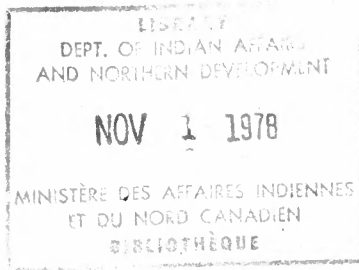


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An analysis of attendance and performance of  
Kehewin students enrolled in Bonnyville Schools in  
1967-1968 for the six year period 1967-68 to 1972-73  
with comparison to a Non-Native student population.

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An Analysis of Attendance and Performance of Kehewin Students  
Enrolled in Bonnyville Schools in 1967-68  
for the 6-Year Period 1967-68 to 1972-73  
with Comparison to a Non-Native Student Population

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May 15, 1974

### Introduction

Comments from members of the Kehewin Band and from various school representatives in Bonnyville suggest that as a consequence of the Total Community Development Approach of the past 2 years there has been a marked improvement in school attendance during the 1972-73 school year as compared to previous school years. As part of the analysis and identification of the affects of the Total Community Development Approach it was felt necessary to ascertain, if, in fact school attendance had improved. It was also thought desirable, where possible, to identify the performance levels of Kehewin students in terms of pass, failure or withdrawal.

The Bonnyville School District, like most if not all school districts in Canada, maintains a record of student attendance. The daily register as it is called identifies by classroom each student, his or her monthly attendance during the year and in some cases whether he or she has completed the grade successfully.

For the purpose of this analysis it was decided to extract information on individual student attendance for all native (registered Indian) students from Kehewin Reserve who were registered in school in 1967-68 and to follow these students through school up to 1972-73. A corresponding number of non-native children were also to be selected, but on a random basis, to act as a control group against which attendance and performance of the native children could be compared.

The year 1967-68 was selected as a starting point for analysis as it would give an historical perspective of 6 years for attendance and performance data and thus identify trends.

The consequence of choosing a fixed population and following it through the 6-year period is that at the end of the period (1972-73) there are only about 45% of the original group remaining in school due to graduation, transfers and withdrawals. Any observations or conclusions made with respect to school attendance or performance in these later years are thus based on a sub-population of the total school attending population of those years. Hopefully this sub-population is in all respects representative of the total native school population for those years.

For school years 1971-72 and 1972-73 some enrollment data was unavailable at the School District office and arrangements had not been made with the High School to extract the data required. The number of students excluded from the analysis for these latter two years is not known.

Mr. J. Moquin, Superintendent of Schools, Bonnyville School District kindly consented to make the registers available for data collection. The data was gathered during the period February 26 to March 6, 1974. A list by grade of the students in school in 1967-68, and included in the analysis, both native and non-native, is found in the appendix. Also shown is the student's age and his pattern of attendance during the six-year period.

Distribution by Age & Grade of Native Students  
Enrolled in Bonnyville District Schools  
in September 1967

Grade	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	Average Age Year - Month	
1	14	6	4	9	6	1											21	6 yr. 8 mo.	# in higher grade - 3
2	1	4	8	8	2	1											21	8 yr. 6 mo.	# in expected grade - 36
3							3										19	9 yr. 4 mo.	# in lower grade - 78
4					4	7	3										14	10 yr. 5 mo.	(than expected for age) 117
5						1	4	4									9	11 yr. 8 mo.	100%
6						1	1	4	3								9	12 yr. 4 mo.	
7								1	1	2	2						8	14 yr. 4 mo.	
8									2	3	3	1					10	15 yr. 4 mo.	
9													3				4	15 yr. 6 mo.	
10														1			1	17 yr. 3 mo.	
11																	1	17 yr. 1 mo.	
12																	0		
Total	1	15	10	17	18	12	9	9	6	6	8	3	3				117		

Table 2  
Distribution by Age & Grade of Non-Native Students

Grade	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total	Average Age Year - Month	
1	10	1	1	1													17	6 yr. 6 mo.	# in higher grade - 16
2	3	10	7	1	1												22	8 yr. 0 mo.	# in expected grade - 63
3			2	13	4												19	8 yr. 8 mo.	# in lower grade - 35
4				1	7	6											14	9 yr. 9 mo.	(than expected for age) 114
5					1	6	2										9	10 yr. 9 mo.	100%
6						1	6	1	1								9	11 yr. 8 mo.	
7							1	4	2	1							8	13 yr. 1 mo.	
8								1	5	2							10	13 yr. 11 mo.	
9									2	2							4	14 yr. 8 mo.	
10										2							1	14 yr. 8 mo.	
11																	1	15 yr. 6 mo.	
12																	0	15 yr. 6 mo.	
Total	5	13	13	21	14	13	8	8	5	4	1	1					114		

Age/Grade Distribution of Students Enrolled in 1967-68

In 1967-68, 117 native children from Kehewin Reserve were attending Bonnyville district schools. Table 1 gives the distribution of the 117 native children by age and grade enrolled in September 1967. Table 2 similarly identifies the 114 non-native children who were randomly selected. The lower number of non-native children results from the selection technique. (For every native child in a class a non-native child was selected. In some instances the majority of children in a class were native. As a consequence there were insufficient numbers of non-native children to fill the sample required.) The majority of children (80%) in this analysis were enrolled in the primary grades (grades 1 - 6) in 1967-68.

Tables 1 and 2 also show the average age for each of the students for each grade, expressed in terms of years and months.

In 1967-68 native children were generally older than their non-native counterparts for each grade. The difference in average ages is very little for the primary grades but at the more senior grades the age differential is more pronounced such that by grade 10 native students are on average approximately 2 years older than non-native students. The age differential is easily recognized when a comparison is made between the number of children enrolled in the expected grade for their age as indicated by the diagonal line and the numbers falling outside the diagonal line. This is based on the assumption that a 6-year old would be enrolled in grade 1 and progress satisfactorily; i.e. one grade for each additional year. Those above and to the right are older than expected for the grade; those below and to the left are younger for the grade than expected.

66% of the native children enrolled in 1967-68 were enrolled in a grade lower than expected for their age. This is twice the percentile for non-native students.

The age differential suggests that native students are not progressing as rapidly through the grades as their non-native counterparts.



Table 3

Average Attendance of Native Students Enrolled in 1967-68 for 1967-68 and each Subsequent Year

Number of Days (# of Students Enrolled)

Number of days of school

	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73
	193	191	192	190	191	190

Note: This table does not show student grade progression, but rather average attendance of the same students for six (6) consecutive years in school.

1 (21)	166 (20)	160 (20)	179 (16)	172 (17)	133 (19)	166 (14)
2 (21)	174 (20)	170 (19)	175 (18)	174 (16)	135 (19)	167 (14)
3 (19)	181 (19)	177 (19)	179 (16)	173 (17)	132 (14)	156 (13)
4 (14)	170 (14)	162 (13)	166 (11)	170 (8)	169 (7)	157 (5)
5 (9)	163 (9)	162 (9)	160 (7)	160 (7)	128 (4)	
6 (9)	171 (9)	149 (8)	163 (6)	162 (5)	160 (2)	
7 (8)	155 (8)	156 (5)	146 (2)	176 (1)		
8 (10)	146 (6)	151 (4)	138 (2)	108 (1)		
9 (4)	156 (4)	157 (1)	110 (1)	29 (1)		
10 (1)	154 (1)	-	-	-		
11 (-)	-	-	-	-		
12 (1)	8 (1)	169 (1)	137 (1)	-		

Average Attendance of Non-Native Students

1 (17)	176 (16)	181 (14)	176 (13)	178 (11)	180 (10)	174 (8)
2 (22)	174 (22)	182 (21)	185 (16)	180 (16)	183 (15)	177 (14)
3 (19)	182 (19)	182 (17)	186 (15)	184 (16)	182 (17)	173 (16)
4 (14)	185 (14)	177 (10)	179 (10)	174 (10)	172 (9)	173 (7)
5 (9)	182 (9)	175 (7)	179 (7)	185 (6)	186 (4)	
6 (9)	189 (8)	181 (6)	184 (6)	182 (4)	57 (1)	
7 (8)	178 (8)	178 (7)	184 (5)	173 (6)		
8 (10)	179 (10)	174 (9)	171 (7)	175 (5)		
9 (4)	186 (4)	180 (3)	181 (3)	181 (3)		
10 (1)	186 (1)	-	-	-		
11 (-)	-	-	-	-		
12 (1)	174 (1)	-	-	-		

Average Attendance of Students

Table 3 shows average attendance of students by grade enrolled in 1967-68 for the years 1967-68 to 1972-73. The students enrolled in 1967-68 are followed through to 1972-73 and average attendance by grade for each year is calculated. To be included in the calculation a student must attend at least 100 days during the school year. Those who have been excluded by this arbitrary cut off include students who withdraw part way through the year, students who transfer in or out during the school term and students who have a significant attendance problem. All of these have been omitted so as to remove strong downward bias in the average attendance figures. The number of students who started in September 1967 are shown in brackets after the grade and the number each year is shown after the average attendance for that year.

The attendance pattern of native students can be examined in two ways; relative to perfect attendance and relative to non-native attendance. Table 4 identifies the attendance differential of native students with respect to a full attendance situation for each of the years examined. The following observations can be made.

1. Generally, the higher the grade, the poorer is the attendance of native students.
2. Generally, the attendance of native students in 1969-70 and 1970-71 was better than for any other year.
3. The attendance of native students was poor in 1971-72. This was a result of the school strike of September, October and November of that year.
4. Attendance of native students improved in 1972-73 as compared to the prior year 1971-72 but was not as good as in 1970-71 or 1969-70.
5. The students included in this analysis represent a diminishing proportion of the total school attending population as the analysis moves from 1967-68 to 1972-73. The observations made above assume that the sample group is representative of the total native population attending school from Kehewin.

Table 5 identifies the attendance differential between native and non-native students. The following observations can be made.

1. Generally, native children exhibit a poorer school attendance pattern than non-native children.
2. Generally, the higher the grade the poorer their attendance.
3. Attendance in 1971-72 of native children relative to non-native children was poorer than other years as a consequence of the school strike.
4. Attendance of native children as compared to non-native children was relatively unchanged and perhaps even somewhat poorer in 1972-73 as compared to 1970-71.

Table 4

Average Attendance Differential (# of days absent) from Perfect Attendance for those Native Students Enrolled in 1967-68 and Attending School during Subsequent Years

	Grade En 1967-68						
	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	
1	27	31	13	18	58	24	
2	19	21	17	16	56	23	
3	12	24	13	17	59	34	
4	23	29	26	20	22	33	
5	30	29	32	30	63		
6	22	42	29	28	31		
7	38	35	46	14			
8	47	40	54	82			
9	37	34	82	-			
10	39	-	-	-			
11	-	-	-	-			
12	-	22	55	-			

Table 5

Average Attendance Differential (# of days absent) of Native Students as Compared to Non-Native Students Enrolled in 1967-68 and Attending School during Subsequent Years

	Grade in 1967-68						
	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	
1	10	21	(3)	6	47	8	
2	0	12	8	6	48	10	
3	1	5	7	11	50	16	
4	15	15	13	4	3	16	
5	19	13	19	25	58		
6	18	32	21	20	103		
7	23	22	38	(3)			
8	33	23	33	67			
9	30	23	71				
10	32						



Table 6  
Grade in 1967-68

Enrollment by Year of Native Students  
Enrolled in 1967-68 for the Years 1967-68 to 1972-73

	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73
1	21	20	19	19	20	15
2	21	20	20	17	21	16
3	19	19	19	18	17	15
4	14	14	13	10	10	5
5	9	9	9	9	6	1
6	9	8	8	5	3	N/A
7	8	7	4	1	N/A	N/A
8	10	4	3	1	N/A	N/A
9	4	2	2	1	N/A	N/A
10	1	-	-	-	-	-
11	-	-	-	-	-	-
12	1	1	1	-	-	-
Total	117	104	98	81	77	51

<sup>1</sup> data not available

Rate of Attrition, i.e. Yearly enrollment as % of 1967-68

89% 84% 69% 68% 45%

Grade in 1967-68

Enrollment by Year of Non-Native Students

	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73
1	17	14	14	13	11	8
2	22	21	19	17	16	14
3	19	18	16	16	17	17
4	14	11	10	10	11	8
5	9	8	7	5	5	1
6	9	6	6	4	1	N/A
7	8	7	7	6	N/A	N/A
8	10	9	8	6	N/A	N/A
9	4	3	3	3	N/A	N/A
10	1	-	-	-	-	-
11	-	-	-	-	-	-
12	1	-	-	-	-	-
Total	114	97	90	80	61	47

<sup>1</sup> data not available

Rate of Attrition, i.e. Yearly enrollment as % of 1967-68

85% 80% 70% 54% 41%

## Student Progression

Though student progression was not of primary concern in the formulation of the original hypothesis some information on student progression can be readily extracted from the data. For example, Table 6 shows the rate of attrition of native and non-native students over a 6 year period starting in 1967-68. The attrition is due to graduation, withdrawals and transfers. The rate of attrition of native students is equal to that of non-native students. However, the major reason for attrition of native students appears to be withdrawal (quitting) while for non-native students it is transfers and graduation.

For native children there is a significant decline in enrollment between grade 8 and grade 9. This is evident across all 6 years on the chart. The diagonal line on the chart separates grade 8 enrollment from grade 9 enrollment for each year after 1967-68. The arrow which crosses the diagonal line identifies the change in enrollment that has occurred each year as students move from grade 8 to grade 9. Enrollment of non-native students does not show the same decline. Reference to the appendix shows the partial attendance levels of native students in their final school year and supports the fact that the decline in enrollment occurs between grades 8 and 9. Significantly, this withdrawal from formal educational services appears to be coincident with the student reaching age 16.

The student registries examined noted the pass, failure or special status of all students in the primary grades for the years 1967-68, 1968-69 and 1969-70. For the remaining years and for grades 7 through 12 information on student progression was not available from the registry document.

Tables 7 and 8 show for grades 1 through 6 the disposition of native and non-native students for the 3 year period 1967-68 to 1969-70. The comments below draw on the summary data from each table.

Of the 93 native students enrolled in grades 1 to 6 in 1967-68, 77 or about 83% were still in Bonnyville schools in 1969-70. Out of a total of 90 non-native students enrolled in 1967-68, 67 or 74% were still in Bonnyville schools in 1969-70. The significant difference in attrition of the original native and non-native student enrollment populations is due to the high incidence of transfers among non-native students. About 17% of non-native students transferred out during the 3 year period as compared to 1% of native students.

The most important difference between the two groups of students is the high rate of failure and withdrawal among native students as compared to non-native students. 48 students or 52% of the native students enrolled in 1967-68 in grades 1 to 6 advanced a grade each year during the 3 year period. On the other hand 44 students or 47% of the students had fallen at least one grade behind. Of this group 32 had failed at least once and 12 had withdrawn. The failure rate of native children at 34% is approximately twice as high as that of the non-native students during the same three year period. The withdrawal rate, at 13%, is three times as high as for non-native students.

Though the information on student progression covers only 3 of the 6 years and 80% of the survey population (i.e. grades 1 to 6 in 1967-68) it would appear that the observations on student failures, withdrawals and transfers during that 3 year period is representative of the educational experience of both native and non-native children.

Table 7

## Disposition in 1970 of Native Students who were Enrolled in 1967-68

Grade	1 # of Students Enrolled in 1967-68 (4+5+6)	2 # of Failures 1967 to 1970	3 # of Withdrawals 1967 to 1970	4 # of Transfers 1967 to 1970	5 # of Students Who Advanced a Grade/Year	6 # Who Did Not (2+3)	7 # of Students in School June 1970	Disposition in 1970 of Native Students who were Enrolled in 1967-68	
								%	%
1	21	11	3	0	7	14	16	53%	67%
2	21	5	2	0	14	7	18	24%	33%
3	19	8	1	0	10	9	18	42%	47%
4	14	2	3	0	9	5	12	14%	36%
5	9	2	1	0	6	3	8	22%	33%
6	9	4	2	1	2	6	5	45%	67%
Total Grades 1 - 6	93	32	12	1	48	44	77	34%	47%

\* This is a count of students who were in attendance for less than 100 days during the year.

\*\* In some cases students were in attendance for all school months except June. These students have not been counted as withdrawals and also are not included in this total.

Table 3

## Disposition in 1970 of Non-Native Students who were Enrolled in 1967-68

Grade	1 # of Students Enrolled in 1967-68 (4+5+6)	2 # of Failures 1967 to 1970	3 # of Withdrawals 1967 to 1970	4 # of Transfers 1967 to 1970	5 # of Students Who Advanced a Grade/Year	6 # Who Did Not (2+3)	7 # of Students in School June 1970
1	17	4 23%	1 6%	2 12%	10 59%	5 29%	13 76%
2	22	5 23%	2 9%	3 13%	12 55%	7 32%	16 73%
3	19	4 21%	1 5%	2 11%	12 63%	5 26%	15 79%
4	14	2 14%	0 -	4 29%	8 57%	2 14%	10 71%
5	9	1 11%	0 -	2 22%	6 67%	1 11%	7 78%
6	9	1 11%	0 -	2 22%	6 67%	1 11%	6 67%
Total Grades 1 - 6	90	17 19%	4 4%	15 17%	54 60%	21 23%	67 74%

\* This is a count of students who were in attendance for less than 100 days during the year.

\*\* In some cases students were in attendance for all school months except June. These students have not been counted as withdrawals and also are not included in this total.



Closing Remarks

Based on the data gathered for 6 years on students who first enrolled in 1967-68 the following closing remarks with respect to native and non-native students may be made:

With Respect to Age

1. native students attending each grade in Bonnyville schools are generally older than their non-native counterparts particularly in the more senior grades.

With Respect to Attendance

2. native students generally have poorer attendance records than non-native students.
2. attendance patterns of native students in high grades are poorer than in lower grades. A similar pattern is not exhibited by non-native students.
4. there is a significant decline in enrollment of native students between grades 8 and 9. This is coincident with reaching the school leaving age of 16.
5. native school attendance was good during the two years 1969-70 and 1970-71, was poorer during 1971-72 because of the school strike and improved somewhat during 1972-73.
6. there appears to be no evidence (limited by the data gathering technique) to suggest that school attendance during 1972-73 had improved considerably over prior years and that this improvement could be attributed to the Total Community Development Approach as hypothesized.

Attendance among native children did improve in 1972-73 as compared to 1971-72 but certainly was no better than in 1969-70 and 1970-71 which were comparable years.

With Respect to Student Progression

7. for the three years examined and for grades 1 to 6 the failure rate (34%) among native students was twice as high as for non-native students.
8. the withdrawal rate (15%) of native children is three times as great compared to non-native children.
9. 47% of the native children in grades 1 - 6 in 1967-68 had fallen at least one grade behind by the end of the 1969-70 school year as compared to 23% of non-native children.
10. the age disparity of native students particularly in the more senior grades (point 1) supports the conclusions on student progression and suggest that historically the situation has not been any different than it is today.