

Educational Finance In Western Canada

by

Allan Henry Le Neveu

*

A Thesis submitted for the Degree of

MASTER OF ARTS

in the Department

of

ECONOMICS

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The University of British Columbia

APRIL, 1924.

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Educational Finance in
Western Canada

Chapter 1.

The Problem.

The study of Public Finance has received considerable attention since the war. Indeed for some time prior to the cessation of hostilities this study has claimed an increasing consideration in official and even in unofficial circles. The reason for its rather sudden prominence in the public eye is quite obvious to one who gives the subject a moment's thought. The prosecution of the war imposed a heavy financial burden on the belligerent nations. To meet the cost of conducting military operations these nations not only adopted a severe taxation policy, but incurred huge debts by public borrowing. Since government war loans must be liquidated ultimately by taxation the tax burden in those countries involved in the great European struggle will be grievous for many years to come. It is when the shoe begins to pinch that our attention is directed to it. Likewise, the crushing nature of taxation burdens today, has aroused an unprecedented interest in the whole study of Public Finance.

The only salutary means of relieving or reducing the burden of taxation is by ensuring the strictest economy in public expenditures. Public opinion seems to have realized this. In every quarter we hear the cry for retrenchment. The Government must curtail its expenditure all along the line. Save where it is absolutely essential, no new appropriations on capital account must be made. Not only, however, has this cry gone out as a demand for reduction in Capital expenditure, but also as an urgent and insistent appeal for the elimination of all waste and extravagance in the administration of sums set aside for the necessary current expenditures. "What we want," you will hear the business man say, "Is efficiency in the handling of public moneys; the government must conduct its affairs in a business-like way."

Thus we see that the heavy taxation burden made necessary by the war debt, has in a sense been a boon to the community. It has stimulated in the layman an increasing and, it is to be hoped, a more intelligent interest in taxation problems, as well as in the difficulties involved in the administration of public revenue.

In the general outcry against waste, extravagance and unnecessary expenditure in public services it was only to be expected that the field of education was by no means overlooked. The administrators of the public service of education.

ion were charged by many as the greatest sinners in the way of inefficiency and laxity in observing strict 'business' principles of operation. But though such opinion was more or less generally accepted, little inquiry was made into the actual state of affairs to discover after scientific investigation to what extent this indictment was true.

Public opinion in our own province of British Columbia has been no exception. On all sides we hear the statement made that too much money is being spent on education, especially on higher education; and that such money is being literally 'squandered' as a result of a gross mismanagement in its administration. Partly out of a desire to gauge, if possible, the truth of such charges, partly because the subject affords an opportunity to do some original work in a field hardly more than pioneered, the writer has chosen as the subject of this thesis, a study of certain features of "Educational Finance in Western Canada," with special reference to our own province of British Columbia.

The purpose of this thesis is to discover just how much the governments of the western provinces are spending on education. It is to be expected, that after we have considered what sums the governments set aside for educational purposes, how they compare with amounts spent on other government services, how they coincide with educational expenditures in the years before the war, etc., we will be in a worthy

position to pass judgment upon the popular allegations that too much money is being spent on education.

A word or two, finally, in regard to the other charge--the mal-administration of the expenditure for education--will not be amiss. Before a satisfactory and adequate answer to this charge could be given an investigation into educational conditions, so thorough that it would partake of the nature of a School Survey, would be necessary. Incidentally, it may be remarked that time may not be far distant when such a survey will be undertaken. A widespread agitation with that end in view is already rousing public interest and sympathy. Howsoever, though our examination must necessarily be somewhat superficial and narrow in its scope, we are confident that we shall be able to fulfill in some appreciable degree the second purpose of this thesis--a critical observation of the manner of which the educational appropriations are expended and apportioned--and thus discover, partially at least, how much truth there is in the charge of mal-administration of educational expenditure.

In any case, whatever be the conclusions we are able to arrive at as a result of our investigation, they are by no means to be accepted as final. They should be regarded only as tentative findings. The information we should very much like to have has not always been obtainable, and much material we have been able to collect has been so hopelessly

confused and inadequate as to render it of little practical value. Nevertheless, though our research has not brought to light sufficient data to serve as a basis for more than a few temporary conclusions, it has raised questions and indicated problems that must face future explorers in this field. Howsoever, with such conclusions and questionings we are not for the moment concerned. Our present attention will be directed to our first purpose-- an examination of the sums spent by the western provinces for education.

Chapter 11

The Amount Spent On Education By The Western Provinces.

In order that we may develop the first purpose of this thesis satisfactorily it would be well for us to make comparisons as often as is possible. Showing the actual amounts spent and how they are spent would not, of course, meet the contention that too much money is being spent on education. We must endeavor to explain how the sums spent today compare with those expended, say, before the war. Realizing, however, the difficulties involved in attempting to draw comparisons without a comprehensive knowledge of conditions, we shall approach the subject with great caution and present only the most striking comparisons.

In the first place, let us note the expenditure by the governments in the western provinces on education in 1913, just before the war, and in 1922, and observe also how the expenditure at these two periods compares with the total expenditure of the governments in both instances. It must be understood that these expenditures are on current account only.

The Public Accounts of the provinces for these two years disclose the following figures;

Saskatchewan

<u>Year</u>	<u>Total Expenditure</u>	<u>Educational Expenditure</u>
1912-13	\$4,656,800.43	\$ 612,220.00 or 13%.
1922-23	12,823,208.81	3,043,987.96 or 24%.

Alberta

<u>Year</u>	<u>Total Expenditure</u>	<u>Educational Expenditure</u>
1913	\$ 5,225,584.14	\$ 713,733.36 or 14%
1922	11,235,192.22	2,444,689.70 or 21%

British Columbia

<u>Year</u>	<u>Total Expenditure</u>	<u>Educational Expenditure</u>
1913	\$ 9,000,000.00 *	\$1,141,070.43 or 13%
1921-22	17,436,486.92	3,432,919.23 or 20%

In every case we notice that the proportion that Educational Expenditure bears to the total expenditure on current account has increased from about 13% in 1913 to over 20% in 1922. In examining the items in the current accounts of the provinces during these two years we find that both Public Debt and Education have increased, relatively, to a striking degree. The expenditure on almost every government service has increased, absolutely, but in many cases the proportion

*approximately

to the total expenditure has declined with the passing of years. Public Works and the Administration of Justice, especially the former, have about held their own. But, obviously, in order that Public Debt and Education might make such outstanding relative gains, it was inevitable that the expenditures on other government services should have decreased relatively from 1913 to 1922.

An account of these government's expenditure for education just prior to the war and in the very recent years would hardly be complete were we to dismiss the question of capital expenditure entirely from our consideration. We appreciate fully the difficulties involved in an attempt to classify and compare capital expenditures at two particular periods, ie., at two distinct years. Obviously, the most satisfactory manner of studying expenditure on capital account is to note the trend of such expenditure over a space of several successive years. Though, unfortunately, we have been unable to collect the actual figures representing capital expenditure over a period of successive years, we have been able to gather from educational reports an insight into this general trend or development. But before considering further this question of the dominant course of expenditure on capital account over the ten years since the advent of the war, let us examine the actual amounts spent by the governments of the western pro-

vinces, as capital expenditure on education, in the years 1913 and 1922. Though perhaps not particularly significant, these figures will, we trust, be of some interest.

Saskatchewan

<u>Year</u>	<u>Expenditure On Capital Account.</u>
1912-13	\$ 323,584.69
1922-23	443,930.80

Alberta

<u>Year</u>	<u>Expenditure on Capital Account.</u>
1913	\$ 139,264.32
1922	557,246.34) 386,658.40)

(It might be well at this point to offer a word or two of explanation. These figures were compiled after a careful examination of the Public Accounts of these provinces. In all, but the 1922 report for Alberta, the section devoted to Educational Expenditure contained only expenditure on current account. We found, however, the desired information listed in the section, Public Works, Capital Account. In regard to the 1922 Public Accounts of Alberta, the first figure \$557,246.34 represents the amount spent on buildings, structures, etc., as collected from the Public Works Expenditure,

Capital Account. The second sum, \$386,658.40 was classed as an Educational Expenditure, Capital Account, and consists of Advances to School Districts and Loans to Normal Students. Perhaps this sum may have been intended as something in the nature of an 'extraordinary' expenditure. The fact that the year 1913 shows, for Alberta, a relatively small capital expenditure, \$139,264.32 as compared with 1922, \$557,246.34, is at first glance somewhat astonishing. This curious situation is explained by the fact that in the year 1922, \$552,000.00 out of the \$557,000.00 went towards the construction of the new Normal School and Institute of Technology at Calgary. Such an incident like the above, where a huge expenditure falls due at one particular year, shows the utter impossibility of trying to compare capital expenditure by reference only to two special years.)

Before, however, leaving this examination let us observe the situation here in British Columbia in regard to capital expenditure in the years 1913 and 1921 and 1922.

<u>Year</u>	<u>Capital Expenditure.</u>
1913-14	\$ 637,490.67
1921-22	379,902.46
1922-23	241,898.24 *

When we bear in mind the fact that the value of the dollar

*These figures are obtained from The School Reports for these years.

was much less in 1921 and 1922 than in 1913, and even so, the latter year indicates an expenditure on capital account of about twice the amount that was expended in 1921 or 1922, these figures, insufficient as they are as a basis for comparison, nevertheless give us a clue to the mystery we wish to unfold. We will, then, proceed to examine more closely the general trend of capital expenditure over the past decade.

A perusal of the School Reports of the Western Provinces for the year 1913 and the past few years discloses a rather indistinct, but yet discernible, development in regard to the factor of capital expenditure. The course of this expenditure in any one province seems to maintain a rough relation to the courses followed in the other provinces; and this noticeable relation affords us a justifiable ground for outlining what we believe to be the general trend over the past ten years.

In order that we may broaden our field of investigation let us in the first place reveal the situation that has existed in the Province of Manitoba.

In the annual report of the deputy-minister of education in the Public School Report for 1913 we find some interesting information in regard to educational-financial conditions in Manitoba. In a section entitled 'Value of School Property' he states; "The total value of all school property has increased from \$2,227,645.00 in 1904, to \$8,780,076.00 in 1913. This has been preëminently a period of advance in the style

and quality of our school architecture; larger buildings have been built, many having been constructed of permanent material... In 1904 there were 1,218 school houses, and this number has now increased to 1,447... During the year covered by this report, debentures to the amount of \$594,200.00 were approved by the Department to provide new buildings, or to improve existing buildings." According to the deputy-minister we gather that the 10 years prior to 1914 were years "of advance" in school building. Moreover, on examining the statistical chart in that report, giving a summary of the total receipts and expenditures by the government and municipalities over most of this period we find the following figures listed under the expenditure on;

<u>School Buildings, etc.,</u> 1907	\$ 460,200.20
1908	582,033.95
1909	641,899.91
1910	830,431.66
1911	1,199,288.47
1913	1,420,881.95

These figures confirm the statement made by the deputy-minister, that the years 1904-13 witnessed in the province of Manitoba a steady growth of expenditure on capital account for educational purposes.

Though the 1922 report contains no review of educational conditions by the deputy-minister we are able to gauge with

some accuracy the tendency in capital expenditure for education over the period 1913-22 by a study of the statistical account of receipts and expenditures in the province from 1915 to 1922. The total sum expended by the government and municipalities on capital account is as follows:-

Expenditure On Buildings, Etc.

1915	\$ 1,358,533.40
1916	823,266.32
1917	382,988.34
1918	440,221.49
1919	556,071.54
1920	958,932.91
1921	2,081,176.00
1922	1,947,527.21

We notice in examining these figures that from 1915 to 1918 there was a sharp decrease in capital expenditure, but from 1919 the expenditure rapidly mounted till in 1921 and 1922, about \$2,000,000 was being expended on capital account for education. This progression is significant in that it represents the total expenditure on capital account by the government and municipalities combined over the period we are studying.

We may now turn our attention to the Province of Saskatchewan, and seek to discover the trend of capital expenditure that obtained there from 1913-22.

From the report of the deputy-minister of education in the Saskatchewan School Report for 1913 we gather the following figures; 'The amount expended on school sites and buildings for the year 1913 was \$2,031.489, an increase of \$614,359 over 1912.

In order that we may study the general relationship existing between the Province of Manitoba and that of Saskatchewan in regard to the progression of expenditure on capital account over that period from the outbreak of the war till the year 1922, it is necessary to discover the sums spent on School Buildings, Grounds, etc., by the government and municipalities in Saskatchewan. We have already examined the figures for Manitoba on this phase of the question. The reports available disclose the following information:

Expenditure On School Buildings, Etc.

1917	\$1,136,599.81
1918	990,309.71
1919	1,546,622.51
1920	2,099,350.50
1921	1,854,456.16
1922	1,209,293.53

Even a cursory comparison of the figures of these two provinces educes a noteworthy similarity of development. In both cases the amount spent in 1913, a time when the dollar would buy much more than it has been buying in the last six or

seven years, exceeded amounts spent in the succeeding years, till the 1920 and 1921 are reached. Unfortunately, a very important missing link, the years '15 and '16 in Saskatchewan, makes it impossible to arrive at an adequate comparison from 1913 to 1918. But the statistics gathered seem to point to a more or less regular degression from 1913 to 1918. Then in both instances there is a sharp upward trend to 1920 and 1921 with a final falling off in the year 1922. Such, then, is the rough relation existing between the two provinces, a similarity which gives us reason to believe that we have determined the general course of capital expenditure over the decade, 1913-1923.

In the Alberta and British Columbia reports the same progression is indicated. In the 1913 Report for Alberta the deputy-minister tells us in no uncertain words that "one of the outstanding features of the year was the remarkable activity in school building." The report for 1913 in our own province shows that the government then spent twice as much as it has been doing in the past couple of years on capital account. Moreover, the recent reports for both provinces refer, in regard to fiscal affairs, of the policies of retrenchment followed by provincial and municipal authorities as a result of the outbreak of the war. Whether these two provinces have revived in appreciable degree their expenditures on capital account from 1919 to 1922 as was the case

in Manitoba and Saskatchewan we are unable to say with accuracy. Statistical data in this regard for Alberta and British Columbia has not been available in recent reports, i.e., capital expenditure for both government and municipal accounts combined. However, the following figures showing the value of School Buildings and Grounds in Alberta during the past few years are suggestive:

Value Of School Buildings and Grounds.

1917	\$14,486,014.29
1918	14,863,976.33
1919	15,892,920.05
1920	16,824,719.25
1921	18,055,485.21

(1922 not listed)

These figures do seem to show that the recovery in capital expenditure witnessed in Manitoba and Saskatchewan in the years immediately following the conclusion of the war has also been evident in the Province of Alberta.

We have now considered the current expenditure of the governments of the western provinces for education in 1913 and 1922 and examined its relation to the total expenditure on current account. We have also dealt with the subject of capital expenditure over the period intervening between these two years, not only on government account but also on the account of the provincial government and municipalities

combined. Following from this treatment a fitting conclusion to this chapter would be effected if an attempt should be made to set forth in a summary fashion the total expenditure on current and capital account of both the provincial and municipal governments for the years 1913 and 1922. With these grand totals let us, lastly, concern ourselves.

In order that the following groups of figures may be understood in their true meaning an explanatory word or two is necessary. In the first place, it would be well to point out how the grand totals were computed. From the totals, as listed in the School Reports, it was essential for us to subtract sums paid on debentures and maturing notes, as well as unexpended balances, before we were able to arrive at the figures representing the true expenditure in toto for the year. Since British Columbia Reports presented only actual amounts spent on education such deductions were unnecessary. The second point we wish to explain is in regard to the method we propose to follow in presenting the groups of figures compiled. We shall first set forth the grand total for any particular province for 1913 and 1922, and, then, beside these totals place the amount of legislative grants for the corresponding years. Then by subtracting the legislative grant from the grand total we shall have a rough estimate of the amount spent by the municipalities for educational purposes for the year.

Furthermore, it must be observed that by legislative grant we mean, in reference to Alberta and Saskatchewan, just the sum contributed by the provincial government under the School Grants Act, but in regard to Manitoba and British Columbia we include, in that term, the total government expenditure. Howsoever, since the sums distributed under the School Grants Act comprise about seventy-five per cent of the total government expenditure this point of difference is only of slight importance.

It would be well to group the statistical data for Alberta and Saskatchewan together:

<u>1913</u>	<u>Saskatchewan</u>	<u>1922</u>
\$5,504,194.36	Grand Total	\$11,501.130.82
<u>764,165.51</u>	Legislative Grant	<u>1,971.139.23</u>
\$4,740,028.85 or 86%	Municipal Expenditure	\$ 9,529,991.59 or 83%
<u>1913</u>	<u>Alberta</u>	<u>1922</u>
\$4,930,104.82	Grand Total	\$12,358.371.36 *
<u>461,288.56</u>	Legislative Grant	<u>1,241.518.32</u>
\$4,468,816.26 or 91%	Municipal Expenditure	\$11,116.853.04 or 90%

The Manitoba and British Columbia figures may properly be considered together:

* In the 1922 Alberta School Report no summary of the total receipts and expenditures is listed, only totals. Consequently the \$12,358,371.36 is the total without the necessary deduction of debenture and note payments. Judging from all other cases the true amount would be \$9,000,000 (appr.)

<u>1913</u>	<u>Manitoba</u>	<u>1922</u>
\$3,807,623.38	Grand Total	\$9,802,557.01
<u>564,558.62</u>	Legislative Grant	<u>1,947,022.57</u>
\$3,243,064.76 or 85% Municipal Expenditure \$7,855,534.44 or 80%		

<u>1913</u>	<u>British Columbia</u>	<u>1922</u>
\$4,634,877.56	Grand Total	\$7,630,009.54
<u>1,888,654.11</u>	Legislative Grant	<u>3,176,686.28</u>
\$2,749,223.45 or 59% Municipal Expenditure \$4,453,323.26 or 58%		

An examination of these figures brings to light one very noteworthy point. We refer to the peculiar difference that exists between the province of British Columbia and the other provinces in the relation which the total municipal expenditure holds to the Grand Total. In the other provinces we find that the municipal expenditure in both 1913 and 1922 amounts to as high as 80 to 90% of the Grand Total Expenditure. Yet in British Columbia this expenditure on the part of the municipalities maintains only an average of about 60% of the total. A partial explanation for this striking divergence from the normal may be found in the fact that, as already pointed out above, the term 'Legislative Grant' comprises in the case of British Columbia the total amount expended by the provincial government on education. If in the cases of Saskatchewan and Alberta the figures representing the Legislative Grant included not only the sums con-

tributed by the government under the School Grants Act, but also the total amount set aside by the government for education, the resulting percentages would have been somewhat different. Let us take an example. Under Legislative Grant for Saskatchewan for year 1922 we find the sum \$1,971,139.23. The Grand Total listed there was \$11,501,130.82. The resulting expenditure by the municipalities was \$9,529,991.59 or 83% of the Total. On returning to an earlier part of this chapter we find that the total amount expended by the provincial government of Saskatchewan for 1922 was \$3,000,000. On this basis results would be somewhat at variance with those just presented. Since our Legislative Grant would now be \$3,000,000 the Grand Total would be \$11,501,130.82 plus the difference between \$3,000,000 and \$1,971,139.23 or \$12,529,991.59. Our resulting expenditure by the municipalities would obviously be the same as in the preceding case, \$9,529,991.59, but, since our Grand Total is larger, the municipal expenditure would necessarily be a smaller percentage of this Total. Actually, we find it to be 76%. The same condition would, of course, also obtain in the case of Alberta if we should utilise the total sum expended by the provincial government for education, which in an earlier part of this thesis we found to be, in the year 1922, \$2,444,689.70, instead of that part known as the sum distributed by the government to the municipalities under the

School Grants Act, which in the statistical summary at the beginning of this section was seen to be \$1,241.518.32.

But even after all modifications allowable have been made the discrepancy would still exist. In the case of Manitoba where the Legislative Grant is understood in the same sense as in British Columbia the percentage that municipal expenditure maintains to the total still is very high, hovering around 80%. If the percentage were obtained for Alberta and Saskatchewan on the same basis as in Manitoba and British Columbia our results would still indicate a situation in which municipal expenditure would be found to bear a relation of 70 to 80% of the Grand Total.

From this examination we are prepared to make certain conclusions. In the first place, it may be stated that after everything has been taken into consideration the expenditure for education by the municipalities in the provinces of Manitoba, Saskatchewan and Alberta amounts on the average to about 75% of the total expenditure, the provincial governments contributing only about 25%. In British Columbia, on the other hand, the proportions are roughly 60 to 40.

But such a conclusion should not be taken too seriously for it is stated with some diffidence here. The reason for our hesitancy and uncertainty in propounding this generalisation is this; the School Reports for British Columbia contain no statement of the total receipts and expenditures

by provincial and municipal governments combined for educational purposes as we find in the reports for the other provinces. A detailed statement of how the government grant is expended is given. Below the total of the expenditure on government account, we find another total, being the sum spent by the municipalities, and then at the base of the column we find a final total, described as "Grand Total Cost of Education." The total, purporting to be the amount spent by municipalities, may be one of two or three things. It may be, as in the case of the other provinces, the total amount spent by the municipalities on current and capital account. It may represent only the current account of the municipalities. It may include such items as sums expended on debentures and maturing notes. Since no statement of items making up the total, but only the total, is given we are unable to judge what that total represents. Perhaps the second surmise is the nearest the truth, i.e., it may be the sum total of expenditure by municipalities on current account.

The final conclusion we wish to make concerns the question of percentages during the separate yearly periods. In Manitoba it is evident that the percentage that the total municipal expenditure bears to the Grand Total is less in 1922 than in 1913. In 1913 we find the municipal expenditure comprising 85% of the Grand Total but in 1922 only 80%. In Saskatchewan a similar decline is noted. In 1913, in this

province, 86% of the total expenditure for education was borne by the municipalities while in 1922 this percentage had fallen to 83%. Alberta preserves a rather stable relation, the 1913 municipal expenditure being 91%, and in 1922, 90% of the Grand Total. But, as explained in a footnote, we were not able to make the proper deductions from the Grand Total, \$12,358,371.36 in Alberta for 1922. A truer estimate of the Grand Total, making allowance for debenture and note payments, would be \$9,000,000 plus. On the basis, say, of a sum as high as \$9,500,000 the percentage would be levelled to 87% of the Grand Total, the Legislative Grant remaining the same, \$1,241,518.32, and the new municipal expenditure being the difference between \$9,500,000 and \$1,241,518.30. On this new computation we would discover here also a like decrease from 91% in 1913 to 87% in 1922. These decreases are of minor significance ranging only from 3 to 5%. Finally, in British Columbia a uniform relation is maintained. In 1913 municipal expenditure amounted to 59% of the Grand Total while in 1922 it stood at 58%. Thus it is seen that in all the western provinces the percentage that the expenditure of the municipalities bears to the Grand Total Expenditure has remained fairly constant with the passing of years.

Chapter 111

Some Further Comparisons And Conclusions.

There was one important consideration purposely avoided in the previous chapter, a consideration which is essential to an adequate and scientific method of drawing comparisons. This is the application of the index number. Since the dollar would by no means buy as much in 1922 as in 1913 it is inadequate to consider absolute equality in amounts, as representing a true relation. In other words, if the government spent \$100,000 on a certain form of education in 1913 and a like sum in 1922 it is not true that it is contributing to that form of education an equal value in 1922 as in 1913. Bearing this in mind we must ask ourselves the question-- How much has money depreciated in value since 1913? The Labour Gazette presents the following Index Number:

Average Prices, 1913--100.0

Average Prices, 1922--150.4

If it takes \$1.50 to buy in 1922 what \$1.00 would buy in 1913 then the value of money must have fallen $33 \frac{1}{3} \%$ over this period. Taking this important factor into consideration, we discover that the expenditure of \$150,000 in 1922 is equivalent in buying power to \$100,000 in 1913, and that there is no real equality in \$100,000 in 1922 to \$100,000

in the year 1913.

We most assuredly do not propose to apply this further complication, of the index number, to the many comparative statistical statements of the previous chapter. It would entail needless repetition of points already sufficiently stressed. Moreover, its application would in many cases only accentuate or, conversely, mitigate a tendency, but in no way bring forth definiteness out of something indefinite. An illustration will suffice to make this proposition clear. In the first statistical chart in chapter 11 we find figures representing the total government expenditure on current account for the years 1913 and 1922, and beside these, the sums spent on education for the same years, and the percentages the educational expenditure bore to the total expenditure. Now taking, for example, the sums spent on education in the first province, Saskatchewan, in the years 1913 and 1922. We found the educational expenditure by that government to be \$612,220.00 in 1913, and in 1922, \$3,043,987.96. We note a substantial increase in 1922 over 1913. Obviously, when we remember that it takes \$1.50 in 1922 to buy what \$1.00 would buy in 1913 this increase is not so striking. Thus the application of the index number here has tended to mitigate what seemed at first an extraordinary increase. But still we have made no definite and exact analysis. We don't know how far the rise in prices or the fall in value of money

enters in, how far it occasioned the increase. Undoubtedly, the government bore in mind the high level in prices in determining the educational expenditure. But whether it sought to regulate its apportionment according to an index of the value of money in 1922 as compared with 1913, for example, is uncertain. In fact it is extremely doubtful that this government, or any of the governments with which we are concerned, took into account the exact change in the value of money. Moreover, we are unable to ascertain how far that increase in expenditure is due to the broadening of the scope of educational activity, to the resulting expansion all along the line, to the great increase in the number of students. Therefore, since in our superficial survey, in our scratching on the surface, we cannot hope to understand and estimate a thousandth part of the phenomena that are collectively responsible for such an increase, we can only say that we don't know how far the depreciation in the value of money influenced the increase in expenditure, how far the growth of educational activity induced that increase. Undoubtedly the latter was the fundamental cause. Probably the other factor, insignificant as it must be in this case where the educational expenditure in 1922 is almost five times as great as in 1913, was, nevertheless, by no means fully accounted for in the government apportionment.

There are one or two instances, however, amongst the groups

of comparative figures in the second chapter in which reference to the exact index in the changing value of money is of some significance. In concluding the review of the trend of capital expenditure in the provinces of Manitoba and Saskatchewan we observed that in 1913, a time when the dollar would buy more than in recent years, more money was spent on capital account than in any single year over the following succession of years, until the arrival of 1920 and 1921. Remembering that it took \$1.50 in 1922 to buy what \$1.00 would buy in 1913, let us make a more accurate examination of the situation.

In 1913, the capital expenditure in the province of Manitoba for educational purposes amounted to \$1,420,881.95. Now we noted that there was an absolute decrease in such expenditure here in the succeeding years. It was not till the year 1921 that a larger sum than the amount expended in 1913 was spent on capital account. The actual expenditure was \$2,081,176.00 and in 1922 \$1,947,527.21. Supposing that the \$1.50 to \$1.00 relation that obtained in 1922, taking 1913 as the base, also existed in 1921. In fact the difference in the value of money in 1922 from the value in 1921 was slight, so that we may with slight inaccuracy take the \$1.50 as representing the state of the purchasing power of money in 1921 as well as in 1922. The actual expenditure in 1913 was \$1,420,881.95. Resorting to the round numbers \$1,400,000

for simplification, we find it would take--150/100 times \$1,400,000 -- \$2,130,000 to equal in purchasing power the sum expended in 1913. Therefore, in reality the capital expenditure in 1913 was greater than in 1921 and 1922 though ostensibly about \$600,000 less. The same situation obviously holds true in the case of Saskatchewan for there the capital expenditure was \$2,031,489.00 in 1913, which sum was exceeded in 1920 only when \$2,099,350.50 was spent, in which year we believe it would have taken considerably more than \$1.50 to be the equivalent of \$1.00 in 1913.

All this goes to show that from the point of view of purchasing power more was spent on capital account in these provinces in 1913 than in any year since that time. The rapid decline in capital expenditure down to 1919 was due no doubt to the policy of rigid economy forced upon the government and the municipal authorities by war conditions. The sharp upward trend till 1921 is in large part explained by the fact that provincial and municipal governments were then making many much-needed and long-delayed expenditures and in some degree owing to the high price-level which prevailed during those years. The decrease in 1922 is consistent with the general return to the normal and with the continued falling of prices then taking place.

Though the index number, therefore, has been serviceable in pointing out the phenomenon that 1913 witnessed greater

capital expenditure in these provinces than more recent years, that phenomenon surely does not give us ground for concluding that too much money is not being expended for capital purposes. We saw that the expenditure on current account by the provincial governments has increased four or five times since 1913. We concluded that, even allowing for the depreciation in the value of money, there was still a large increase. We attributed this increase to the growth of educational activity in these provinces over the decade between 1913 and 1923. We made it clear that, although we could discover with reasonable accuracy how much money was being spent on education, we could not judge with any certainty whether too much or too little was being spent. Such judgment could be made only on the basis of an exhaustive survey of the whole field, far beyond the limits of our partial treatment of the subject. The same condition applies also in the case of capital expenditure. The simple fact that more money was really being spent in 1913 than in 1922 is no criterion for passing judgment on the 1922 expenditure. It might have been necessary, and from the articles appearing in the reports, it does seem that it was necessary to spend more money on capital account in 1913 than in 1922. The years before the war were primarily years of development. In the city of Vancouver itself, according to civic reports, \$558,585.14 was expended on capital account in 1913, and in 1922 not a cent was spent for capital purposes. Such instances

as this bring home to one a realization of the utter futility of attempting to assess reasonable amounts without a knowledge of the facts. Figures in themselves convey little or nothing. A complete survey of the number of students attending school, the number, size, yes, and the quality of schools erected; such information is essential before one can hope to pass fair judgment on the question of capital expenditure for educational purposes in recent years. One sometimes wonders whether some of those, and there are many, that are crying out against the crowded and crammed conditions prevalent in our schools, are to be numbered amongst those 'that cry in vain'. It is indeed amazing that too such dissimilar cries - the outcry against the 'fabulous' expenditures on education, and the outcry against the crowded and unsanitary conditions in the schools - should be heard at the same time and in the same quarter. Therefore, although we would expect a greater capital expenditure in the formative years before the war, the evidence of crowded conditions today, due largely to the enormous increase of students, would incline us to believe that the capital expenditure on education in the western provinces of late years has been by no means excessive.

Before concluding this chapter, however, we would like to carry our comparative analysis a little further. It was pointed out in this chapter that a host of factors in the educational field would have to be considered before it would be possible to state with any degree of accuracy,

whether the expenditure in late years on education has been in keeping with the growth of educational activity or, out of all proportion to that development. Undoubtedly, one of the most important factors entering into a true analysis of the situation is the number of students. On this basis we have been able to collect some interesting information. Let us, then, turn our attention, finally, to an examination of increases of late years in educational expenditure in the light of corresponding increases in the number of students.

Statistical data dealing with this subject are contained in the Educational Reports of our own province. But before considering that information it would be well to dispose of a closely related phase of the subject pertaining to conditions obtaining in the provinces of Saskatchewan and Alberta.

In the preceding chapter we discovered that the total expenditure of the government of Saskatchewan for education was \$612,220.00 in 1912-13. In the same year, the Educational Report informs us, the total enrolment was 79,882. Therefore, the cost to the government of each pupil on enrolment was \$7.61. In 1922-23 the same government spent \$3,043,987.96 on Education. The number of students enrolled in the same year, was, 178,314. Therefore, the cost per pupil enrolled was now \$ 17.05.

Let us now turn to Alberta. The expenditure by the govern-

ment for education was \$713,733.36 in 1913. At the same time there were 79,909 students enrolled. Therefore, cost per pupil enrolled was \$8.93 in 1913. In 1922 the government expenditure was \$2,444,689.70. The total enrolment was 142,902. Therefore, the cost to the government of each student enrolled was \$17.10 in 1922.

From this statistical survey it appears that in both provinces the government cost per pupil enrolled has increased, by 1922, from \$8 to \$10 over the 1913 cost. In Saskatchewan the cost has more than doubled with the passing years, while in Alberta the cost has almost doubled. Even allowing for the depreciation in the value of the dollar this is a notable augmentation of government cost. When we consider, also, that according to Educational Reports for these provinces the average attendance is only 54% of the total enrolment in 1913, and 64% in 1922, in Saskatchewan, and 57% of the enrolment in 1913 and 70% in 1922, in Alberta, we find that, though the ratio that the average attendance bears to the total enrolment has increased in the year 1922 from 10 to 13 per cent over the 1913 ratio, still the cost to the government for each student on the basis of average attendance has increased considerably in 1922 over the cost of the year 1913.

On the basis of the percentage that the average attendance bears to the total enrolment we may deduce the actual cost to the governments, in these two years, of each pupil, from the

stand point of average attendance. A rough estimate would elicit the following result: Since cost per pupil enrolled in province of Saskatchewan was \$7.60 in 1913, and since average attendance was 54% of the enrolment, the cost of each pupil to the government on basis of attendance would be approximately \$14.00. Cost per pupil enrolled in the same province was \$17.05 in 1922. Since average attendance in the same year was 64% of the enrolment, the cost on the basis of average attendance would be approximately \$27.00 in 1922. In Alberta we found that cost per pupil enrolled was \$8.93 in 1913. Since average attendance in that year was 57% of the enrolment, the cost on the basis of average attendance would be approximately \$15.75. In 1922, the cost per pupil enrolled was \$17.10. Since average attendance in that year was 70% of the enrolment, the cost to the government of each pupil on the basis of average attendance would be approximately \$24.60 in 1922.

Reviewing the situation from the standpoint of cost to these governments on basis of average attendance we observe that in Saskatchewan there has been an increase of \$13.00 in 1922 over cost in 1913, and in Alberta a much smaller increase of about \$9.00. In the former province, on this basis, the cost had not quite doubled at the close of the decade from 1913--1922. In Alberta, the cost had only increased a little more than 50% over the same period.

We may now direct our attention to the figures in the British Columbia School Reports on this particular topic. The following table shows the cost to the Provincial Government of each pupil on enrolment and on average daily attendance during the past ten years-

<u>Year</u>	<u>Cost Per Pupil Enrolled</u>	<u>Cost Per Pupil On Average Attendance.</u>
1913-14	\$ 20.04	\$ 25.27
1914-15	21.78	26.65
1915-16	22.50	28.56
1916-17	22.47	27.83
1917-18	22.64	27.93
1918-19	24.88	31.59
1919-20	27.20	36.05
1920-21	29.01	36.38
1921-22	29.33	35.70
1922-23	27.92	34.07

As inspection of these figures reveals certain notable contrasts to the results obtained for Saskatchewan and Alberta. The first question that comes to mind is this: Why was British Columbia spending \$20.04 on each pupil enrolled back in 1913 when Saskatchewan was spending only \$7.60 and Alberta but \$8.93? This amazing difference can be accounted for, we believe, by reference to a consideration emphasized in the preceding chapter. It was there shown

that the percentages the municipal and government expenditure for education in Saskatchewan and Alberta bore to the Grand Total were about 75 and 25 respectively. British Columbia we discovered was an exception. The relation here was approximately 60 to 40. Since the provincial government in this province has borne a considerably greater ratio of the grand cost of education than is the case in the other provinces, it is not unnatural to discover that the cost to the government per pupil enrolled, as well as on average daily attendance, in the year 1913 was much higher than the cost for the governments of Saskatchewan and Alberta. The same reasoning obviously holds true if we take the year 1922 instead of 1913 in order to draw this noteworthy contrast.

Another contrast, though less outstanding, is of sufficient importance to merit attention. We found that the cost to the government of Saskatchewan of each pupil enrolled was in 1922 more than double the cost in 1913, and on the basis of average daily attendance, the cost in 1922 was slightly less than twice the cost in 1913. In Alberta, on the basis of enrolment, the 1922 cost was almost double the cost in 1913, while, on the basis of average daily attendance, the cost to the government was a little over 50% greater than the cost in 1913. Turning now to British Columbia we find much smaller increases took place. On the basis on enrolment, the 1922 cost was less than 50% more than the 1913 cost.

The same condition holds true in regard to average daily attendance cost basis. Since \$1.50 is equivalent in 1922 to \$1.00 in 1913, and since the cost per pupil enrolled was \$20.04 in this province in 1913, it would take 150/100 times 20.00 or \$30.00 per pupil in 1922 to achieve a truly equal expense to the government, on the basis of the 1913 real cost. Actually, we find that the cost per pupil enrolled was \$27.92 in 1922, a deficiency of \$2.08. The proportionally smaller increase in money cost to the government in British Columbia than in Alberta and Saskatchewan is interesting when we recall that in the second chapter attention was drawn to the fact that government expenditure in the latter provinces made a gain ranging from 3 to 5% on municipal expenditure in 1922 as compared with 1913, in the relation to the Grand Total, while in British Columbia the relation of 60 to 40 was maintained in both years.

Thus far we have been considering this question of cost, on the basis of students enrolled and average daily attendance, from the stand point of the governments of the Western Provinces. We might just mention, before concluding this chapter, that Alberta School Reports deal with this same problem, not from the point of view of the provincial government, but from the position of the government and municipalities combined. In this province, then, we find that the cost to the government and municipalities per pupil

enrolled was \$40.19 in 1913, and, according to average attendance, \$69.90. In 1921 the cost per pupil enrolled was \$61.24 and, on the basis of average attendance, \$87.09. Applying the index, which will roughly meet the 1921 situation, we discover that a cost of \$40.19 in 1913 would equal a cost of 150/100 times \$40.00 or \$60.00 in 1921. In other words, the real cost to the province from every source was slightly greater, on the basis of number of pupils enrolled, in 1921 than in the year 1913. Remembering that there was a greater increase in the cost to the government of Saskatchewan, on the basis of pupils enrolled, in 1922 over 1913 than was the case in Alberta, and recalling that in both provinces the municipal expenditure for 1922 bore to the Grand Total from 3% to 5% less than 1913; in other words, recalling the fact that government expenditure gained in each province by 1922 an equal percentage of the Grand Total; and noting that even from the standpoint of both government and municipal expenditure combined the Province of Alberta shows a slight increase in cost on basis of pupils enrolled; therefore, it must necessarily follow that the same situation must even more be true in the Province of Saskatchewan. Since in British Columbia we found that the 60 to 40 relation in regard to Grand Total Expenditure was maintained in both 1913 and 1922, and since, by the application of the index number, the real cost to the government on the basis of pupils enrolled was a

little smaller in 1922 than in 1913, it seems that the same result would hold roughly true in regard to the 1922 municipal cost, per pupil enrolled. In other words, the Grand Total Cost, on the basis of pupils enrolled, would be really less in this province than the cost in 1913.

Therefore, though we cannot say definitely in the narrow scope of this treatment of the subject whether too much money is being spent on education for general purposes we feel confident that, using the important test of the increase in the number of students as our criterion of the development of educational activity, and making due allowance for the depreciation of the dollar in the period under consideration, our analysis has indicated that the cost of education in the Western Provinces has by no means seriously fluctuated with the passing of years. In Alberta, and more so, in Saskatchewan, this analysis shows that the cost has slightly increased. On the same basis, it has slightly fallen in our own province of British Columbia.

In the first chapter of this thesis it was pointed out that our first purpose would be to examine the sums spent by the Western Provinces for education. We have considered rather carefully the subject of the amount spent, both on current and capital account, by the provincial governments and the municipalities. An attempt has also been made,

after an analysis of our figures was completed, to give an answer to the charge that too much money is being spent on education. Having reached our objective along this line we turn naturally to a kindred problem for further enlightenment.

"The second purpose of this thesis," the introductory chapter stated, "will constitute a critical observation of the manner in which educational appropriations are expended and apportioned." It was also declared that on the basis of such observation we would endeavour to adjudge how much truth there was in the other popular charge of today, that of mal-administration of educational funds. With this topic we may now well occupy our attention.

Chapter IV.

Ways In Which Educational Appropriations Are Spent.

Perhaps, the most interesting phase of the subject of Educational Finance is the study of the various ways in which funds for educational purposes are spent. If we turn to the Public Accounts of any of the provinces for such distinct years as 1913 and 1922 and examine the many and diverse items listed under Current Expenditure for the Educational Department, we are sure to meet some startling disclosures. We are informed here of the exact amounts the government is spending on elementary, secondary and university education, how industrial and agricultural education are being supported, and of the sums devoted to general administrative purposes. In order to learn just how the various forms of education have developed since 1913 in the western provinces we shall now make a statistical study of the information tabulated in these Public Accounts.

In the second Chapter of this thesis the sums of money spent by the governments of the western provinces in the years 1913 and 1922 were listed. We discovered that Saskatchewan spent \$612,220.00 in 1913. In the same year the governments of Alberta and British Columbia were spending

\$713,733.36 and \$1,141,070.43 respectively on education. Let us now learn how this money was spent.

In the first place, we may well turn our attention to the Province of Saskatchewan. In doing so it will not be necessary to note every item making up the total account. The more outstanding items, comprising about 90% of the total, will be sufficient for our purpose. They may be conveniently tabulated as follows:

Grants to Elementary Schools	\$ 370,159.69	or 60%*	of total
" " Secondary	17,308.63	3%	" "
Superintendence and Inspection of Schools	51,635.34	8%	" "
Normal Schools	25,514.68	4%	" "
School Readers	18,982.89	3%	" "
Examinations	20,789.16	3%	" "
University of Saskatchewan	<u>100,486.41</u>	16%	" "
	604,876.20		
Incidental Items	<u>7,343.80</u>		
Total (1912-13)	\$612,220.00	or 100%	

Secondly, we shall consider the situation in the Province of Alberta. The Most important items in the Expenditure Account for Education by this government, in 1913 are:-

Grants to Schools	\$479,945.46	or 67%	of total
Inspection of Schools	<u>52,756.47</u>	7%	" "

Carried forward \$532,701.93

*approximately

Carried Forward	\$532,701.93			
Normal Schools	40,100.64	or	6%	of total
School Readers	12,526.11	"	2%	" "
Examinations	21,219.80	"	3%	" "
University of Alberta	81,646.53	"	11%	" "
English School for Foreigners	14,474.65	"	2%	" "
Summer Schools	2,893.08	"	.4%	" "
Education of Deaf, Mute & Blind Pupils	<u>2,220.14</u>	"	.3%	" "
Incidental Items	<u>5,951.48</u>			
Total (1913)	\$713,733.36	"	100%	

It might be pointed out here before proceeding to consider the British Columbia Accounts, that the government of Alberta makes no division between elementary and Secondary schools in setting aside the annual apportionment for schools under the Schools Grants Act.

Finally, let us examine the items in the Current Expenditure Account for Education of the government of British Columbia in the year 1913. We noted above that the total expenditure by the provincial government for education was \$1,141,070.43 in 1913. This figure was obtained from the 1921-22 Public Accounts for this province, in a list of figures showing the expenditure on the public service of education over a period of years. The Public Accounts for 1913 has not been available and so we are unable to detail the various

items making up this total of \$1,144,070.43. The purpose on hand may be served, however, by reference to the 1913 Public Schools Report. This report contains an itemized statement of the government's expenditure on Education for the school year from June 1913 to June 1914. The fiscal year for the 1913 Public Accounts included the period from April 1913 to the following April, 1914. Consequently, we may expect that there would be only slight divergencies in the two statements. In fact, the total, according to the Schools Report, was \$1,248,163.44 for the year 1913, being only a little more than \$100,000 greater than the sum reported in the Public Accounts for the same fiscal year. The more important items listed in the statement of the Schools Report, then, may well engage our interest :

Grants to Schools	\$1,048,388.20	or 84%	of the total	
Inspection of Schools	51,846.69	"	4%	" " "
Education Office	26,954.91	"	2%	" " "
Normal Schools	24,107.48	"	2%	" " "
Free Texts	68,238.49	"	5%	" " "
Physical Training of Teachers	13,675.40	"	1%	" " "
	\$1,233,211.17			
Incidental Items	<u>14,952.27</u>			
Total (1913)	\$1,248,163.44	Or 100%		

An examination of the percentages these items bear to the total in the three provinces reveals in most cases a striking

similarity, in a few instances noteworthy differences. The cost of Superintendence, and Inspection is in Saskatchewan 8%, in Alberta 7%, and in British Columbia, including cost for Education Office, 6% of the total cost for educational purposes. The cost for School Readers and Texts is 3% in Saskatchewan, 2% in Alberta, and 5% in British Columbia of the total cost for Education. The slightly heavier cost in British Columbia for School Texts may be due to a special increased cost for that particular year. In Alberta and Saskatchewan we find that the expenditure for Examinations amounts to 3%, of the total expenditure. This item was not listed in the British Columbia School Report, though it may have been included in the expenditure for the Education Office. Such are the items that maintain similar percentages to the total in the three western provinces.

What of the items that bear no such regular relation? In the provinces of Saskatchewan and Alberta the percentage that Grants to Schools bears to the total is just about the same for each, but British Columbia is quite singular in this regard. The percentage is 63 for Saskatchewan, 67 for Alberta, but in British Columbia, Grants to Schools amount to 84% of the total cost. This oddity on the part of our own province is partially explained by the fact that at that time the government was not providing for the support of the university. We find that the cost of the University in Sask-

atchewan equalled 16% of the total cost, and in Alberta 11% of that total. Adding the cost for elementary and secondary education to the cost of higher education, that is university education, we obtain for Saskatchewan 63% plus 16% or 79% of the total, and for Alberta 67% plus 11% or 78% of the total cost of education. Even when the university cost for these provinces is included in the general cost for the various grades of education and the proportion thus raised to 79% of the total cost to the government for educational purposes, there is still a deficiency of 5% as compared with British Columbia, where Grants to Schools amounted to 84% of the total cost. This brings us to the other item that bears no like relation to the total in the provinces under consideration. We refer to Normal Schools. In Saskatchewan the cost of Normal Schools is 4% of the total, in Alberta 6% of the total, but in British Columbia only 2% of that total. Now when we have added 4% to the 79% we obtained for Saskatchewan and 6% to the 78% likewise obtained for Alberta, with the inclusion of university costs, and only 2% to the 84% representing cost for schools in our own province, the resulting differences in total are negligible.

It may be pointed out that differences amounting to from 1 to 3 per cent were to be found in a preceding paragraph treating of items which we considered as bearing a roughly similar relation to the total in all the provinces, and so

the 'resulting differences' mentioned above are easily accounted for by reference to them.

No comment need be made upon those special items listed at the base of the columns of itemized expenditure by the government in the various provinces. We allude to such items as 'English School for Foreigners', in Alberta, and 'Physical Training of Teachers', in our own province, which, though interesting, are not of particular significance from the point of view of their cost.

Having now completed our comparative study of the items composing the current expenditure account for education of the governments of the western provinces for the year 1913, we may appropriately fulfill the purpose of this chapter by directing our attention to an examination of such accounts as they appeared in the recent year, 1922. We shall, thereby, not only be able to determine how the relations between the provinces existed in 1922 as compared with those obtaining in 1913, but also to observe the development in the separate provinces. Such a survey should bring to light any glaring cases of over-development, misproportion and so on, which would obviously tend to substantiate the charge of mal-administration of educational funds.

In an earlier chapter we learned from an examination of the Public Accounts of the western provinces that the government of Saskatchewan spent \$3,043,987.96, that of Alberta

\$2,444,689.70, and that of British Columbia \$3,432,919.23, for education in 1922.

The more important items making up this sum of \$3,043,987.96 spent by the government of Saskatchewan in 1922 may be tabulated as follows:

Grants to Elementary Schools-\$1,818,112.14 or 60% of Total				
Grants to Secondary Schools	163,213.02	"	5%	" "
Superintendence and Inspection of Schools	199,097.49	"	6%	" "
Normal Schools	76,757.32	"	2%	" "
School Readers	52,593.73	"	1%	" "
Examinations	56,790.68	"	1%	" "
University of Saskatchewan	506,222.10	"	17%	" "
Vocational Education	35,561.42	"	1%	" "
School Agriculture and Household Science	16,081.67	"	.5%	" "
Administration of School Attendance Act	44,216.91	"	1%	" "
School Health Supervision	29,234.49	"	1%	" "
	<hr/>			
	\$2,987,881.97			
Incidental Items	56,105.99			
	<hr/>			
Total (1922)	\$3,043,987.96	"	100%	

Turning now to the Public Accounts for the province of Alberta for 1922 and examining educational expenditure, we

find the following figures:

Grants to Schools	\$1,262,273.56	or 52%	of Total.
Inspection of Schools	169,502.11	"	7% " "
Normal Schools	94,892.31	"	4% " "
Free Text Books	28,689.62	"	1% " "
Examinations	57,489.46	"	2% " "
University of Alberta	696,140.66	"	28% " "
Technical Education	49,602.32	"	2% " "
Education of Deaf, Mute and Blind Pupils	27,486.44	"	1% " "
Summer Schools	15,745.02	"	.6% " "
	<hr/>		
	\$2,401,801.50		
Incidental Items	. 42,888.20		
	<hr/>		
Total (1922)	\$2,444,689.70	"	100%

The Public Accounts for our own province for the year 1922 contains the following educational expenditure:

Grants to Schools	\$2,124,771.38	or 70%	of Total.
Inspection of Schools	73,729.73	"	2% " "
Education Office	30,412.96	"	1% " "
Normal Schools	76,889.01	"	2% " "
Free Text-Books	101,119.98	"	3% " "
Agriculture Education	29,183.43	"	1% " "
Industrial Education	75,855.09	"	2% " "
	<hr/>		
Carried forward	\$2,511,961.58		

Brought forward	\$2,511,961.58		
Deaf, Dumb and Blind	31,255.76	or	1% of Total.
University of British Columbia	445,000.00	"	14% " "
	<hr/>		
	\$2,988,217.34		
Incidental Items	50,394.89		
	<hr/>		
Total (1922)	\$3,048,612.23	"	100% *

That comparative study of items in the educational-expenditure accounts of the provinces for 1913 which was so helpful in clarifying those accounts in terms of each other, may well be applied to the statistical data of the same nature for the year 1922. In so doing not only will we be tracing the relation which the various items bear to the total in the separate provinces as compared with the relations existing in 1913 but also we will necessarily be unfolding at the same time the development that has taken place in each individual province. This twofold mission may well engage our most serious attention.

* It was noted above, and in an earlier chapter of this thesis, that the expenditure by the government for 1922 amounted to \$3,432,919.23. But this sum included \$384,307.00 for School Building. Such an item is not classed as an educational expenditure by other provinces but is listed under Public Works. Moreover, the sum \$1,248,163.44 representing the total expenditure by the government of our province in 1913 does not include cost of School Building, that item being appended under title 'Public Works'. Consequently, the figure \$3,048,612.23 is the correct one for our purpose here.

It was pointed out in a preceding section that in 1913 certain items in the accounts maintained a like percentage of the total in all the provinces. It was shown, for example, that the cost of superintendence and inspection was 8% in Saskatchewan, 7% in Alberta and 6% in British Columbia, including cost of Education Office, of the total cost. The cost of this item was very similar throughout the western provinces. For the sake of orderly development let us take each item as it arose in the study of the 1913 situation and then examine the corresponding item in the statistical tables for 1922. We discover that the cost of superintendence and inspection for the latter year was 6% in Saskatchewan, 7% in Alberta, and 3% in British Columbia, including cost of Education Office, of the total cost. In only one province, Alberta, was the 1922 percentage the same as in 1913. In Saskatchewan this item has declined from 8% to 6% of the total. In our own province it has fallen from 6% to 3%. The next item considered in our study of the 1913 conditions was School Readers. We found that the cost of School Readers was 3% in Saskatchewan, 2% in Alberta and 5% in British Columbia of the total cost of education to the governments concerned. In 1922 the cost of this item amounted to 1% in Saskatchewan, 1% in Alberta, and 3% in British Columbia of the total cost. In this case there has been a general reduction. The cost of School Readers has decreased

2% in Saskatchewan and British Columbia, and 1% in Alberta. The expenditure for Examinations was 3% of the total in 1913 in the Provinces of Saskatchewan and Alberta. In 1922 we find it amounting to only 1% in Saskatchewan and 2% in Alberta of the total expenditure. In 1913 report for British Columbia this item was not mentioned, and in the 1922 Public Accounts it is a negligible factor, being considerably less than 1%. This exhausts the list of items grouped as similarities, or those whose percentages of total cost were roughly equal in the provinces.

What phenomenon stands out conspicuously before us when we turn to these comparisons in search of enlightenment along the line of the main purpose of this study, the discovery of the general development in the separate provinces? It is this: Decline! In every case but one, we find that these items bore a smaller percentage of the total cost in 1922 than in 1913. Adding the decreases in each item together it will be discovered that the total decrease amounted to 6% in Saskatchewan, to 5% in British Columbia and to 2% in Alberta.

We may now continue our comparative study once more by examining those items, which our analysis of the 1913 figures showed to be dissimilar between provinces, for that year as compared with the year we are now interested in, 1922. The first item of this nature we considered, was School Grants. In 1913 the cost of this item was 63% in Saskatchewan, 67%

in Alberta, and 84% in British Columbia of the total cost. The absence of a university in our province we believed was the reason for the outstanding difference between British Columbia and the other provinces as regards this cost. Turning to 1922, the cost of School Grants item was 65% in Saskatchewan 52% in Alberta, and 70% in British Columbia. Saskatchewan maintains a uniform cost for both years. But it is Alberta that presents the problem. Here School Grants have fallen from 67% in 1913 to 52% in 1922, a decrease of 15%. This striking decrease will be reasonably accounted for when we turn to an examination of the University cost. The sharp decline in our province, in this item of School Grants, from 84% in 1913 to 70% in 1922 may also be explained by reference to the same factor.

The next item is the cost of the University. For 1913 it was shown that the cost of the University to Saskatchewan was 16%, to Alberta 11% of the total cost of Education. British Columbia was not supporting a university at the time. In 1922 the cost of this item was 17% in Saskatchewan, 28% in Alberta, and 14% in British Columbia of the total cost. Here, it seems, is the revelation. We noted that Schools Grants maintained an even ratio in Saskatchewan in the two years under consideration. Likewise, the cost of the University in this province was practically the same in 1922 as in 1913, there being a difference of only one percent. Alberta disclosed a remarkable

decrease in School Grants of 15% in 1922 as compared with 1913. But the cost of the University increased by 1922 to 28%, an actual increase of 17% over 1913. Consequently, there was a net increase of 2% in expenditure on the various grades of educational development in the province of Alberta by 1922. Higher education gained 17%, elementary and secondary education lost 15%. The results to be drawn from this occurrence will be more fully dealt with at the close of this chapter. It may be noted that the net increase in expenditure for general education in Saskatchewan in 1922 amounts to 3%, an increase of 2% under School Grants, and 1% under University. Lastly, in British Columbia the noticeable decrease in School Grants cost in 1922 of 14%, 84%-70%, is exactly balanced by the addition of the University cost of 14%. Therefore, in the province of British Columbia general education received exactly the same financial support in 1922 as in 1913.

What of the cost of Normal Schools? In 1913 the cost of Normal Schools in Saskatchewan was 4%, in Alberta 6%, and in British Columbia 2% of the total. In 1922 this cost in Saskatchewan was 2%, in Alberta 4%, and in British Columbia 2% of the total cost. In other words, the cost of this item was 2% less in 1922 than in 1913 in Alberta and Saskatchewan, but the same in British Columbia.

This result leads us to advance the interesting conjecture that the net increase in expenditure for general education in

1922 by the provinces of Alberta and Saskatchewan of 2% and 3% respectively accounts for the decrease in both provinces of 2% in the cost of Normal Schools, while the fact that general education maintained an exactly similar cost in 1913 and 1922 in our own province is the reason why the cost of Normal Schools here has not altered during those years. The general decline emphasized above, which characterized the items bearing like ratio to the total in all the provinces, may be quite properly offset against the additional cost to the governments in 1922 in supporting the new educational functions which we shall consider presently.

We have compared what we termed 'similar' and 'dissimilar' items in our examination of the accounts of the three provinces of the west for the year 1913 with the corresponding items for the later year 1922. Not only have we noted the differences existing in the relations between the provinces in this regard in the year 1922 as contrasted with 1913, but in so doing have also brought out the development in the separate provinces of the costs of the items in the total cost of education. In regard to similar items a general decline was evident; concerning dissimilar items a noteworthy uniformity obtained for Saskatchewan while in British Columbia and Alberta, though general education costs varied in no appreciable degree, one item, one form of that general education decreased considerably, while the other important item, the complementary form

of the so-called general education, increased in compensation thereof. This comparative survey accomplished, we may briefly direct our thoughts in conclusion to a consideration of those items which are peculiar to the year 1922.

In the first place, let us examine that item which in Saskatchewan is termed Vocational Education, in Alberta Technical Education, and in British Columbia Industrial Education. We may conveniently treat these various forms as one, for in substance they are the same, being different only in name. The cost of this item was 1% in Saskatchewan in 1922, 2% in Alberta, and 2% in British Columbia of the total cost of education. This equality of cost in the provinces is in itself reason to believe that this form of education is receiving a recognized degree of support, and that there is no undue development or over-expenditure by any particular government for the maintenance of general industrial education. The cost of the item School Agriculture and Household Science was .5% in Saskatchewan of the total cost, and the cost of Agricultural Education was 1% in British Columbia of the total cost. This minor item did not appear in the account for Alberta, though we would have expected to find it in such an agricultural province even more so than in British Columbia. The administration of the School Attendance Act cost the government of Saskatchewan \$44,216.91 and amounted to 1% of the total cost. This item appears in the Alberta Accounts but is insignificant

in amount, being only some \$8,000. This substantial difference we believe is attributable to a different system of administration in Saskatchewan rather than a case of pure overstaffing of that department. Howsoever, figures in themselves do not always give one the key to unlock the mystery, and being without more adequate information it is useless for us to speculate on the reason for such a disparity in the cost. Another item of interest is that of the education of the Deaf, Mute and Blind. In regard to this item it might be said that it appears in the 1913 reports, also, for Alberta and British Columbia. In 1913 the cost of this item was .3% in Alberta and .4% or \$5,457.73 in British Columbia of the total cost. In 1922 it had increased in Alberta to 1% and in British Columbia to a like amount. Any other items appearing in these tables of figures are sufficiently self-explanatory and need no further elaboration here.

Now that we have examined in a careful manner the many items making up the total expenditure account of the separate provincial governments for education in the distinct years 1913 and 1922 we are prepared to offer some opinions on the reasonableness of the charge of mal-administration of educational funds. Obviously we do not feel justified, on the basis of an examination of figures only, to render authoritative decisions one way or the other. Our statements are opinions, nothing more.

No one believing that today mal-administration is rife in every department of educational activity, could find definite confirmation of such belief by perusing carefully the details in the expenditure accounts for education of the governments of the western provinces for the year 1922, for example, and noting how much was being spent then on the various forms of education and on educational administration in comparison with amounts expended before the war, say in 1913, before the so-called orgy of extravagant expenditure of public funds had come into being. The war may have had the effect of unnerving the public conscience, of enervating the sense of social control and this general 'loosening up' which was the natural reaction from the war may have engendered a carelessness, a spirit of irresponsibility and wasteful habits in the administrators of public moneys. Nevertheless we contend that evidence of such an indifferent attitude towards educational expenditure in the western provinces cannot be found in the official post-war fiscal reports. The expenditure by the governments of these provinces on such items of educational nature as the administration and inspection of schools, school readers and texts, and examinations has declined relatively in 1922, as compared with 1913, rather than increased. The cost of industrial and agricultural education, of the education of the deaf, mute and blind and so on which are more or less recent developments in the educational sphere, has maintained a remarkably even

balance in all the provinces and amounts to about a 1% relation throughout. It is quite probable that educationalists who are far more qualified than financiers to judge of the value of such forms of education and, therefore, of the support they are entitled to, would contend that these forms are not expanding, due to inadequate provision for their development, in due proportion to their importance today as integral parts of the general scheme of education.

The results of our investigation into the remaining and the most important items in the educational expenditure accounts, those items relating to the cost of elementary, secondary, and higher or university education still fail to substantiate a charge of mal-administration from the point of view of a comparison of post-war expenditure of 1922 with pre-war expenditure of 1913. The cost of these various grades of general education combined maintained an exactly like percentage of the total cost in British Columbia in both years, being 84% of that total. True, in Saskatchewan and Alberta there was a slight net increase in this regard in 1922, but this increase being on those items which are fundamental, is to be applauded, not deprecated. In only one instance does there seem to be ground for criticism of apportionments. We refer to the situation in Alberta where it was noted that the cost for elementary and secondary education was reduced 15% in 1922 in order that the expenditure on the university should increase.

Here again we are faced with a question which an educationalist alone can answer satisfactorily. It involves the value of higher education. But even the amateur who voices the opinion that university cost should not be augmented from 11 to 28% if such augmentation necessitates a corresponding scaling down of the costs for elementary and secondary education, has stated an attitude towards educational matters which will appeal to the commonsense of the community. Especially at this time when a great many people have a doubtful opinion of the value of higher education would such an argument merit favorable attention. But we might say, in closing, that if the lower grades of education are today suffering in Alberta in order that higher education may receive greater financial support we would incline to view this case as one of misproportion. But we feel confident that such is not the case. Our survey of conditions leads us to believe that the provincial government has adopted this course of giving more assistance to the university, a provincial institution, and less to primary and secondary schools only because the municipalities have become able to more adequately shoulder their financial responsibilities in the proper sphere of their endeavor, the elementary and secondary forms of education.

Chapter V.

The Basis of Apportionment.

To become familiar with the basis of apportionment it is necessary to study the School Grants Act. The term 'basis of apportionment' simply means the various factors, such as enrolment and attendance of students, number of teachers, size of schools and number of days in operation, and so on, which are collectively taken into consideration in awarding grants to the separate districts and to the special forms of education. In the preceding chapter we were acquainted with the sums the governments of the western provinces have been allotting to the various forms and grades of education. In this chapter we shall try to discover how such allotments or apportionments are determined. The relative importance of the factors entering into a scheme of apportionment must be decided by an expert in the field of education. One attempting to review the situation, therefore, from the standpoint of finance must be extremely cautious and prudent in his remarks. Consequently, this chapter may properly be brief and predominantly descriptive rather than critical in character.

A reading of the School Grants Acts for the provinces of Saskatchewan, Alberta, and British Columbia will reveal an essential similarity in substance existing between them; though in places terminology differs and at times different

methods are used to attain the same end. The acts for Saskatchewan and British Columbia are concise, comprising no more than three pages, while that of Alberta is of a more detailed and comprehensive nature, including a dozen pages of material. In order to learn something of the basis of apportionment adopted by the various provinces let us notice how they arrive at the grants to be made to the principal school districts and more important forms of education.

In the first place , suppose we consider rural school districts . In regard to Saskatchewan the Act reads : "Out of any moneys appropriated by the Legislature for the purpose there shall be payable in aid of elementary education the following grants :(I) To every rural school district ; (a)The sum of \$150 for every teaching day upon which the school of the district is legally open ;(b)An additional sum of 60¢ for every teaching day upon which the school is open during the year ending on the 31st day of December in which it is first in operation." This excerpt informs us that the number of days the school is in operation constitutes the basis of the grant, and also, that a higher sum is paid to a school in the financially burdensome period of its organisation. Of course, such a grant is provided subject to certain conditions, such as; " a district in which only one school is in operation shall have an average attendance of at least six pupils, and a district in which more than one school is in operation shall

have an average attendance equal to at least twenty pupils per school." Nevertheless, the fundamental basis of apportionment is as we have already noted, the number of teaching days the school is open.

The section devoted to rural education in the Alberta Grants Act is, in keeping with the act itself, treated with utmost regard for every minor detail. Howsoever, it is, happily, not necessary to consider more than the main subsections thereof to discover upon what basis the grant to rural school districts is made. Quoting from the Act: "There shall be paid to rural districts the following grants out of any legislative appropriation made for that purpose, that is to say: (a) To each district, a grant of 90¢ per day for each legally authorised teaching day during which the school is kept open, and an additional grant of 25¢ per day to each district operating only one room, if instruction is given therein in grades above the eighth; (b) To each district, an additional grant of 20¢ per day for each legally authorised teaching day during which the school is kept open in the first year of its operation and the succeeding year; (c) To each district, maintaining a graded school with separate rooms for junior and senior pupils, a grant of \$2.00 per day for each legally authorised teaching day during which the senior room is kept open." In this province, also, we are told that the number of teaching days the school is kept open forms the basis upon

which the financial support is given. Separate treatment, however, is accorded graded and ungraded schools. As in Saskatchewan, additional support is given to schools in their infancy. It might be added that a further modification of the general principle of determining grants according to number of teaching days a school is open, is outlined in this section of the act. This new factor entering in to the scheme of apportionment for rural school districts is efficiency, and is couched in the following terms: "To each district, whose school attains a minimum grading in its efficiency in respect of grounds, buildings, government and progress, a grant not exceeding 15¢ per day for the first year in which it is operated, and for five subsequent years, the grant to be paid in proportion to such grading for each day the school is kept open."

In the British Columbia Act the following information may be found relative to rural school districts: "The Minister of Finance shall pay in ten equal instalments-----to each ~~teacher~~, dental surgeon, and nurse employed regularly every school day for purposes of the public schools of any regular organised rural school district, other than night schools, an ~~annual per capita~~ grant of \$580.00." Again; "For the purpose of aiding in the establishment and maintenance of a public school in any assisted rural school district or community school district, there shall be paid from the Provincial

Treasury such sums as the Council of Public Instruction may from time to time think proper to grant. The salary of each teacher in the assisted rural school district shall be an annual salary voted by the Legislature." British Columbia obviously follows a different plan of apportionment. Here the apportionment is "based on the actual number of teachers, dental surgeons and nurses employed regularly every school-day for purposes of public schools of the school district." But, of course, reduction of the grant is provided for by taking the factor of number of teaching days the school is open into consideration as a modification of that fundamental basis, rather than, as in the case of the other provinces, as the basis itself. Strictly speaking, the factor of the school is not mentioned, but instead the pupils and teachers of that school, as will be observed in the following provision for reduction in grant: "A reduction of the grant payable under this act in aid of schools may be made in case of any school district in which the average attendance of the resident pupils enrolled for the year has been less than 40% of the total enrolled, and in the case of any teacher who has not taught the full number of prescribed school-days in the school in which he is employed." Not a certain sum per day that a teacher has taught, which would in a sense correspond to the scheme of the amount per day the school is open in Alberta and Saskatchewan, but a definite total of \$580 to any teacher

that has taught a prescribed number of days, is the method of determining the amount for the year. Therefore, in British Columbia the factor of the teacher receiving a fixed sum, except when not having taught the prescribed number of days, seems essential to the apportionment plan, while in the other provinces the factor of the school receiving an indeterminate sum depending on the number of teaching days kept open, appears to be fundamental to their scheme of apportionment.

It is unnecessary to protract this review of the methods of apportionment in the provinces by indicating how the method for each province applies to the various grades and forms of education. Substantially the same factors of the apportionment scheme are considered in reference to these other grades and forms as were applied in the case of rural school districts. Conditions peculiar to a certain type of district are attended to in the application of the scheme to such a district. For example, take the town and city districts. In Saskatchewan Act we read: "To every town district, the sum of \$1.50 for each teaching day upon which the school of the district is legally open: provided, that if the district maintains in operation in any term or part thereof between six and ten rooms inclusive the rate of grant per teaching day shall be \$1.30; if between eleven and twenty-five rooms inclusive the rate shall be \$1.10, and if more than twenty-five rooms the rate shall be 90¢." In other words, the larger the district, the greater the number of

rooms, the smaller the grant. Likewise, in Alberta: "To a district in which number of teachers does not exceed forty, a grant of 90¢ for each day the school is kept open; to a district in which the number of teachers employed is above forty, but not above one hundred, a grant of 70¢ for each day the school is kept open....." Here, also, the larger the district, the greater the number of teachers, the smaller the grant.

Finally, in British Columbia we read in the Act: "The Minister of Finance shall pay in quarterly instalments to the municipality comprised in each city school district an annual per capita grant of \$460 in the case of city school districts of the first class, \$520 in the case of city school districts of the second class....." Again, we note that the principle of decreasing the grant in accordance with the increase in the size of the town or city school district is followed in British Columbia as in the other provinces. Conditions particularly characteristic of a certain form of education are also recognized. For example, where an expensive equipment, necessary for instruction in agricultural, vocational, or technical education, has been acquired in some school district, the government, in each province, has provided a grant amounting from 25% to 50% of the initial cost thereof. Finally, the School Grants Act of each province provides for the distribution of special grants during the year to any school districts where, in the estimation of the proper authorities, such

grants are deemed necessary.

This sketchy examination of the School Grants Act for the separate provinces is sufficient to give us some idea of the numerous factors that form the basis of apportionment of grants for educational purposes. The term of life of the school per year, prescribed minimum teaching days, minimum average attendance, number of rooms and teachers in a school district, distinction between graded and ungraded schools, grades of efficiency, financial burdens attendant upon the establishment and operation of a new school, the installation of costly equipment, special needs that may arise throughout the year, etc., are some of the factors woven into the schemes of apportionment. In accordance with the conditions obtaining in some special sphere of educational activity, certain factors enter more prominently into an apportionment plan, while under differing circumstances their importance becomes obscured, other factors supplanting them. Whether the value of particular factors in the scheme of apportionment are being unduly stressed while others are not receiving the attention they merit is a problem on which we are not qualified to judge. We are not prepared to trespass in the proper sphere or field of the educationalist. Consequently, we have been content, in this chapter, to search out the phenomena relative to the subject and have refrained at the same time from subjecting it to an analytical treatment.

The financial equity of the grants should be examined, and the degree of the inequity ascertained.

Chapter VI.

Concluding Remarks

Reference to topics we had intended to reserve for consideration in this concluding chapter has already been made in appropriate places throughout the thesis. After some thought on the matter we deemed this the wiser plan in that it served better the purpose of bringing into clear light the significance of those topics. We refer to the instances in our development of the subject where attention was drawn to the woeful lack of uniformity in the western provinces in the methods used for computing various educational expenditures. We allude, in the second place, to cases where it was regretted that no comparisons could be made in certain important connections owing to the fact that necessary information was not available in the reports on the subject. In closing, however, we should like to make some observations in a very general way on such conditions as they have come to our notice in our research in the field of educational finance in the western provinces.

In the first place, what may be said in regard to this absence of standardization, in the provinces, in the collection of statistical data bearing upon financial conditions in the realm of educational activity? Lack of standardized methods in this concern must be part of a general failure between the

provinces to cooperate in matters of educational significance. Nowhere did we discover, in reading reports of deputy-ministers of education and school inspectors in the provincial School Reports, reference made, during a review of some new educational problem or some existing condition in school life, to the ways in which similar problems and conditions were being met in the neighbouring provinces. Just so long as such independent and self-centred courses are followed will it be hopeless to expect to find uniformity in educational matters, particularly in the problem of financing education. But it must not be gathered from this statement that we believe that there is an utter disregard and indifference in one province towards educational activity in other provinces. The many cases of similarity between the western provinces in various forms of educational expenditures that were considered throughout our study of the subject would surely dispel such a notion from the mind of the reader. Geographical propinquity, likeness of political organization, common concern and common interests have all tended to almost enforce a large degree of harmony in dealing with educational conditions. But, even so, an examination of the School Reports of the separate provinces will show that there is much room for improvement, for an expansion of harmonious relations. It might be said that as the provinces have common interests, likewise, each has its own peculiar conditions to consider, and that, therefore, the discord and absence of similarity that pervade these distinct School Reports are but a

reflection of such individual conditions. Undoubtedly, this is to some extent true. For example, the prairie provinces have the problem of the consolidated school to attend to; a problem that is not met in British Columbia. Nevertheless, after all allowances have been made, there still remain unnecessary differences in method, and these could be obviated if the provinces would make an honest attempt to remodel their systems in the light of modern manifestations of efficiency. We have in mind, of course, the application of modern standardized and efficient methods of collecting and tabulating data. The adoption of such methods in the realm of financial-statistical information would both simplify investigation into the subject of the financing of education and ensure accuracy in results. And at a time like today when the public is demanding an examination of all government accounts to learn how its money is being spent never was there a greater need for accuracy, for truth, to search out and destroy the wild guesses of the enthusiast and the deliberate misrepresentation of the political demagogue.

We need only mention the other topic we intended to bring up in this concluding chapter. It is closely related to the topic just considered, and steps which are taken to correct the one will, of necessity, eliminate the other. We refer to the absence of adequate statistical information in the government reports. Clearly any effort that is made to establish uniformity in method will inevitably remove such annoying

hindrances in the way of a comprehensive comparative survey of educational conditions. A properly conducted School Survey would make a point of filling up the gaps in the statistical data dealing with the financing of education. It would be interesting to anticipate how closely a survey into educational conditions here in British Columbia would follow the lines adopted in the recent Saskatchewan survey. Howsoever, a broad survey of the whole field is necessary to prepare the way for an efficient survey in a particular field, such as finance. Moreover, the increasing relative importance of education amongst the social services supported by the government calls for the efficient financing of the same.

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