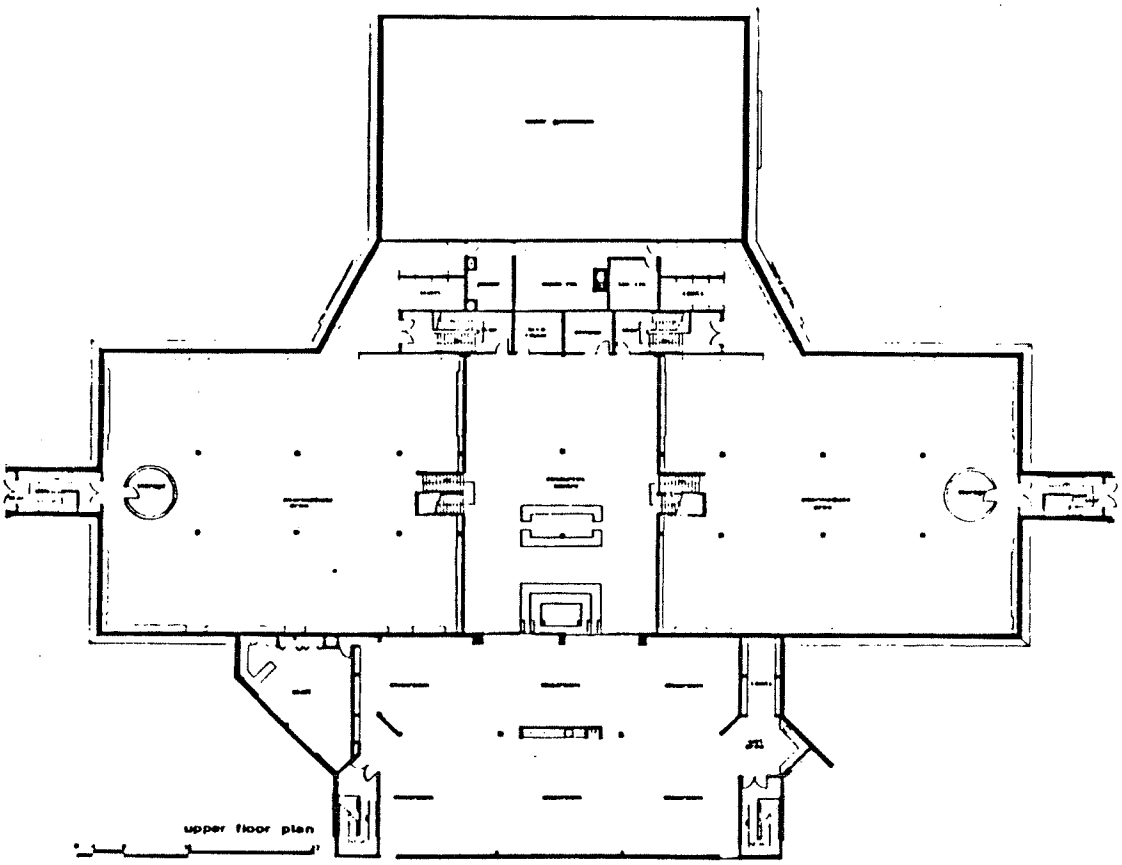
The Fort Garry School Division, an expanding suburban division, was one of the leaders in this movement to provide open plan schools. One of the first schools, St. Avila Elementary School, cautiously provided both an open area and traditional classrooms. The open area was designed to accommodate six classes and a library/resource centre.



DALHOUSIE ELEMENTARY SCHOOL

The Fort Garry School Division

Dalhousie Elementary School, built later, contains no traditional classrooms. Three classes and the kindergarten are semi-enclosed. Three large open areas housing six classes each are grouped around a library/resource centre.



There were a number of open plan additions built onto traditionally designed schools during these years and some renovations where walls were removed. Most school divisions moved cautiously, however, and schools with traditional classrooms were still being built in 1970.

The second most innovative aspect of the new schools, after the open area, was the absence of windows. Windowless classrooms became a controversial topic as early as 1963 when the following concern was voiced by Winnipeg School Division Trustee Robert J. Cochrane:

> Does the Department of Education, the final authority on construction of Manitoba Schools, have information showing that windowless classrooms will

> have no detrimental effects upon the children? If such information does not exist, it should not permit any further building of such rooms.[5]

It appears from the following that no such information was forthcoming.

> . . . the Winnipeg School Board at a meeting in September (1963) decided to discontinue the building of windowless schools pending further investigation.[6]

It will be noticed that the traditional classrooms in the St. Avila School have windows while the open area has only sidelights at the entrance. The Dalhousie School plan has a small area of windows in the partially enclosed classrooms but none in the kindergarten or open areas.

There were other innovations in these new school designs. Plans tended to be more complex, somewhat disorienting and multi-levelled. Notice the stepped-down resource centre and the return to a two storey traditional classroom wing in the St. Avila School plan. Notice, also, the many changes in levels in the upper floor of Dalhousie School.

A number of innovations resulted directly from the open area concept. Hallways were eliminated, floors were carpetted to absorb sound, complex heating and ventilating systems were required to service these large spaces that accommodated up to three hundred students. Special "quiet rooms", and seminar rooms were needed for activities requiring more quiet than the open areas afforded. Special music and projection rooms were added for activities too noisy to be carried on in the open areas.

Other innovations were a result of the windowless spaces. More artificial lighting and special emergency lighting systems were required to prevent serious egress problems during electrical failures.

While the disadvantages of open plan, windowless schools were unclear, the advantages were easily recognized. They could be built at a lower cost per square foot than traditional schools. They were less prone to vandalism because of their fortress like exteriors. They allowed administrators easier supervision of teachers and were conducive to team teaching methods, both of which promised to improve the quality of instruction.

8.1 CONCLUSION

The introduction of the open plan school was one of the most remarkable developments in the history of school architecture in Manitoba. It was influenced by the British Infant Schools in that it attempted to implement a non-graded system of instruction similar to that of village schools in Great Britain. The scale at which it developed in Manitoba was, however, more imitative of developments in the United States as Manitoba's first open plan schools were some of the largest elementary schools ever built in the Province. By 1970 some school divisions, such as the Fort Garry School Division, were committed to the open plan schools but many school divisions adopted a more cautious stance.

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[2] ibid.

[3] J. W. Peach and J.D.M. Pelletier, The Manitoba Journal of Education, "Organization for Continuous Progress", Vol. V, No. 2, June, 1970, pp. 15-21.

[4] William Donald, Annual Report to the Board of the Winnipeg School Division 1967, "Laying a Solid Foundation", p. 6.

[5] Robert Cochrane, The Manitoba Teacher, "Do Our Schools Need Windows?", Vol. 42, No. 2, Sept.-Oct., 1963, pp. 33-35.

[6] ibid (Inset p. 34)

Chapter IX

SUMMARY AND CONCLUSIONS

9.1 SUMMARY

An attempt has been made to chronicle the changes in the architecture of schools in Manitoba between the years 1870 to 1970. The changes can best be noted under the following headings: plan; architectural style; materials; safety and hygiene.

Plan

From the earliest days there have been some residential schools but these form only a small part of this history. Most students during the period 1870 to 1970 have attended schools other than residential schools.

The one room school was prevalent in Manitoba for at least half of the years under consideration. Multi-room schools began to appear in Winnipeg as early as the 1870s but did not begin to replace one room rural schools on a large scale until 1906. From that date the consolidation movement brought forth multi-room, multi-storey schools in most of the Province's towns and villages. These first multi-room schools were generally a collection of classrooms stacked two to three storeys high. It was not until shortly before the First World War that special facilities such as

science laboratories, domestic science rooms, manual training shops or gymnasia were incorporated into schools with any regularity. Multi-storey schools fell from favour over the years mainly because of their poor means of egress during emergencies. In the 1920s architects began to reduce the heights of schools to remedy this. By the 1930s schools were planned in wings with numerous exits and fewer stairways. By the 1950s almost all schools built were a single storey, were zoned to provide separate areas for community use, and were designed to allow for future expansion. The late 1960s brought the open plan school. Many classes would share a single space and much of the building would be designated "multi-purpose". These open plan schools introduced features such as pits, projection rooms, conference rooms and resource centres into elementary schools and were built in a multi-level fashion.

The planning of schools, once done by local trustees and ratepayers as they erected the building with volunteer labour, had become the exclusive task of professionals under the strict guidance of the School Building Projects Committee under the Department of Education's Public School Finance Board by 1970.

Architectural Style

The earliest schools were indigenous structures built in varying styles of log construction according to the size of logs available. Log buildings were being erected for

schools as late as the 1930s in newly settled areas of the Province. With a few exceptions log schools were one room, one storey, and of a generally domestic scale.

The buildings that replaced the first log structures were often churches or churchlike buildings in the English speaking communities and residential schools with some Second Empire features in French settlements.

The first multi-storey schools had many Neo Classic details but were, more accurately, eclectic in style. Gone was the domestic scale replaced by more monumental, civic-like buildings.

The Bauhaus School of architecture, established in Germany in the 1920s, did not make its mark on school architecture in Manitoba until the 1930s. At that time some large Winnipeg schools were built which had almost no architectural ornamentation or Neo-Classic details. Materials were used more honestly and an attempt was made to scale schools down to their residential environments.

Throughout the 1940s and 1950s school architecture became more and more streamlined and modest in its proportions with very few schools built of more than one storey.

The open plan schools of the late 1960s maintained the honest use of materials introduced into school architecture in the 1930s. These open plan schools did, however, lose the modest proportions of their immediate predecessors. The few examples that were built prior to 1970 took on a

fortress-like scale and appearance that set them quite apart in residential neighbourhoods.

Materials

Log was the choice for most settlements' first schools as late as the 1930s. The very first log schools were built in the traditional log construction methods of dovetailing or notch and saddle but as large timber became scarce and in areas where large timber was never available the piece-sur-piece or Red River frame method of log construction was commonly used.

Stone was used in school construction as early as 1857. The stone used was generally random-course limestone available along the rivers. Lack of skilled stonemasons limited the use of this material to only a few settlements.

The first recorded use of brick for school construction was in 1875 in the Morris School District where a brickyard had been established.

Wood frame construction was employed as lumbermills began to operate about 1875. From that time wood frame was used almost exclusively for one-room schools. It was less popular for larger schools but a number of two and three storey schools were built entirely of wood around the turn of the century.

The early two and three storey schools often used a brick or stone veneer over wood frame construction. A hollow concrete block formed to resemble rusticated stone was used

as a veneer over foundatoins, for quoining and on window details during this period of the eclectic styles. This artificial stone was also used alone as a construction material for small schools.

Frame construction with stucco replacing brick as an exterior finish became popular in the 1950s. The use of glass blocks, another feature of The Bauhaus design, was often used around windows and entrances in conjunction with stucco or brick.

By the end of the 1960s concrete had become the most common building material. The use of concrete slab, concrete block as well as poured-in-place concrete had surpassed all other masonry materials. Limestone was popular as an exterior finish and steel had replaced wood for roof joists in most large schools and was left exposed on the interior in the open plan schools.

Safety / Hygiene

Fire hazards: The fire hazards of the first log schools were limited. Most of the first log schools were unheated while those that had stoves were so small that problems could be detected immediately and escape made quickly. The most fire hazardous were the two and three storey frame and brick veneer schools. Many were built with a single exit and fires from basement furnaces were often well advanced before detected. After a number of lives were lost auxiliary fire escapes had to be added to these schools but

these fire escapes always presented some danger. The one and two storey schools built in wings with numerous exits were considerably safer from fire. The schools built in the 1960s used very little wood or other combustible materials and maintained the numerous exits. Those open plan schools entirely without windows present some egress problems during electrical failures but most of these large schools are equipped with automatic sprinkler systems. The sanitation in Manitoba's schools was primitive for most of the period under consideration. Drinking fountains appeared as early as 1910 (Starbuck Consolidated School) but outhouses remained a part of one room schools until their demise in the 1970s.

Heating

The most serious threat to health of the first schools was the cold and the damp. Later when stoves were installed the distribution of heat was uneven. Cloakrooms were usually located outside the heated area. With the advent of central heating systems heating was more uniform but the fumes and dirt that accompanied the burning of coal presented new health problems. With some exceptions the problems of heating schools were solved for the latter half of the period under consideration with the replacement of coal by natural gas and oil and the use of better equipment.

Lighting

All log schools tended to have inadequate lighting. The early brick and frame schools often had a "cross-lighting" problem from windows located on two or three sides of a classroom. Windows along one side of classrooms became a standard practice about 1910 when plans were issued by the Department of Education. The glass blocks used in the 1950s gave a nice diffuse light but tended to collect a great deal of heat and caused thermal problems. The window was gradually replaced as the major light source in the late 1950s and early 1960s. Fluorescent lighting became the major light source with windows installed for "visual release" only. By the late 1960s some of the open plan schools had eliminated windows from classroom areas entirely.

Ventilating

The ventilating of schools was incidental for most of the early years. The plans issued by the Department of Education in the early 1900s specified windows that opened at both the top and bottom and fresh air vents along the outside baseboards. In many schools these details were omitted and stoves and furnaces were fed the air from along the floors which they recirculated back into the classrooms. In the 1930s large schools had quite sophisticated ventilating systems but it wasn't until the 1960s that small schools were equipped with heating systems that could be

thermostatically controlled in each room and that brought fresh air directly into classrooms. The large open plan schools had complex ventilating systems carefully calculated to provide a certain number of cubic feet of fresh air per student per hour.

Other

There are reports that some of the early schools provided neither drinking water nor toilets. Certainly the water pail and dipper were commonly found in rural schools until the 1940s. Over the years measures were taken to make water containers more hygienic and enclosed water coolers with spigots were also found in rural schools. Drinking fountains supplied from cisterns or wells were common to large schools after 1900. Outdoor toilets were part of one room rural schools until their demise and were often the only toilet facility of the larger consolidated schools, as well. Water and sewage systems appeared in rural schools only as they became available to communities.

9.2 CONCLUSIONS

Plan

There is some evidence that plans were dictated by the aims of curricula. Many early Roman Catholic schools tended to be large and residential. Toombs believed that the first objective of these schools was to convert students to Catholicism and prepare them for service in the church and

that residential schools where students were removed from family influences best served this purpose. It was the belief of some of Manitoba's school inspectors that the first concern of Manitoba's schools during the First World War was to assimilate the children of non-speaking immigrants. It was believed that larger schools located in villages and towns could achieve this more successfully than one room schools located in totally non-English settlements. After the First World War and during the Second World War educators attempted to prepare the youth of Manitoba to better defend the nation by improving their physical fitness. As a result gymnasia and indoor playrooms were incorporated into school plans. After both world wars attempts were made to remedy unemployment by offering more vocational training in the schools. During both periods schools in larger centres began to incorporate workshops and domestic science rooms into school plans. In the 1960s a generally more egalatarian attitude on the part of educators brought about the open plan schools as a means of providing continuous progress education, thought to give equal opportunity to all.

Architectural Style

Two unique periods, the early piece-sur-piece log period and the 1895 to 1919 period when ethnic influences could be detected in schools, stand out. Otherwise the architectural styles of schools like those of houses and civic buildings

followed, at a distance of some years, architectural trends in Eastern Canada and the United States. Because the Province was populated in spurts there are a great many more examples from some periods than others, namely the one room frame schools from 1895 to 1919 and the large eclectic town and village schools from the same period.

Materials

Over the years economics was the most important influence in choice of building materials. The technologies of concrete, glass and steel, although developed long before the construction of many of Manitoba's log schools only became available as Manitoba's economy developed.

Safety / Hygiene

For the first one hundred years of Manitoba's history the safety and hygiene of its schools were perhaps the most bothersome aspects of school design. The safety and hygiene of schools received more attention from school inspectors if not architects and trustees than any other architectural consideration according to the annual reports of the Boards and the Department of Education. Accordingly the safety and hygiene of schools improved steadily, albeit at varying rates across the Province, throughout the years 1870 to 1970. Exceptions to this continuing improvment would be the large schools built between 1895 and 1920. These schools tended to have serious egress problems. The hygienic conditions of these schools were also frequently regressive,

as facilities were only slightly better than those found in one room schools and when shared with much larger numbers became lethal. The final exception to continually improving safety and hygiene might be the windowless classrooms of the open plan schools of the late 1960s. These classrooms must have artificial lighting operating at all times and the fluorescent lighting found in them tends to be excessive. We await the verdict on this architectural development.

9.3 RECOMMENDATIONS

Having concluded this study it appears that the most obvious area for further study is that of the open plan schools. As there were very few examples built in Manitoba before 1970 they have been given only a cursory look in this study. Open plan schools are a major development in the history of school architecture in Manitoba and elsewhere. The successes and failures of these buildings deserve a more thorough investigation.

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REGULATIONS OF THE PROTESTANT SECTION OF THE BOARD OF EDUCATION RESPECTING SCHOOL SITES, SCHOOL HOUSES, AND SCHOOL FURNITURE.

Adopted 5th January, 1885.

SCHOOL PREMISES.

SCHOOL GROUNDS.

1. The school sites at present existing, and those that may hereafter be fixed at the formation of new school districts, shall remain as the school sites of those districts respectively, until changed by a majority of the ratepayers present at a meeting called for that purpose in any school district; but each change shall be made only with the consent of the Protestant Section of the Board of Education.

2. School trustees are required to obtain a title to their school site, and register the same. When a title cannot be immediately secured, the case must be reported to the Superintendent before a building is erected or expense incurred in the purchase of the ground.

3. The school grounds shall, in rural districts, include, at least, one acre of ground, and in cities and towns at least one quarter acre, unless with the special permission of the Protestant Section of the Board of Education.

4. In cities and towns, school grounds shall be enclosed with a substantial fence; in rural districts a fence shall be erected where practicable; the planting of shade trees in school grounds is recommended.

5. A supply of drinking water shall be provided upon the school ground or within a convenient distance from it.

SCHOOL HOUSES.

6. All school houses shall be kept insured.

7. Before letting any contract for the erection of a school house, or obtaining a loan by issue of debentures for the same, school trustees shall submit a copy of the plans and specifications to the Superintendent of Education for the approval of the Board, and shall accompany the same with an architect's estimate or a *bona fide* tender for the completion of the work; and no school house shall be erected, or school furniture provided, except upon a plan duly approved by the Board.

8. The Superintendent shall transmit a copy of the plan of each school house and its furniture, as finally approved, to the local inspector, whose duty it shall be, at his first official visit, to examine the school house and report to the Superintendent any departure from the approved plan in its erection and furnishing.

9. In new school districts school buildings costing over six hundred dollars shall not be approved by the Board, except under special circumstances that may justify a larger expenditure; but in order to insure the health, comfort and convenience of the children attending, the Board requires as a condition of its approval, that all school houses shall be erected and furnished with due regard to the following conditions:

(1.) The dimensions of each school house shall not be less than twenty-four feet long by eighteen feet wide, and the side walls shall be at least ten feet in height from floor to ceiling. School houses at which there shall be an average attendance of over twenty-five pupils shall be erected so as to afford one hundred and fifty cubic feet of air space for each pupil.

(2.) The entrance door or doors shall open outwards and be protected by a weather tight porch or shall open from an inner vestibule. An embankment of earth shall be placed around the house to the height of the floor level.

(3.) The chimney shall be constructed of brick or cement, and shall contain two flues, one for the escape of smoke and one for foul air, each flue to have a capacity of not less than five by eight inches in the clear. The ventilating flue shall be continued from the chimney down to the floor of the room, by means of a wooden or metal pipe of the same capacity as the chimney flue; this pipe shall contain two openings, not less than eight inches square, one at the floor and one near the ceiling, regulated by valves.

(4.) The windows shall light the room from the sides of the building only, and shall be arranged to open easily at the top and bottom.

OUTHOUSES.

(5.) There shall be separate buildings for privies for boys and girls respectively. These buildings shall be erected in the rear of the school house, at least ten feet apart, their entrances facing in opposite directions, or otherwise effectually screened from each other.

SCHOOL ARCHITECTURE AND FURNITURE.

Until now very little concern has been had or care taken in construction of school houses answering all the requisite conditions of salubrity and hygiene, of comfort, order and cleanliness.

It is impossible, let us admit, to suddenly organize a complete system when everything is to be done, and especially when facilities for so doing are exceedingly limited. The question is, however, of such importance, and so closely connected with the interest of teaching, that we must reflect how to apply what is prescribed by reason and experience.

Every one appreciates and values at their real worth the advantages of education. And no one dare deny the direct influence of the surroundings on the success of the education of the child.

If the school room is not clean and badly ventilated; if the furniture is insufficient and if fresh air and space are wanting, the pupil will take but little interest in the teaching. If, on the contrary, the school room is clean, well lighted and elegantly furnished, the child will like to be at school, it will impress him with the noble character of education, the self sacrifice which it inspires and where he is to acquire sound principles and habits.

An American writer, Mr. Henry Barnard, the author of a work published a few years ago on United States school architecture says on this subject:

School houses as a rule, are badly located, exposed to dust, and to all the noises and dangers of the highway. Their outward and inward appearance is inattractive, if not altogether repulsive; they are erected with the worst description of material, built in a hurry and with too much economy.

They are too small. In mixed school there is no separate vestibules for the boys and for the girls. In class rooms, the pupils cannot sit or move with ease. There is no platform for the master, no suitable desk in which he may safely put away under key the few articles he needs. No small repetition room where he may withdraw. They are badly lighted and receive either too much or too little light. The windows are placed at the random, facing in all directions. There is no blind or curtains to avoid the bad effect of sunrays or the excess of light which fall directly on the eyes of the children or reflect directly on the white surface of their books. The pupil can watch what is going on outside the room. There is no good ventilation, no pure air, no ventilator for the escape of emanations from a crowded room. The temperature of the room is not kept even. One freezes near the windows and another roasts near the stove. They are badly heated. Cold air penetrates through chinks in doors and windows, through bad window frames, floors and ceiling.

The desks and seats are badly put together, and not placed in a convenient position for either pupil or master. Seats are either too high or too low; desks are placed on three sides of the room, so that a portion of the pupil facing one another and not the master.

The seats and desks are so close to one another, and so near the wall that the pupil cannot go to the master, or the latter to the pupil without disturbing those sitting at the same table.

They have neither blackboards, nor geographical maps, no clock, no thermometer, and none of the most indispensable articles necessary for the maintenance of good behaviour and good discipline.

In the exterior or the interior of the school house they have nothing of what is necessary to give notions of order, progress, and, what is needed, of good breeding and elegance of manner. They have no private places where children may conveniently resort. No grass, no trees or green in the vicinity. No play ground, no matting near the door to wipe their feet, no closet or hooks to hang up their hats, nor their little winter coats. No fountain, *no washstand when they may frequently wash their hands, etc.*

These remarks may in a great measure be applied to our mode of construction and furnishing.

As a rule our school commissioners do not seem to realize as well as they might, the necessity for the proper selection of a convenient site for the erection of school houses, the good adaption of the internal divisions to the intellectual and physical development of the pupils, the regard to room needed for the convenience of the number of children in attendance and finally, the furnishing of the school room with all necessary furniture, black boards, forms, desks, maps, etc.

Let us then in future display more foresightedness in the building of our school houses and more zeal in procuring the furniture necessary to the progress of the children. Should we neglect what may to us appear mere accessories, but in fact are an essential part of the teaching, all the efforts of the teacher shall prove unavailing, and we shall be denied the right both of wondering and complaining at the want of success in schools.

(6.) The seats and desks shall be arranged so that the pupils may sit facing the teacher and they shall not be longer than is requisite to seat two pupils each.

(7.) The seats shall be so regulated as to height that pupils of different ages may be seated with their feet squarely upon the floor. The backs shall slope backward two or three inches from the perpendicular.

(8.) The seats and desks shall be fastened to the floor in rows, with aisles of suitable width between each row; a passage, at least two feet wide, shall be left between the outside rows, and the side and rear walls of the building, and a space, from three to five feet wide between the teacher's platform and the front desks.

(9.) Each seat shall be so placed that its front edge shall be slightly overlapped by the edge of the desk in front of it. Each desk shall be provided with a shelf for pupils' books, etc.

(10.) A sufficient number of seats and desks shall be provided for the accommodation of all the pupils ordinarily in attendance at the school.

Trustees purchasing desks are recommended to procure at least three different sizes, suited to the ages of the pupils. For the convenience of those who may choose to have them made by a local mechanic, the following table of dimensions is given:

AGE OF PUPILS.	CHAIRS OR SEATS.			DESKS.			
	HEIGHT.		SLOPE OF BACK.	LENGTH.		WIDTH	Height next Pupil.
	Front.	Rear.		Double	Single.		
Five to eight years.....	12 in.	11½ in	2 in.	36 in.	18 in.	12 in.	22 in.
Eight to ten years.....	13	12½	2	36	18	12	23
Ten to thirteen years.....	14	13½	2½	36	20	13	24
Thirteen to sixteen years..	16	15½	3	40	22	13	26

(11.) Each school house shall be provided with a blackboard, at least four feet wide and ten feet long, extending across the room in the rear of the teacher's desk, its lower edge not over two and a half feet above the floor or platform.

The following suggestions will be found useful to those desiring information as to the materials, etc., that are necessary to make a good blackboard:—

1. The plaster, upon which the coloring is to be spread, should be composed largely of plaster of Paris.

2. Before and after receiving the first coat of color, it should be thoroughly rubbed with fine sand paper.

3. The coloring matter should be laid on with a wide, flat varnish brush.

4. The liquid coloring matter may either be purchased ready to be laid on, or may be made by any painter as follows:

Dissolve gum shellac in alcohol, four ounces to the quart, the alcohol being at least 95 per cent. strong; the dissolving process will require about twelve hours. Fine flour of emery with enough lamp black or chrome green to give color is then to be added until the mixture has the consistence of thin paint. It may then be applied in long, even strokes up and down, the liquid being kept constantly stirred.

MAPS AND APPARATUS.

(12.) Each school shall be supplied with the necessary maps and apparatus, which shall be under the care of the teacher, who shall be responsible for their preservation from injury.

The following articles shall be considered necessary to the equipment of every school:

One or more sets of reading charts.

Maps of the world, Canada and Manitoba.

A supply of chalk or crayons for blackboard use.

N. B.—In choosing maps, trustees are required to procure only those of Canada and Manitoba that have the latest divisions properly marked.