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ABSTRACT

The purpose of this study is to determine to what extent inequalities in educational opportunity exist in Manitoba, Canada and, should extensive inequalities exist, to propose ameliorative policies to provincial policy-makers. Equality of educational opportunity is considered to exist when educational resources and services are provided in such a way that access to them is distributionally equal across the province; conversely, inequalities exist when access varies consistently, on a basis other than need, for students in the province. Since unitary school divisions are the administrative units responsible for providing educational services to the great majority of public school students in Manitoba, since there are major variations in student enrollments in school divisions, and since such variations in administrative unit size have been associated with variations in service provision in other jurisdictions, the method adopted is to present data on nine different educational services and resources by size of school divisions. This presentation shows that students in larger school divisions, which are generally urban, have substantially higher levels of access. These vary in size by service, but the direction of advantage or disadvantage is constant. There is no evidence that the discrepancies are positively associated with need differentials. (Author/JM)

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EDUCATIONAL OPPORTUNITY IN MANITOBA:

A STUDY OF EQUALITY OF EDUCATIONAL OPPORTUNITY AND SCHOOL DIVISION ORGANIZATION IN MANITOBA

Peter Coleman

A Study Jointly Sponsored By

The Manitoba Association of School Trustees

and

The Department of Education of Manitoba

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ABSTRACT

The purpose of this study is to determine to what extent inequalities in educational opportunity exist in Manitoba, and, should extensive inequalities exist, to propose ameliorative policies to provincial policy-makers. Equality of educational opportunity is considered to exist when educational services and resources are provided in such a way that access to them is distributionally equal across the province; conversely, inequalities exist when access varies consistently, on a basis other than need, for students in the province.

Since unitary school divisions are the administrative units responsible for providing educational services to the great majority of public school students in Manitoba, since there are major variations in student enrollments in school divisions, and since such variations in administrative unit size have been associated with variations in service provision in other jurisdictions, the method adopted is to present data on 9 different educational services and resources, by size of school divisions.

This presentation shows that students in larger school divisions, which are generally urban, have substantially higher levels of access. These vary in size by service, but the direction of advantage or disadvantage is constant. There is no evidence that the discrepancies are positively associated with need differentials.

The second portion of the study examines the financial aspects of existing inequalities in access to services. The financial statements of school divisions reveal that small divisions generally spend less per student, and that a larger proportion of their expenditures is directed to support services. Thus expenditures on instruction are very substantially lower in those divisions providing relatively low levels of service. The costs associated with improving service provision in the small divisions, and their limited wealth, suggests that only an increased share of provincial resources can give them the financial power to improve the provision of educational services.

A series of policy objectives and standards is developed, against which the probable output of policy proposals can be evaluated. The first objective is equalization of resources available, and the standard required is a reduction in the current range in revenues and local effort of divisions. The second objective is autonomy. These two objectives interact so that attainment of the first somewhat limits attainment of the second. Local autonomy is signalled by diversity of expenditure patterns and levels, but equalization requires a limitation or floor on minimum expenditures, and thus some reduction in the range of expenditure levels. The third objective is flexibility, which requires that policies be readily adaptable to changing needs, and that an information system be available to signal changes in needs, service levels, and financial characteristics, and thus monitor progress towards equality of educational opportunity.

The proposals for provincial funding are of the "inverse allocation" type, and have the objective of increasing the financial power of small divisions, without limiting their decision-making powers. To achieve both

equalization and pluralism objectives, the proposal provides for three types of grants: categorical grants; basic grants, a per pupil flat grant; and equalization grants, based on division wealth and the amount raised by local effort.

The final section of the study also establishes resource equalization, local autonomy, and flexibility objectives for service provision by school divisions, and proposes a system of regional educational service agencies, to provide those services which divisions are not large enough to provide effectively and economically for themselves.

The study asserts that major changes in provincial financing of school divisions, and less sweeping changes in administrative structures, can change the distribution of educational services in Manitoba. The proposals made here can be implemented by provincial policy-makers, and in most instances can be pilot-tested. The objectives and standards provided should simplify judgments as to the probable effectiveness of the proposals to bring about a redistribution of educational services in the province, so as to improve access to services by students in small, and generally rural, school divisions. The proposed information system will allow the measurement of progress towards a high level of equality of educational opportunity in Manitoba.

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The office staff of the Association all contributed in some measure to the study. Mr. Craig Stahlke gave able assistance in the computations. My Research Assistant, Mrs. Shirley Merry, was as committed to the study, and its successful completion, as myself, and without her commitment and assistance it is unlikely that the work would have been completed at all.

I am grateful to them all.

Peter Coleman

CHAPTER I

INTRODUCTION

The purpose of this study is to attempt to determine to what extent there are inequities in the provision of educational opportunities in Manitoba, or more specifically, inequalities in the provision of educational services which vary consistently on a basis other than need. If extensive inequalities are discovered, the study will propose ways of reducing them, ways which are logically related to the nature of the inequalities, and which seem practical and useful in the immediate future.

Chapter I of the study will assemble the available data on the provision of a number of services in Manitoba and illustrate the distribution of these services in the province. If extensive inequalities are found, Chapter II will examine the effect of provincial educational finance policies, and suggest some changes which might reduce some of the inequalities identified, and Chapter III will examine the current provincial administration units for public school education, and suggest some policy proposals which might reduce some of the inequalities.

The Importance of Equality of Educational Opportunity

The issue of equality of educational opportunity becomes a very serious one for educators and for educational systems when education becomes a determinant of one kind of success in life after schooling. Clearly, if success in the school context was not related to any subsequent achievement it would still be important to provide some measure of equality of opportunity in education, but it would not be a vital issue, of importance to the entire society. However, since we now know that level of education predicts eventual social status quite accurately, at least in the United States, and probably also in Canada, the significance of the issue increases very substantially. The closeness of the relationship between educational success and social status is now beyond question. Further, it is likely to increase, as Parsons (1959) points out. There is a further characteristic which is equally relevant and equally a matter of concern for educators; Porter comments that:

> Although it is not particularly startling to show a relationship between education, occupation level, and income there is a persistent myth that the drawback of an inadequate education can be overcome by experience in the work world. Upward mobility during the career despite the lack of education may have been possible a half century ago when Sir Francis Galton argued that able people will overcome their social handicaps by the time they are fifty. In the mid-twentieth-century industrial system, however, there seems to exist in the occupational world, not a ladder of continual promotion, but hierarchical compartments into which people enter from the educational system. Although during a career there may be some movement up within a compartment, moving up from one compartment to another is much more difficult. This mobility within compartments is directly related to educational levels. (1965: p. 164)

Verification of such analyses is provided by an entirely independent line of research, dealing with the economics of education. The relation between education and income of individuals has been thoroughly investigated in

the United States and Canada in recent years. There have been a great many studies, and the results have been surprisingly consistent:

> The results obtained for the U.S. economy offer rather consistent (some might say surprisingly consistent) support for the notion that education, on the average, has paid significant financial as well as non-financial rewards. The evidence is quite strong that individuals with the requisite ability have been well advised to continue their education through university level and there is no reason to think that this pattern will not continue. (Bowen, 1968: p. 95)

Thus it is not surprising that in the United States, as Gordon (1972) points out:

> equal opportunity in education has become an issue of crucial national concern. By many, it is regarded as the base for all the rights, privileges, and responsibilities of membership in this modern democratic society. (p. 423)

The situation does not seem very different in Canada. With regard to the economic importance of education, an assessment prepared for the Economic Council of Canada suggested that, if eight years of schooling was taken as the base of 100% of income, high school graduation would give an equivalent of 148.1% income, and university graduation would give an equivalent of 241.2% of income. (Bertram, 1966) Naturally, there is no reason to assume these figures would hold precisely true for a different period of analysis; nevertheless it seems clear that in general at least, education and income are very closely related, and that this relationship is causal. It is also common in the literature on the economics of education to find some assessments of additional benefits to individuals, beyond those associated directly with measured income. One of these is the opportunity to obtain still further education, for which high school graduation, for instance, is prerequisite. Additionally, education is seen as providing wider employment choices, and

the extent that it is basic or general education, opportunities for withstanding technological unemployment not open to people of lesser education (Bertram, 1966)

Porter, commenting on the importance of educational opportunity, notes that "the distribution and content of education establishes boundaries for industrial growth" (1965: p. 165). Thus national policy should concern itself with equality of opportunity: "the industrial society which has the greatest flexibility is the one in which the egalitarian ideology has affected the educational system to the extent that education is available equally to all, and careers are truly open to the talented". (1965: p. 167)

Porter's national policy perspective differs from that generally found in the literature on equality of educational opportunity, which emphasizes equitability for individuals. The conclusions are similar, regardless of perspective, however. As Porter puts it, "the principle of equality and the principle of the rational use of economic resources thus have a mutually reinforcing function". (p. 167) Both principles support the judgment that providing for equality of educational opportunity is of vital importance to Canadians, both individually and collectively.

Rationale for the Study

For the purposes of this study, equality of educational opportunity will be defined as equal provision of educational services. Within this definition, simple equality is obtained when every child has an equal chance to obtain the services of highly qualified teachers, suitable programs, and adequate facilities. Distributionally, simple equality of opportunity is obtained when,

in respect of an educational service or resource, students residing anywhere in the province have an equal chance to obtain it; statistically, this is represented by the case in which the distribution of students and services is perfectly matched. If, for a given service, this is not the case, then inequality exists.

Some limitations of the approach and the data used here must be pointed out. First, there is little general reference here to demand for, or need for services, since the needs of students, when aggregated into school divisions, can be assumed to be roughly equal with reference to overall quantities of educational service, although obviously diverse at the level of the individual student. Need is discussed, however, in the context of finance, and of specific proposals. Second, in general the data given refer to availability of a service or resource, and not the utilization of it, although in cases where enrollment data are given, for example in special classes, the reverse is the case; the data speak to utilization and not availability, since there may be more "places" than students.

In general, the existence of unequal distributions will signal the need for a consideration of possible policy proposals to amend the existing situation. However, several important provisos must be stated: first, it is possible to correct distributional inequalities by reducing services available to the advantaged. The proposals will in general emphasize the alternative possibility, of increasing services to the disadvantaged.

Second, some inequalities might be explicable and justifiable on the basis of needs, values, or purposes which have been identified in advance. For example, in school divisions having proportionately low enrollments in

vocational courses or programs, it is possible that there may be more "places" than student volunteers. This presumably reflects the students' perception of their own needs with reference to those programs, at least in part, and the distribution then constitutes an 'intended and desired' inequality. Such inequalities would not generally give rise to policy proposals in this study.

Third, since the emphasis of this study is on policy, and the focus is the provincial educational system in Manitoba, the main concern will be with distributional inequalities that are or seem to be outcomes of administrative arrangements, and not of natural or cultural conditions or circumstances. This point has been made by Coons, Clune and Sugarman:

> to us the state's moral and legal imperative extends no further than those inequalities created by government itself. Discrimination by the state is our sole object; this excludes the duty to ameliorate cultural or natural disadvantages. It is important to cast this in terms of absence of the state's duty: we do not suggest that the state is forbidden to compensate for such disadvantages. (1970: p. 9)

Thus, for example, if it should appear that administrative characteristics of school divisions, and provincial finance arrangements, are associated with the distribution of services, this finding would give rise to proposals for amelioration of the condition. Basically, what is being proposed is a limited though generally acceptable view of equality of educational opportunity, that the school division of residence within the province should not in itself affect the range of educational opportunity available to a student.

Fourth, since it is possible that inequalities might exist which are considered unimportant, policy proposals will review any available evidence regarding the probable significance of a specific inequality. This

will allow some ranking of policy proposals in order of priority.

The Method of the Study

The first part of the study will attempt to portray the distribution of a number of educational services in Manitoba, in the year 1969-1970, the last year for which full data are available. The data will deal exclusively with unitary school divisions (i.e. single administrative units enrolling students in Grades K-12), which in that year enrolled 88.6% of all students in the public school of Manitoba (DBS, 1971). The remainder were enrolled in a variety of elementary or secondary school districts, remote or special schools, and special revenue schools. In many cases, adequate data are not available, and general provincial policies do not precisely apply to these units, and for these reasons they are excluded from the study.

The general method will be to display the distribution of a variety of services, by groups of school divisions, across the province. The tables categorize school divisions by size of enrollment, into 0-3,000, 3,001-6,000, 6,001-10,000 and 10,001 and up. Although such categories suppress differentia between divisions in the same size categories, they do make comprehensible a good deal of information. Should specific policy proposals require intra-category information, this can be presented subsequently. The general purpose of the category scheme is to allow a reasonably detailed overview of the distribution of a range of services across the school divisions of the province.

This particular way of presenting data on the availability of services was chosen for two reasons: first; it has been believed for many years that

a relationship exists between size of school district (student enrollment), and the provision of services. (Campbell et al., 1970). This belief influenced the presentation of data chosen here, since it was anticipated that interesting contrasts would appear. Second, since school divisions are creatures of the provincial government, any inequalities in the distribution of services related to the divisional structure are appropriate grounds for policy proposals addressed to provincial authorities, since such inequalities may well be amenable to correction by these authorities.

This study is primarily concerned with proposals for ameliorating distributional inequalities which seem to be unintended and undesired consequences of existing provincial policies. Thus the study is developmental or policy research. The analysis of the existing situation, and the reasons for it, is consequently limited to a consideration of factors which seem directly relevant to amelioration; a number of interesting questions, many of them casual, raised by the association between size of unit and services provided, revealed by the data to be presented, are not explored here.

The services and resources examined are as follows: degreed teachers, experienced teachers (defined as claiming five or more years of teaching experience), and school division administrative, consultative and referral personnel; vocational courses, vocation programs, business courses, and special education classes; and library books, periodicals, and audio-visual materials. This group of services and resources comprises virtually all those for which data are easily available, either from provincial departments of education or Statistics Canada. The fact that these data are available is not of course accidental, but reflects the shared belief of many of those

responsible for the administration of education at the provincial level that data on such things as the qualification of teachers are important and worth collecting. To a very large extent, provincial educational policies are based, then, on the kind of data treated here, and this study quite explicitly accepts existing assumptions about what are important characteristics of an educational system, and bases the policy proposals for ameliorating distributional inequalities on these.

For most services, parallel information for British Columbia is provided, to show the existing situation in another province of Western Canada, one in which school districts have somewhat different geographical, financial, and administrative features. The comparisons and contrasts which the provision of parallel data makes possible are generally useful in revealing that the distribution of services is indeed variable by province. Subsequently, specific policy proposals might also refer to these similarities and differences, since one cause of variation might be differences in provincial policies.

In subsequent parts of the study, in which policy proposals are presented, the general method will be to describe the existing situation in the province, attempt to provide appropriate criteria against which the existing situation and the policy proposals can be evaluated, (see Dror, 1968, for a review of the uses of criteria in policy development,) and to present policy proposals which relate to inequalities which seem unplanned, and important in their impact on the student and the provincial educational system, and thus to provincial policy-makers.

THE DISTRIBUTION OF SERVICES AND RESOURCES

This section describes the present distribution of educational services and resources in three main categories. First, under personnel, data on degreed teachers, experienced teachers, and consultative personnel are presented. Under programs, the provision of special education classes, vocational and industrial programs, and business programs is described. Finally, under facilities, data on the provision of library services is given. These categories include virtually all the published and readily available data on the provision of various kinds of educational services in Manitoba. The data used in this section will be drawn exclusively from the Dominion Bureau of Statistics, 1971, unless otherwise specified.

Concern with the distribution of these services and resources is justified, since they do form an important segment of the total spectrum of services and resources which comprise the educational system, as viewed by the client. The importance traditionally attached to the services and resources studied here is revealed by the maintenance of detailed data on these services by Statistics Canada. Such data are collected in part because these services and resources are thought to be important indicators of quality in the provision of education. The evidence for this view, with regard to individual services and resources, is presented subsequently. It is sufficient to point out here that reviews of research subsequent to the Coleman Report (1966) have tended to support the importance of the traditional indicators of quality in education as useful until the state of our knowledge improves. Mood suggests that "the present rudimentary

state of our quantitative models does not permit us to disentangle the effects of home, school, and peers on students' achievement". (1970: p. 6) Guthrie and his associates (1970) reviewed a series of major studies on the effects of various school services on pupil achievement, and asserted the importance of a variety of school services, including all those used in this study.

When the distribution, amongst school divisions, of services and resources is at issue, an important differentiation of the group of services into two categories can be made. The first category consists of uniform services and resources; that is, those services which, it seems likely, should be distributed on a perfectly uniform basis, if equality of educational opportunity is desired.

The second category consists of services which, it seems likely, are most appropriately distributed on a non-uniform basis, to take into account the lack of uniformity of the needs of clients in the various school divisions.

To a large extent, the differentiation is arbitrary, and not in the final analysis defensible, given a very extensive and highly developed analysis of individual differences and needs. However, a tentative differentiation, based on current capabilities in needs assessment, can be suggested. Access to highly qualified teachers, a variety of administrative consulative and referral personnel, and library facilities, is regarded as uniformly required by students in school divisions. Access to special education, and to vocational and business programs, is regarded as differentially required.

It is conceivable that the existing distribution of these services is based on variations in need, and that any pattern simply reflects decisions by administrators in small divisions that the students for whom they are

responsible have less need for special class facilities, and vocational and business education. In the absence of formal needs assessments it is impossible to refute this possibility completely. The only recent large study bearing on this at all, a survey of reading achievement in the province, demonstrated that, after Grade 1, rural students had significantly lower reading achievement levels than urban students.

TABLE 1

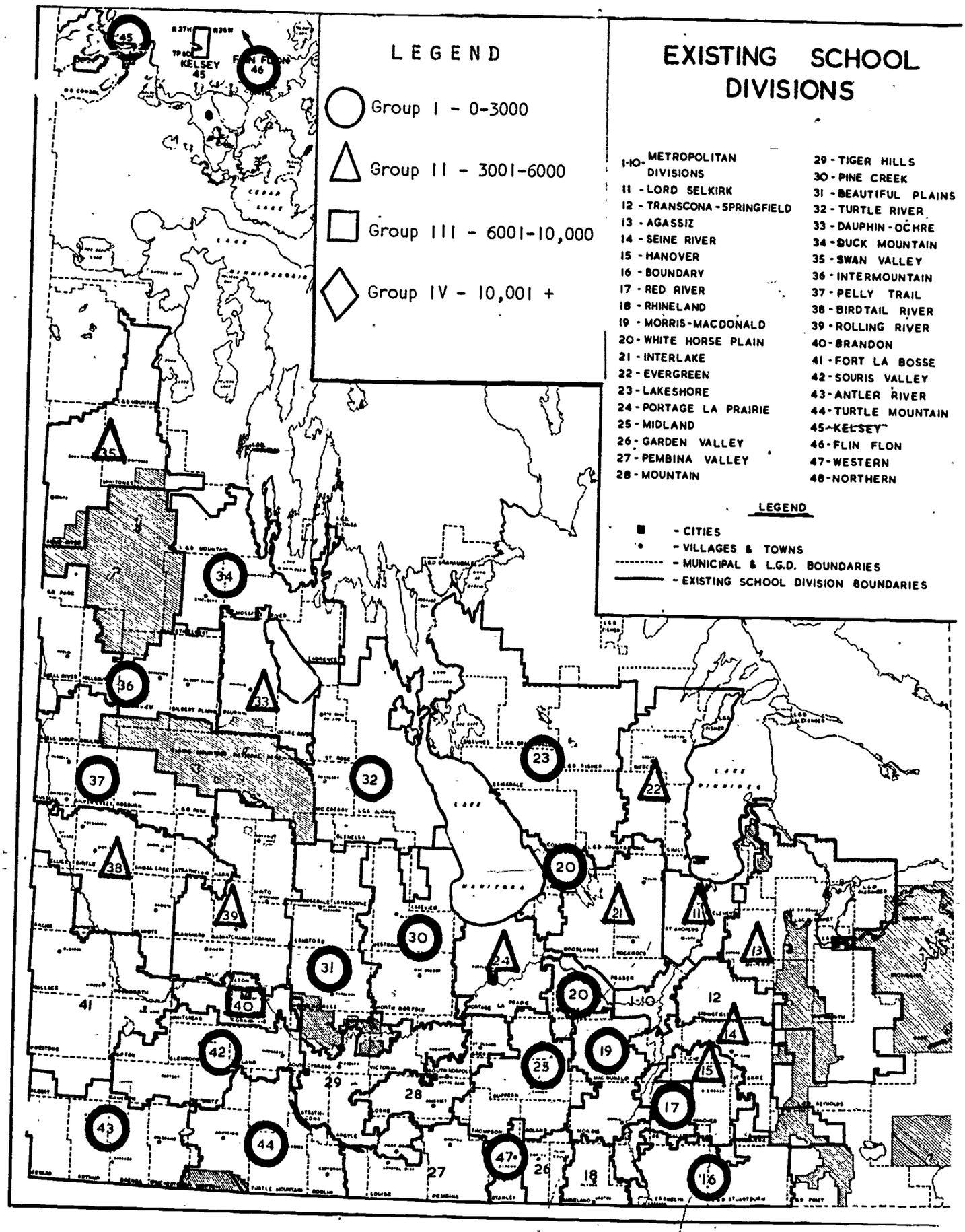
MEAN READING ACHIEVEMENT SCORES OF PUPILS CLASSIFIED ACCORDING TO URBAN/RURAL AND GRADE

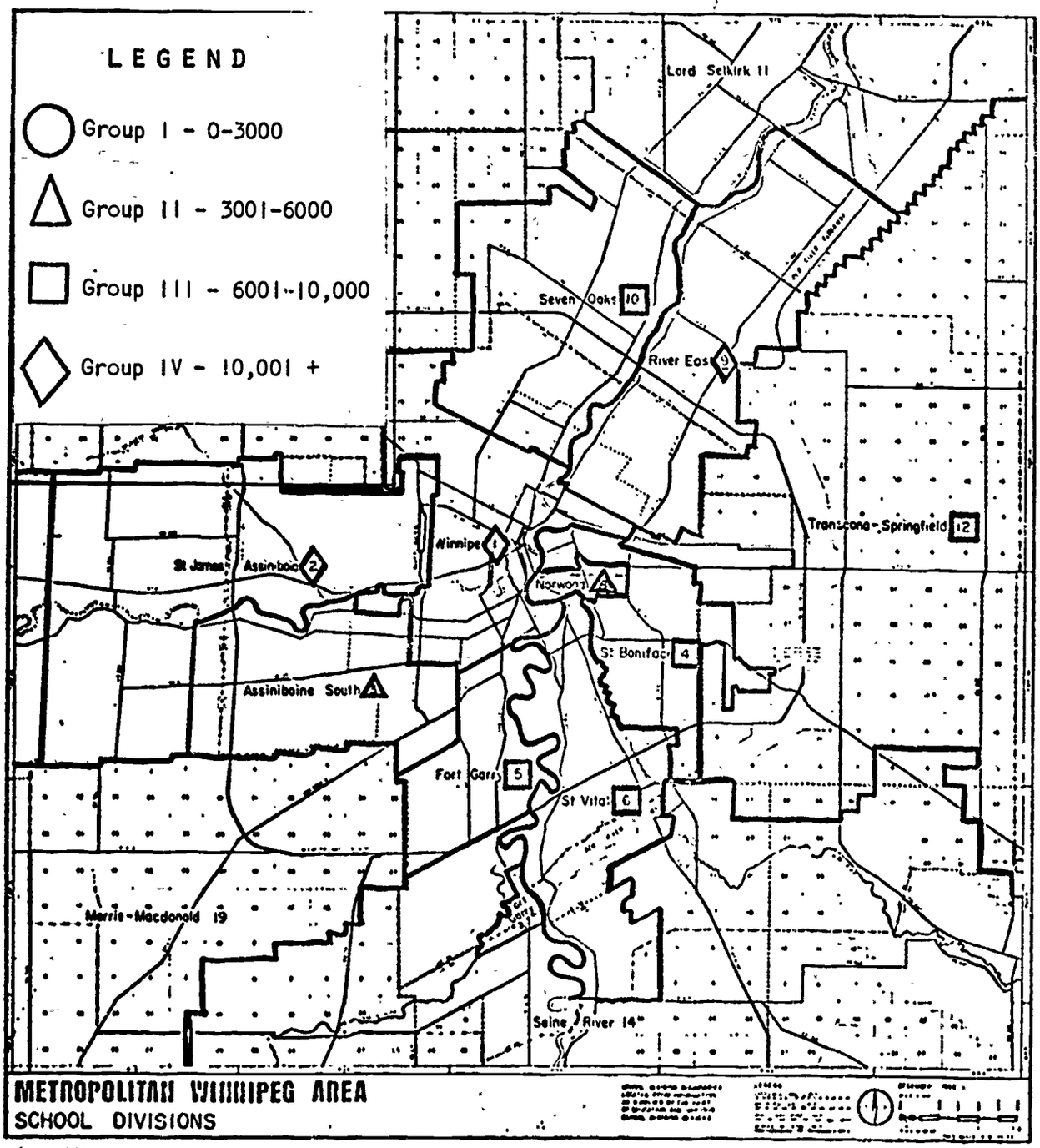
	URBAN	RURAL	DISCREPANCY
Grade 1	1.76	1.85	+ 0.09
2	2.97	2.77	- 0.20
3	4.07	3.77	- 0.30
6	7.16	6.73	- 0.43

(Halamandaris, 1971: p. 133)

Given the general importance of reading, these data do not suggest that the need for special education is greater in urban areas (large divisions). Similarly, data presented later regarding enrollments in regional vocational high schools suggest that rural students may tend to enroll more readily in such schools.

In general, data is presented subsequently on the basis of unit size. However, the relation between services and size of unit is also in part a locational relationship, since in Manitoba most large divisions are located in the Greater Winnipeg area. The following table compares size and location.


LEGEND
Group I - 0-3000
Group II - 3001-6000
Group III - 6001-10,000
Group IV - 10,001 +
EXISTING SCHOOL DIVISIONS
1-10 - METROPOLITAN DIVISIONS
11 - LORD SELKIRK
12 - TRANSCONA-SPRINGFIELD
13 - AGASSIZ
14 - SEINE RIVER
15 - HANOVER
16 - BOUNDARY
17 - RED RIVER
18 - RHINELAND
19 - MORRIS-MACDONALD
20 - WHITE HORSE PLAIN
21 - INTERLAKE
22 - EVERGREEN
23 - LAKESHORE
24 - PORTAGE LA PRAIRIE
25 - MIDLAND
26 - GARDEN VALLEY
27 - PEMBINA VALLEY
28 - MOUNTAIN
29 - TIGER HILLS
30 - PINE CREEK
31 - BEAUTIFUL PLAINS
32 - TURTLE RIVER
33 - DAUPHIN-OCHRE
34 - DUCK MOUNTAIN
35 - SWAN VALLEY
36 - INTERMOUNTAIN
37 - PELLY TRAIL
38 - BIRDTAIL RIVER
39 - ROLLING RIVER
40 - BRANDON
41 - FORT LA BOSSE
42 - SOURIS VALLEY
43 - ANTLER RIVER
44 - TURTLE MOUNTAIN
45 - KELSEY
46 - FLIN FLON
47 - WESTERN
48 - NORTHERN
LEGEND
- CITIES
- VILLAGES & TOWNS
- MUNICIPAL & L.G.D. BOUNDARIES
- EXISTING SCHOOL DIVISION BOUNDARIES
KELSEY
45
FLIN FLON
46



1 - Winnipeg
2 - St. James-Assiniboia
3 - Assiniboine South
4 - St. Boniface
5 - Fort Garry
6 - St. Vital
8 - Norwood
9 - River East
10 - Seven Oaks
11 - Transcona-Springfield

TABLE 2

SIZE OF ADMINISTRATIVE UNIT, BY ENROLLMENT GROUPINGS AND METROPOLITAN AREA OR OTHER LOCATION, MANITOBA, 1969-1970

Group & Symbol	Enrollment	No. Divs.	Location	
			Metro Area	Other
Group I	Up to 3,000	18	0	18
Group II	3,001-6,000	13	2	11
Group III	6,001-10,000	6	5	1
Group IV	Over 10,000	3	3	0
TOTALS		40	10	30

In the accompanying maps, the symbols associated with the groups are used in association with division identifying number to show the locations of divisions of various sizes

The Distribution of Highly Qualified Teachers

For the purposes of this study, highly qualified teachers are considered to have two characteristics, which are treated separately. First degreed teachers will be considered, and then teachers reporting five years or more of teaching experience.

At present in Manitoba pupil-teacher ratios do not vary widely between the groups of divisions. Table 3 demonstrates this.

TABLE 3

PUPIL-TEACHER RATIOS IN UNITARY SCHOOL DIVISIONS IN MANITOBA, 1969-1970, BY ENROLLMENT GROUPING

Enrollment Group	No. Divs.	Total No. Students	Total No. Teachers	Average P/T.R.
I	18	40,686	1,861	21.86
II	13	50,644	2,308	21.94
III	6	45,574	2,089	21.82
IV	3	80,662	3,648	22.11
	40	217,566	9,906	21.96

Thus teachers in general seem to be distributed more or less uniformly across the school divisions of Manitoba. Students have roughly equal access to teachers, and in this respect approximately equal opportunity. The situation in British Columbia is similar.

TABLE 4

PUPIL-TEACHER RATIOS IN UNITARY SCHOOL DIVISIONS IN B.C., 1969-1970, BY ENROLLMENT GROUPING

Enrollment Group	No. Divs.	Total No. Students	Total No. Teachers	Average P/T.R..
I	41	60,901	2,690	22.64
II	17	79,677	3,302	24.13
III	11	81,078	3,262	24.86
IV	12	290,018	11,499	25.22
	81	511,674	20,753	24.66

However, with regard to highly qualified teachers, the situation is somewhat different. The distribution of degreed teachers in Manitoba's unitary school divisions is shown in Table 5.

TABLE 5

THE DISTRIBUTION OF TEACHERS WITH DEGREES IN UNITARY SCHOOL DIVISIONS IN MANITOBA, GROUPED BY SIZE OF ENROLLMENTS, 1969-1970

Enrollment	(A) No. Divs.	(B) Total No. Teachers	(C) % of Prov. Teachers	(D) No. of Degreed Teachers	(E) % of Prov. Degreed Teachers	(F) Discrepancy
Up to 3,000	18	1,861	18.79	512	13.34	-5.45
3,001-6,000	13	2,308	23.30	732	19.07	-4.23
6,001-10,000	6	2,089	21.09	880	22.92	+1.83
Over 10,000	3	3,648	36.82	1,715	44.68	+7.86
PROVINCIAL TOTALS	40	9,906	100.00	3,839	100.00	

This table suggests that the larger the school division, the better chance the student has of being instructed by a degreed teacher.

In British Columbia, the distribution of degreed teachers follows a comparable pattern, as is indicated by Table 2.

TABLE 6

THE DISTRIBUTION OF TEACHERS WITH DEGREES IN BRITISH COLUMBIA SCHOOL DISTRICTS, GROUPED BY ENROLLMENTS, 1969-1970

Enrollment	(A) No. Dist.	(B) Total No. Teachers	(C) % of Prov. Teachers	(D) No. of Degreed Teachers	(E) % of Prov. Degreed Teachers	(F) Discrepancy
Up to 3,000	41	2,690	12.96	1,165	10.45	-2.51
3,001-6,000	17	3,302	15.91	1,578	14.15	-1.76
6,001-10,000	11	3,262	15.72	1,695	15.20	- .52
Over 10,000	12	11,499	55.41	6,713	60.20	+4.79
PROVINCIAL TOTALS	81	20,753	100.00	11,151	100.00	

The importance of the size of administrative unit seems less marked in British Columbia than in Manitoba.

A somewhat similar pattern emerges when the distribution of experienced teachers is examined. (An experienced teacher is considered to be one with five or more years of teaching experience.) Table 7 displays this distribution by size of school division in Manitoba.

TABLE 7

THE DISTRIBUTION OF TEACHERS WITH EXPERIENCE IN UNITARY SCHOOL DIVISIONS IN MANITOBA, GROUPED BY SIZE OF ENROLLMENTS, 1969-1970

Enrollment	(A) No. Divs.	(B) Total No. Teachers	(C) % of Prov. Teachers	(D) No. of Experienced Teachers	(E) % of Prov. Experienced Teachers	(F) Discrepancy
Up to 3,000	18	1,861	18.79	1,041	18.43	- .36
3,001-6,000	13	2,308	23.30	1,205	21.33	-1.97
6,001-10,000	6	2,089	21.09	1,189	21.05	- .04
Over 10,000	3	3,648	36.82	2,214	39.19	+2.37
PROVINCIAL TOTALS	40	9,906	100.00	5,649	100.00	

Table 8 reveals the distribution of experienced teachers in British Columbia, which follows a similar pattern to that in Manitoba.

TABLE 8

THE DISTRIBUTION OF TEACHERS WITH EXPERIENCE IN BRITISH COLUMBIA SCHOOL DISTRICTS, GROUPED BY ENROLLMENTS, IN 1969-1970

Enrollment	(A) No. Dists.	(B) Total No. Teachers	(C) % of Prov. Teachers	(D) No. of Experienced Teachers	(E) % of Prov. Experienced Teachers	(F) Discrepancy
Up to 3,000	41	2,690	12.96	1,668	12.84	- .12
3,001-6,000	17	3,302	15.91	2,036	15.68	- .23
6,001-10,000	11	3,262	15.72	2,046	15.76	+ .04
Over 10,000	12	11,499	55.41	7,235	55.72	+ .31
PROVINCIAL TOTALS	81	20,753	100.00	12,985	100.00	

In general, in the distribution of degreed teachers, large school divisions in Manitoba, and in British Columbia, seem distinctly advantaged. They are also slightly advantaged in experienced teachers.

This portrayal of the distribution of highly qualified teachers is not by any means novel or surprising. A major survey study of the teacher workforce in British Columbia carried on in 1968-1969 by the Centre for the Study of Administration in Education of the University of British Columbia, showed that the Lower Mainland Region (comprising most of the urban area of the province), which employed 49.13% of the total teacher workforce employed 54.75% of the degreed teachers. (Wallin, 1971: p. 14)

The same British Columbia study suggests a pattern of teacher mobility which could help to explain the tendency for highly qualified teachers to be employed in urban areas. In analyzing the responses regarding reasons for teacher mobility, the study found that of those teachers planning to move to

another region, 36.57% gave geographical factors as the main reason, 28.00% gave personal factors, and 15.31% gave educational factors. Amongst all teachers, whether planning to change location or not, 24.15% gave geographical factors as a primary reason for doing so. (Wallin, 1971: p. 44) Additionally, the Lower Mainland Region showed low levels of teachers expecting to move, and high levels of duration of employment. All these findings are consistent with the view that in British Columbia teachers tend to move to the Lower Mainland (an urbanized area) and stay there.

Presumably these highly qualified teachers have had the option of moving, perhaps because of their qualifications, and have exercised that option. The same choice might have been available in Manitoba, and given rise to the present distribtuion of highly qualified teachers.

There is little indication of major short-term changes in this pattern of distribution. Tables 9 and 10 display the distribution, on the same bases, for Manitoba in the 1971-72 school year. These data were supplied by the Department of Education of Manitoba, and are not precisely comparable with the data already used, since they report academic qualifications by salary schedule steps, rather than directly by degree.*

*In Manitoba, teachers' salaries are determined by the number of acceptable years of training, and of experience. In most cases, Class IV status represents holding a degree, and was so calculated here.

TABLE 9

THE DISTRIBUTION OF TEACHERS WITH DEGREES IN UNITARY SCHOOL DIVISIONS IN MANITOBA, GROUPED BY SIZE OF ENROLLMENTS, 1971-1972
(Based on 40 Divisions, as in Table 1)

Enrollment	(A) No. Divs.	(B) Total No. Teachers	(C) % of Prov. Teachers	(D) No. of Degreed Teachers	(E) % of Prov. Degreed Teachers	(F) Discrepancy
Up to 3,000	18	2,002	18.50	750	13.37	-5.12
3,001-6,000	13	2,460	22.74	1,081	19.28	-3.46
6,001-10,000	6	2,227	20.58	1,230	21.93	+1.35
Over 10,000	3	4,131	38.18	2,547	45.42	+7.24
PROVINCIAL TOTALS	40	10,820	100.00	5,608	100.00	

TABLE 10

THE DISTRIBUTION OF TEACHERS WITH EXPERIENCE IN UNITARY SCHOOL DIVISIONS IN MANITOBA, GROUPED BY SIZE OF ENROLLMENTS, 1971-1972

Enrollment	(A) No. Divs.	(B) Total No. Teachers	(C) % of Prov. Teachers	(D) No. of Experienced Teachers	(E) % of Prov. Experienced Teachers	(F) Discrepancy
Up to 3,000	18	2,002	18.50	1,124	17.63	-0.87
3,001-6,000	13	2,460	22.74	1,328	20.82	-1.92
6,001-10,000	6	2,227	20.58	1,393	21.84	+1.26
Over 10,000	3	4,131	38.18	2,532	39.71	+1.53
PROVINCIAL TOTALS	40	10,820	100.00	6,377	100.00	

These tables suggest that in regard to access to highly qualified teachers, the extent of the advantage of students in large divisions has declined slightly. Over the period 1969-1970 to 1971-1972, no major shifts have taken

place however. This suggests the continuing importance of the basis used in the analysis here.

The Distribution of Administrative, Consultative, and Referral Personnel

The data presented here describe the distribution of all division-employed, as opposed to school-employed, administrative and consultative personnel; thus special education supervisors, library coordinators, subject and grade level supervisors, travelling psychologists, and so on, are all included. Excluded are the staff of the Winnipeg Child Guidance Clinic, and similar referral services, which will be dealt with separately.

On the familiar enrollment basis, the distribution is as follows:

TABLE 11

THE DISTRIBUTION OF ADMINISTRATIVE AND CONSULTATIVE STAFF IN UNITARY DIVISIONS IN MANITOBA, 1969-1970, BY ENROLLMENT GROUPINGS

Enrollment	(A) No. Divs.	(B) Total No. Students	(C) No. of Staff	(D) % of Prov. Students	(E) % of Prov. Staff	(F) Discrepancy
Up to 3,000	18	40,686	33	18.70	13.07	- 5.63
3,001-6,000	13	50,644	44.5	23.28	17.62	- 5.66
6,001-10,000	6	45,574	41	20.95	16.24	- 4.71
Over 10,000	3	80,662	134	37.07	53.07	+16.00
PROVINCIAL TOTALS	40	217,566	252.5	100.00	100.00	

(Based on data supplied for Manitoba Association of School Trustees, 1971)

To the inbalance suggested by these data, it is necessary to add rather different data to complete the description of the provision of administrative, consultative and referral personnel. The major (and only significant) referral

service operating in the province is the Child Guidance Clinic of Greater Winnipeg. Table 12 compares the provision of referral services in the Greater Winnipeg area (10 divisions) with the provision of similar services, coordinated by the Provincial Office of Child Development Services, to the rest of the province.

TABLE 12

THE DISTRIBUTION OF REFERRALS OF CHILDREN TO THE CHILD GUIDANCE CLINIC AND THE OFFICE OF CHILD DEVELOPMENT SERVICES, 1969 - 1970

Greater Winnipeg Divisions	No. Students	% of Prov. Students	No. Referrals*	% of Prov. Referrals	Discrepancy
Winnipeg	48,020	19.55	6,429	53.65	+34.10
St. James-Assiniboia	20,132	8.20	1,176	9.81	+ 1.61
River East	12,510	5.10	747	6.23	+ 1.13
St. Boniface	8,720	3.55	822	6.86	+ 3.31
Transcona-Springfield	8,493	3.46	416	3.47	+ 0.01
St. Vital	7,026	2.86	729	6.08	+ 3.22
Seven Oaks	6,630	2.70	463	3.86	+ 1.16
Fort Garry	6,122	2.49	348	2.90	+ 0.41
Assiniboine South	3,704	1.51	239	2.00	+ 0.49
Norwood	3,117	1.27	219	1.83	+ 0.56
	124,474	50.69	11,588	96.69	+46.00
All other provincial administrative units	121,090	49.31	396	3.31	-46.00
TOTALS	245,564	100.00	11,984	100.00	

(*Drawn from the Annual Report of the Child Guidance Clinic of Greater Winnipeg, n.d. No size category data available.)

Several points should be made about the data provided in this table. First, the disparity between Greater Winnipeg and the remainder of the province is obviously related to the fact that only the Child Guidance Clinic was specifically established to provide referral services for the schools. (See Child Guidance Clinic of Greater Winnipeg, n.d., p. 23) Second, the disparity between the services provided for the Winnipeg School Division and those provided for other divisions in the Greater Winnipeg area may well be related to the fact that the Child Guidance Clinic was originally established by the Winnipeg School Division and is still administered by the Division. Third, the divisions are listed in order of size and there does seem to be at least a rough relationship between size of unit and referrals proportionate to population.

The general conclusion of this section is similar to that in the previous sections, on degreed and experienced teachers - the provision of administrative, consultative, and referral services to students (or their teachers) in the smaller administrative units in the province is at substantially lower levels than the provision of the same services in the larger units.

The Distribution of Enrollments in Special Education

Tables 13 and 14 portray enrollments in special education classes, on the same basis used in the previous section, for Manitoba and British Columbia.

TABLE 13

THE DISTRIBUTION OF ENROLLMENTS IN SPECIAL EDUCATION IN UNITARY DIVISIONS IN MANITOBA, BY ENROLLMENT GROUPS, 1969-1970

	(A)	(B)	(C)	(D)		(E)	(F)
Enrollment	No. Divs.	Total No. Students	% of Prov. Students	Students in Special Classes No.	%	% of Prov. Spec.Cl.Pop.	Discrepancy
Up to 3,000	18	40,686	18.70	690	1.70	18.15	- .55
3,001-6,000	13	50,644	23.28	798	1.58	20.99	-2.29
6,001-10,000	6	45,574	20.95	721	1.58	18.97	-1.98
Over 10,000	3	80,662	37.07	1,592	1.97	41.88	+4.81
PROVINCIAL TOTALS	40	217,566	100.00	3,801	1.75	100.00	

TABLE 14

THE DISTRIBUTION OF ENROLLMENTS IN SPECIAL EDUCATION BY ENROLLMENT GROUPINGS, IN BRITISH COLUMBIA SCHOOL DISTRICTS, 1969-1970*

	(A)	(B)	(C)	(D)		(E)	(F)
Enrollment	No. Divs.	Total No. Students	% of Prov. Students	Students in Special Classes No.	%	% of Prov. Spec.Cl.Pop.	Discrepancy
Up to 3,000	41	60,901	11.90	609	1.00	8.32	-3.58
3,001-6,000	17	79,677	15.57	815	1.02	11.14	-4.43
6,001-10,000	11	81,078	15.85	1,222	1.51	16.70	+ .85
Over 10,000	12	290,018	56.68	4,672	1.61	63.84	+8.01
PROVINCIAL TOTALS	81	511,674	100.00	7,318	1.43	100.00	

*The source, DBS, 1971, lists three types of enrollments, Junior Auxiliary, Secondary Special, and Senior Auxiliary. A comparison of the figures reported with those reported in the Annual Report, 1969-1970, British Columbia, Department of Education, 1971, shows that the third category is not equivalent to special classes elsewhere, and hence it is not included here.

These tables suggest that in both provinces, students in large administrative units have a better chance of being enrolled in a special class than students in small units.

A general point about the provision of special education services can be made before concluding this section. In the 1969-1970 school year, fewer than two children in every hundred were taught in special classes in Manitoba and British Columbia. The CELDIC Report (Roberts, 1970), of a national study of Canadian children with learning disabilities, suggested that 12% of all students should probably receive special education services; this incidence figure is also used in a manpower projection model by the U.S. Office of Education. (The Committee on Teacher Education and Professional Standards, 1971.) It seems reasonable to conclude that current levels of provision are not entirely adequate in the two provinces studied.

The Distribution of Enrollments in Vocational Education

In Manitoba, vocational education carried on in secondary schools is categorized as either Industrial Education or Business Education. The first category has two sub-categories, Vocational Industrial programs, for students spending 50% of their class time in this area, and Industrial Arts courses, for students on University Entrance programs who have 12% of their timetable open for optional courses, which may be Industrial Art courses. In many ways, the provision of Vocational Industrial programs is more significant than that of Industrial Arts courses, from the point of view of offering alternatives to academic courses for students who are not university bound.

The tables which follow adhere to the format already established. The data presented were gathered from three main sources, listed in the tables and in some cases by personal solicitation from officials of the Department of Education. The first group of tables provides separate figures for enrollments in Vocational Industrial programs, Industrial Arts courses, and Business Education courses. A subsequent table collapses these three categories into a single group, and thus shows the distribution of enrollments in all vocational and business courses and programs in unitary divisions in Manitoba. This last table is used for comparisons with British Columbia, for which similar information is provided.

TABLE 15

THE PROVISION OF VOCATIONAL INDUSTRIAL PROGRAMS IN UNITARY DIVISIONS IN MANITOBA, 1969-1970, BY ENROLLMENT GROUPS

Enrollment	(A) No. Divs.	(B) Total No. Students	(C) % of Prov. Stud. Pop.	(D) No. Stud. in Voc. Ind.	(E) % of Prov. Enrollment	(F) Discrepancy
up to 3,000	18	40,686	18.70	0	.00	-18.70
3,001-6,000	13	50,644	23.28	143	7.66	-15.62
6,001-10,000	6	45,574	20.95	57	3.05	-17.90
Over 10,000	3	80,662	37.07	1,667	89.29	+52.22
PROVINCIAL TOTALS	40	217,566	100.00	1,867	100 00	

TABLE 16

THE PROVISION OF INDUSTRIAL ARTS COURSES IN UNITARY DIVISIONS IN MANITOBA, 1969-1970, BY ENROLLMENT GROUPS

Enrollment	(A) No. Divs.	(B) Total No. Students	(C) % of Prov. Students	(D) No. Stud. in Ind. Arts	(E) % of Prov. Enrollment	(F) Discrepancy
Up to 3,000	18	40,686	18.70	1,419	6.24	-12.46
3,001-6,000	13	50,644	23.28	3,522	15.48	- 7.80
6,001-10,000	6	45,574	20.95	6,406	28.16	+ 7.19
Over 10,000	3	80,662	37.07	11,403	50.12	+13.05
PROVINCIAL TOTALS	40	217,566	100.00	22,750	100.00	

TABLE 17

THE DISTRIBUTION OF BUSINESS EDUCATION COURSES IN UNITARY DIVISIONS IN MANITOBA, 1969-1970, BY ENROLLMENT GROUPS

Enrollment	(A) No. Divs.	(B) Total No. Students	(C) % of Prov. Students	(D) No. Stud. in Bus. Ed.	(E) % of Prov. Bus. Ed. St.	(F) Discrepancy
Up to 3,000	18	40,686	18.70	684	13.64	- 5.06
3,001-6,000	13	50,644	23.28	879	17.53	- 5.75
6,001-10,000	6	45,574	20.95	1,220	24.33	+ 3.38
Over 10,000	3	80,662	37.07	2,232	44.50	+ 7.43
PROVINCIAL TOTALS	40	217,566	100.00	5,015	100.00	

TABLE 18

THE DISTRIBUTION OF ENROLLMENTS IN ALL VOCATIONAL AND BUSINESS COURSES AND PROGRAMS IN UNITARY DIVISIONS IN MANITOBA, 1969-1970, BY ENROLLMENT GROUPS

Enrollment	(A) No. Divs.	(B) Total No. Students	(C) % of Prov. Students	(D) No. Enroll. in Voc.Ed.	(E) % of Prov. Enrollments	(F) Discrepancy
Up to 3,000	18	40,686	18.70	2,103	7.10	-11.60
3,001-6,000	13	50,644	23.28	4,544	15.33	- 7.95
6,001-10,000	6	45,574	20.95	7,683	25.93	+ 4.98
Over 10,000	3	80,662	37.07	15,302	51.64	+14.57
PROVINCIAL TOTALS	40	217,566	100.00	29,632	100.00	

The situation in British Columbia is noticeably different from that in Manitoba:

TABLE 19

DISTRIBUTION OF ENROLLMENTS IN VOCATIONAL AND BUSINESS EDUCATION IN BRITISH COLUMBIA SCHOOL DISTRICTS, 1969-1970, BY ENROLLMENT GROUPS*

Enrollment	(A) No. Divs.	(B) Total No. Students	(C) % of Prov. Students	(D) No. Enroll. in Voc. Ed.	(E) % of Prov. Voc. Ed. Stud.	(F) Discrep.
Up to 3,000	40	60,601	11.81	2,346	11.06	- .75
3,001-6,000	16	74,090	14.44	3,425	16.15	+1.71
6,001-10,000	12	88,202	17.19	3,366	15.87	-1.32
Over 10,000	12	290,186	56.56	12,071	56.92	+ .36
PROVINCIAL TOTALS	80	513,079	100.00	21,208	100.00	

*(British Columbia Department of Education, 1971)

These data suggest that the obvious geographic and transportation difficulties faced by administrators attempting to group students for vocational education purposes have to a large extent been solved in British Columbia, but not in Manitoba.

The 1969-1970 data provided here for Manitoba are to some extent rendered obsolete by the establishment in the province of a number of regional vocational schools, which were intended in part to alleviate the discrepancies noted here. These schools offer a broad variety of vocational courses to students in Grades 10, 11, and 12. In the 1971-1972 school year there were four of these schools in operation, two in the Metropolitan area and two outside the Metropolitan area. There were two more under construction, one at Brandon and one in Swan River, a rural area. These regional institutions have certainly reduced to some extent the discrepancies in availability of vocational education but the following table of enrollments at the four schools will suggest that this reduction is not sufficient to eliminate completely the discrepancies already described.

TABLE 20

ENROLLMENTS IN REGIONAL VOCATIONAL SCHOOLS IN MANITOBA, IN 1971-1972, BY LOCATION*

Location	School Division	Enrollment
Rural	Dauphin, No. 33	870
	Selkirk, No. 11	1,133
Urban	River East, No. 9	784
	St. James-Assiniboia No. 2	779

*(Data supplied by Department of Education, Manitoba)

Early indications are that the schools in the rural areas will alleviate discrepancies in the provision of programs for students in the division in which the school is located but not for other students. The school at Dauphin was attended by 20 students from outside the home division, that is, only 2.3% of the total enrollment; the school at Selkirk was attended by 35 students from outside the home division, 3.1% of the enrollment.

The conclusion of this section is that for Manitoba, inequalities in the provision of non-academic programs exist. Regional schools, recently provided, have probably reduced these inequalities, but unless attendance patterns change very sharply, will not be entirely successful in eliminating them.

The Distribution of Library Materials

The following tables portray the distribution of library materials in three different classifications: books, periodicals, and audio-visual materials. Both the Manitoba and British Columbia situations are discussed, using data provided by Statistics Canada, and originally collected for their annual report on libraries. These reports were not complete, and consequently enrollment figures, and numbers of divisions and school districts, differ from those in previous tables.

Table 21 portrays the distribution of books, by enrollment groups.

TABLE 21

THE PROVISION OF LIBRARY SERVICES (BOOKS) IN REPORTING UNITARY DIVISIONS IN MANITOBA, 1969 - 1970, BY ENROLLMENT GROUPS

Enrollment	(A) No. Divs.	(B) Total No. Students	(C) No. of Books	(D) % of Prov. Stud.	(E) % of Prov. Books	(F) % Discrepancy
Up to 3,000	13	29,382	137,248	18.31	13.33	- 4.98
3,001-6,000	13	50,831	237,386	31.67	23.06	- 8.61
6,001-10,000	5	37,437	223,823	23.32	21.74	- 1.58
Over 10,000	1	42,859	430,980	26.70	41.87	+15.17
PROVINCIAL TOTALS	32	160,509	1,029,437	100.00	100.00	

Tables 22 and 23 portray the distribution of periodicals and audio-visual materials respectively.

TABLE 22

THE PROVISION OF LIBRARY SERVICES (PERIODICALS) IN REPORTING UNITARY DIVISIONS IN MANITOBA, 1969 - 1970, BY ENROLLMENT GROUPS

Enrollment	(A) No. Divs.	(B) Total No. Students	(C) No. of Period.	(D) % of Prov. Stud.	(E) % of Prov. Period.	(F) % Discrepancy
Up to 3,000	13	29,382	648	18.31	9.33	- 8.98
3,001- 6,000	13	50,831	992	31.67	14.27	-17.40
6,001-10,000	5	37,437	1,137	23.32	16.36	- 6.96
Over 10,000	1	42,859	4,173	26.70	60.04	+33.34
PROVINCIAL TOTALS	32	160,509	6,950	100.00	100.00	

TABLE 23

THE PROVISION OF LIBRARY SERVICES (A/V MATERIALS) IN REPORTING UNITARY DIVISIONS IN MANITOBA, 1969-1970, BY ENROLLMENT GROUPS

Enrollment	(A) No. Divs.	(B) Total No. Students	(C) No. of A/V Mat.	(D) % of Prov. Stud.	(E) % of Prov. A/V Mat.	(F) % Discrepancy
Up to 3,000	13	29,382	3,444	18.31	4.05	- 14.26
3,0001-6,000	13	50,831	14,874	31.67	17.51	- 14.16
6,001-10,000	5	37,437	15,268	23.32	17.98	- 5.34
Over 10,000	1	42,859	51,348	26.70	60.46	+ 33.76
PROVINCIAL TOTALS AVERAGES	32	160,509	84,934	100.00	100.00	

All three tables reveal the by now familiar pattern of discrepancies, with the large divisions being heavily favored in all materials.

The equivalent tables for British Columbia reveal an entirely different situation. In all three types of library materials, the smaller districts are relatively advantaged, and the larger relatively disadvantaged.

TABLE 24

THE PROVISION OF LIBRARY MATERIALS (BOOKS) IN REPORTING SCHOOL DISTRICTS IN BRITISH COLUMBIA, 1969-1970, BY ENROLLMENT GROUPS

Enrollment	(A) No. Dist.	(B) Total No. Students	(C) No. of Books	(D) % of Prov. Students	(E) % of Prov. Books	(F) % Discrepancy
Up to 3,000	25	44,253	416,943	9.00	10.47	+ 1.47
3,001-6,000	17	79,974	678,118	16.24	17.03	+ 0.79
6,001-10,000	11	81,207	643,455	16.49	16.16	- 0.33
Over 10,000	12	286,893	2,243,011	58.27	56.34	- 1.93
PROVINCIAL TOTALS AVERAGES	65	492,327	3,981,527	100.00	100.00	

TABLE 25

THE PROVISION OF LIBRARY MATERIALS (PERIODICALS) IN REPORTING SCHOOL DISTRICTS IN BRITISH COLUMBIA, 1969-1970, BY ENROLLMENT GROUPS

Enrollment	(A) No. Dist.	(B) Total No. Stud.	(C) No. of Period	(D) % of Prov. Studs.	(E) % of Prov. Period	(F) % Discrepancy
Up to 3,000	25	44,253	2,257	9.00	10.33	+ 1.33
3,001-6,000	17	79,974	3,691	16.24	16.89	+ 0.65
6,001-10,000	11	81,207	4,496	16.49	20.58	+ 4.09
Over 10,000	12	286,893	11,407	58.27	52.20	- 6.07
PROVINCIAL TOTALS AVERAGES	65	492,327	21,851	100.00	100.00	

TABLE 26

THE PROVISION OF LIBRARY MATERIALS (A/V MATERIALS) IN REPORTING SCHOOL DISTRICTS IN BRITISH COLUMBIA, 1969-1970, BY ENROLLMENT GROUPS

Enrollment	(A) No. Dist.	(B) Total No. Stud.	(C) No. of A/V Mat.	(D) % of Prov. Stud.	(E) % of Prov. A/V Mat.	(F) Discrepancy
Up to 3,000	25	44,253	47,260	9.00	17.55	+ 8.55
3,001-6,000	17	79,974	52,586	16.24	19.53	+ 3.29
6,001-10,000	11	81,207	28,035	16.49	10.41	- 6.08
Over 10,000	12	286,893	141,382	58.27	52.51	- 5.76
PROVINCIAL TOTALS AVERAGES	65	492,327	269,263	100.00	100.00	

With regard to library services, small divisions in Manitoba seem substantially disadvantaged. This pattern does not appear in British Columbia, which suggests perhaps that a different policy with regard to purchases of library materials has been in force there. The fact that simple equality exists suggests that this is a province-wide policy, and not a series of local decisions. Thus this characteristic of the distribution of library services can be taken as some indication that provincial policies can indeed work to effect simple equality, as might also be concluded from the data previously presented on the provision of vocational programs in British Columbia.

This analysis of virtually all the published data on the distribution of a number of educational services in Manitoba has demonstrated that in every service area studied the level of provision of services or resources is related to the size of the administrative unit. The direction of relative advantage in terms of access to services and resources always favors students in large divisions, whether the service is one which it was expected might be distributed uniformly, or differentially according to the needs of students. The regularity of the distributional pattern, together with the absence of any formal assessment of needs to justify the differential distribution of special, vocational and business education opportunities, suggests strongly that the pattern is independent of student needs, but associated with unit size.

There is, of course, nothing particularly surprising about the conclusions arrived at here. Porter has pointed out, for example, that one social barrier to equality of education "lies in the regional differences in educational facilities" (1965: p. 168); however, many people will perhaps find it surprising that even within social and geographic regions, such an apparently trivial element as size of administrative unit can make a difference to educational services available. With regard to urban or rural location, few people involved in education would find it surprising, for instance, that a small rural school division cannot provide the services that can be provided in a large urban division. What is perhaps surprising is the high degree of consistency among distribution patterns in various services. The attached chart provides a simple summary which reveals the

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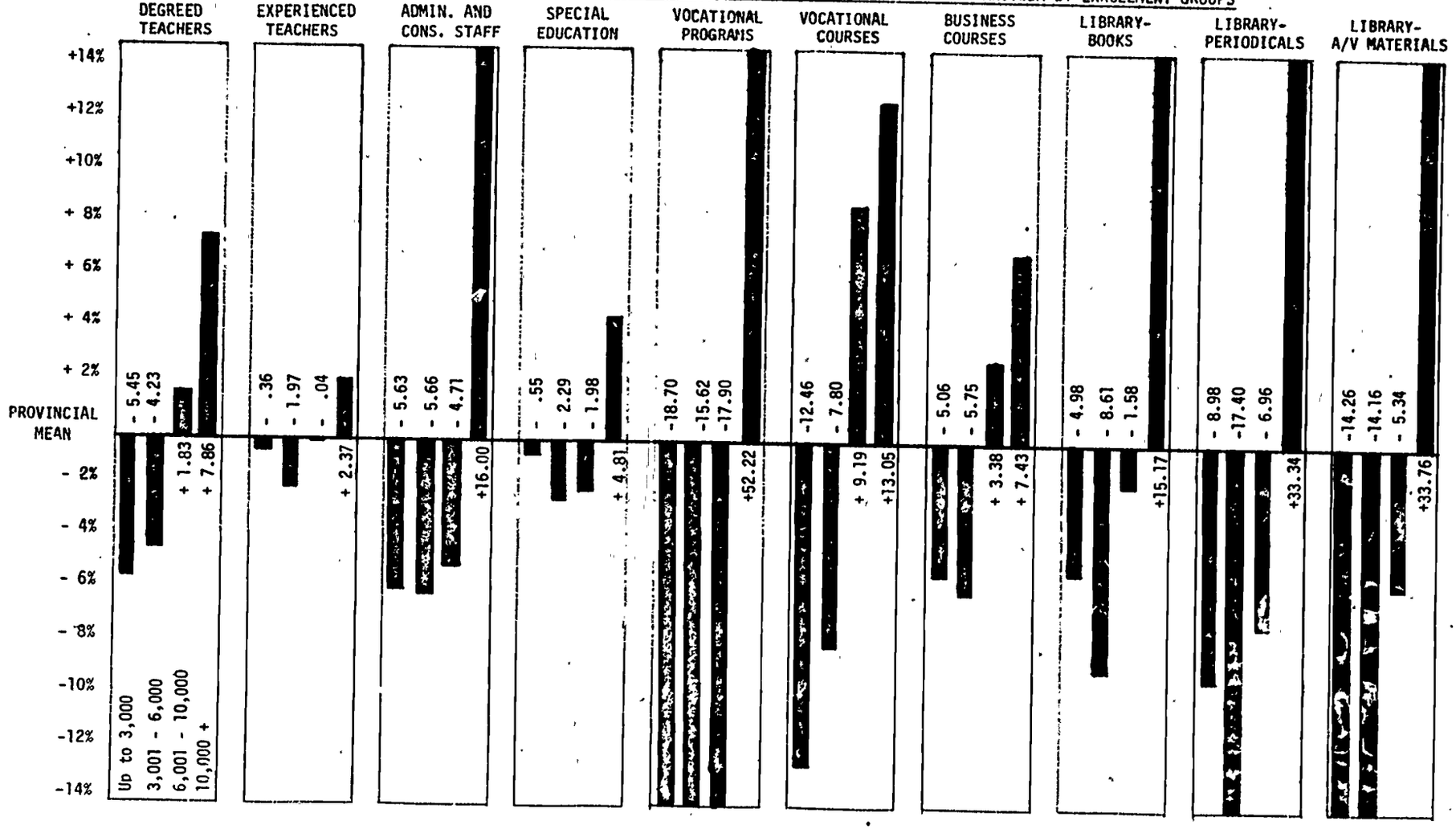
THE DISTRIBUTION OF SOME EDUCATIONAL SERVICES IN UNITARY SCHOOL DIVISIONS IN MANITOBA BY ENROLLMENT GROUPS



extent of this consistency at a glance. The chart illustrates the distribution of services on the enrollment basis used in the tables.

The parallel figures presented for British Columbia show that this consistency is not necessarily characteristic of other provincial jurisdictions. Although in many services the pattern in British Columbia is very similar to that in Manitoba, in at least some services, for instance, library materials and vocational education programs, the picture in British Columbia is quite different. In one sense this is reassuring, since it suggests that appropriate policies can equalize access to educational services.

From the point of view of provincial policy-makers, perhaps the most significant point is that the inequalities described here clearly <u>are</u> related to provincial policies. Administrative units in education are the creatures of provincial legislatures in Canada (Bargen, 1961: p. 10), just as they are the creatures of state legislatures in the United States (Wise, 1968: p. 101). Hence responsibility for inequalities relating to these administrative units is inescapable. If these inequalities are unintended, and contrary to preferences held by provincial decision-makers, some changes in provincial policies seem called for. The general criterion of equality of educational opportunity, if acceptable to provincial decision-makers, suggests the overall direction that these policy changes might take. Subsequent portions of this study will argue the case for two general policy proposals intended to reduce the inequalities described here. More detailed criteria, or value positions, will form a part of the argument for these proposals.

The purpose of this part of the study was to review data on the existing distribution of services in the school divisions of Manitoba. The main conclusion is that the size of administrative unit tends to be related to the provision of a number of educational services, with small divisions, and the students enrolled in them, generally being disadvantaged. This generalization holds true over a wide range of services in Manitoba, and a somewhat smaller range in British Columbia.

CHAPTER II

EQUALIZING FINANCIAL RESOURCES: POLICY OBJECTIVES & PROPOSALS

This Chapter deals with educational finance in Manitoba. Its primary purposes are as follows: first, to examine the portion of the distributional inequality in the provision of services, associated with school division organization and described in detail in the previous chapter, which might be attributable to financial characteristics. Second, to propose ameliorative policies, the general thrust of which will be to provide small school divisions, whose students at present have limited access to some educational services, with increased financial power, and thus make it possible for these school divisions to improve the levels of service provision, to more adequately meet local need, at the discretion of local decision-makers. As a consequence of the first two purposes, the third purpose will be to examine those characteristics of the financing of education which are directly determined by provincial policy-makers, to whom this report is addressed. The order of treatment will be to establish first the extent to which distributional inequalities in services seem to be associated with financial characteristics; second, to propose a set of goals or objectives in finance which might be acceptable to provincial policy-makers; third, to provide some analysis and evaluation of the effects of current financing policies based on the goals or objectives proposed; and fourth, to propose a set of policies for the financing of education in the province, the "probable real output" (Dror, 1968: p. 41) of which will more nearly meet the stated goals or objectives than existing finance policies.

Many scholars believe that the provision of equality of educational opportunity is contingent on access to financial resources: "equality of educational opportunity is fundamentally a matter of equality of access to financial resources." (National Educational Finance Project, 1971a: p. 59) Thus the modification of provincial financial policies, with respect to school divisions, to be proposed in this chapter as one response to the existence of distributional inequalities in educational services, may well be a necessary, if not sufficient response. Changes in the abilities of small school divisions to provide educational services may be contingent upon increased financial power resulting from a redistribution of provincial resources. However, such a redistribution, it should be emphasized, will change the potential to provide services, rather than the actual provision of services. These changes are left to the discretion of local decision-makers by the proposals in this chapter, which are aimed at provincial decision-makers, and only concern the distribution of provincial resources.

A contrary view to that given above, regarding the importance of financial resources, has been argued. Some scholars maintain that since input measures, such as the educational services analyzed in Chapter I, and output measures, for example of student performance, do not correlate very well, attempts to change the distribution of services are not worth making. More specifically, doubt is expressed about the utility of additional expenditures. See for example Jencks (1972: p. 90).

The responses to this argument take three forms: first, the Coleman Report (1966), on which the argument is based, may have underrepresented the importance of school factors (Bowles & Levin, 1968); second, in principle what is at issue in any discussion of opportunity is not achievement, the use made of opportunity; third, the factors correlating strongly with achievement seem to be far beyond the scope of public policy-making (Mosteller & Moynihan, 1972: p. 42), and hence beyond the responsibility of state or provincial policy-makers; finally, to summarize the response to the questions raised above in the words of Coons, Clune, & Sugarman,

> The basic lesson to be drawn from the experts at this point is the current inadequacy of social science to delineate with any clarity the relation between cost and quality. We are unwilling to postpone reform while we await the hoped-for refinements in methodology which will settle the issue. We regard the fierce resistance by rich districts to reform as adequate testimonial to the relevance of money. Whatever it is that money may be thought to contribute to the education of children, that commodity is something highly prized by those who enjoy the greatest measure of it. If money is inadequate to improve education, the residents of poor districts should at least have an equal opportunity to be disappointed by its failures. (1970: p. 30)

This issue is also argued in Benson (1965: pp. 19-27) and Wise (1968a: pp. 142-150), with similar conclusions.

Financial Elements in the Distributional Inequalities in the Provision of Services

This section will attempt to reveal the financial basis of distributional inequalities in the provision of services by examining the pattern of expenditures of school divisions, and also the range of revenues and local effort in divisions. In effect, the latter material provides an analysis of the effects of existing provincial finance policies. The first part then deals with inequalities in expenditures; the second with inequalities in revenues.

Before examining in detail some financial elements in the provision of services in Manitoba school divisions, it is perhaps desirable to examine briefly the overall relationship between size and costs, and its possible effects on the provision of services. Hopefully, this will provide a picture of the financial situation of small divisions which in accuracy and detail is adequate to serve as the basis for some policy proposals in a subsequent section.

Recent reviews of current research on the relationship between school district size and annual expenditures per pupil have generally not supported the simplistic view that large districts must benefit from economies of scale and hence should be able to operate more economically, that is at lower annual per pupil costs. Rather it seems to be the case that in a number of different jurisdictions, both American and Canadian, per pupil costs fall roughly on a curve, with large and small districts encountering high costs, and intermediate-sized districts encountering lower costs (Coleman, 1972a; Holdaway & Blowers, 1971; Subalao & Hickrod, 1971). The emphasis of most of the research has been on finding the optimum point on this curve, that is the ideal size of districts from a cost standpoint. In Manitoba this seems to have been around 4,000 students in the 1969-70 school year (Coleman, 1972a: p. 63).

The notion of economies of scale operating in school district administration is still an inherently attractive one, however, since it is consistent with common sense, with the experience of administrators, and with research on the costs of operating small schools. In British Columbia, for instance, an analysis of factors affecting the size of school district budgets showed that the average

size of school was an important factor, correlating positively with size of budget. (Robinson & Sawadsky, 1971). The scattered data available suggest that small districts encounter high costs, particularly in support services, due to diseconomies of scale, and large districts encounter high costs in providing high levels of service.

The accompanying tables present data on school division expenditures, by category, for 1970. In expenditures on instruction, both absolute and percentage expenditures rise with increasing size, in general, which seems to support the portion of the generalization above which deals with expenditures on services in large divisions. The obverse portion, which suggests that small districts spend more on support services because of diseconomies of scale, seems to some extent supported in the budget categories Administration General, Plant Maintenance, and Other Expenditures. In all three absolute and percentage costs decline with increasing size, with the exception of the category Plant Maintenance for the very large divisions.

There are certainly factors other than diseconomies of scale influencing these figures; for example, the category Other Expenditures includes expenditures on student transportation, which are not important in the large urban divisions. Additional factors which might well be influential are variations in costs of goods in rural areas, substantial climatic variations, variations in indebtedness, and so on. (See Wise, 1968a: p. 157) However, some of these factors are themselves probably associated with diseconomies of scale. For example, variations of costs of goods are as likely to be attributable to small orders producing small discounts as to remoteness from suppliers. Transportation costs are sometimes influenced by diseconomies of scale. (France, 1971: p. 4)

TABLE 27

THE DISTRIBUTION OF EXPENDITURES IN MANITOBA'S UNITARY SCHOOL DIVISIONS PER STUDENT BY BUDGET CATEGORY AND ENROLLMENT GROUPING, 1970

(A)	(B)		(C)		(D)		(E)		(F)		(G)	(H)
Group*	Admin. Gen. per Stud.		Admin. Instruct. per Stud.		Instruct. Day per Stud.		Plant Maint. per Stud.		Other per Stud.		Total Expend.	Range in Expend. per Student
	$	%	$	%	$	%	$	%	$	%	$	$
I	24.05	3.71	18.36	2.83	379.77	58.59	59.62	9.70	166.41	25.67	648.21	514.88 - 770.81
II	23.73	3.86	20.58	3.35	387.55	63.04	58.72	9.55	124.16	20.20	614.74	519.63 - 693.66
III	23.43	3.68	26.17	4.11	437.91	68.84	57.48	9.04	91.16	14.33	636.15	555.53 - 683.43
IV	22.16	3.11	36.59	5.13	480.47	67.42	77.71	10.90	95.70	13.43	712.63	624.94 - 768.28
PROV. AVERAGES	23.15	3.50	27.27	4.12	431.09	65.14	65.67	9.92	114.60	17.32	661.78	514.88 - 770.81

*Group here refers to the four enrollment categories used earlier. Group I is comprised of divisions in the 0 - 3000 enrollment range, Group II is comprised of divisions in the 3001 - 6000 range, Group III comprised of divisions in the 6001 - 10,000 range and Group IV is comprised of divisions in the 10,000 + range.

(Based on audited statements of school divisions, supplied in summary form by the Manitoba Department of Education.)

It seems reasonable to conclude that diseconomies of scale play at least a part in the high level of expenditures for support services found in small divisions.

The remaining category, Administration of Instruction, parallels in trend the expenditures on instruction. Since it has already been demonstrated that most of the administrative and consultative personnel in the province are located in the large divisions, and since administrators' salaries are distinctly higher in the large divisions (MAST, 1971), this trend is not surprising. If the existing budget categories are collapsed into two, with the Administration of Instruction and Instruction Day School categories being considered a single category of Instructional Service Expenditures, and the remainder being considered Support Service Expenditures, the picture becomes somewhat clearer.

TABLE 28

INSTRUCTIONAL AND SUPPORT EXPENDITURE PER STUDENT IN MANITOBA'S UNITARY SCHOOL DIVISIONS, BY ENROLLMENT GROUPING, 1970

(A) Group	(B) Instructional Services		(C) Support Services		(D) Total Expenditure
	$	%	$	%	$
I	398.13	61.42	250.08	38.58	648.21
II	408.13	66.39	206.61	33.61	614.74
III	464.08	72.95	172.07	27.05	636.15
IV	517.06	72.56	195.57	27.44	712.63
PROVINCIAL AVERAGES	458.36		203.42		661.78

Table 28 shows the trend to increased expenditures in instructional services, both in absolute and percentage figures, with increase in size, and

thus to reduced expenditures in support services with increase in size. The trend is not completely upheld in Group IV since support service costs rise, absolutely and in percentage terms, in the largest divisions.

A tentative conclusion based on this analysis of expenditures can now be stated: in Manitoba, large divisions, which as has been demonstrated previously provide superior levels of educational services, do so at relatively low costs, but encounter non-instructional costs which tend to raise their expenditures substantially. Thus, in general, if it is desirable for instructional services to be equalized, it can be anticipated that very substantial amounts of additional funds will be required for small divisions; a rough measure of the extent of these additional funds can be seen by contrasting expenditures on instruction in the two groups of small divisions with those in the two groups of large divisions in the preceding table.

In considering specific financial bases for the distributional inequalities in services already identified, the service categories of personnel, programs, and facilities can be used again. Teachers' salaries are clearly a major cost item, and should certainly be examined. The following table presents average salary per teacher in the enrollment categories already used.

TABLE 29

AVERAGE SALARY PER TEACHER IN MANITOBA'S UNITARY SCHOOL DIVISIONS, BY ENROLLMENT GROUPING, 1970

(A) Group	(B) No. of Divs.	(C) No. of Students	(D) No. of Teachers	(E) P/T Ratio	(F) Expend. on Teach. Sal. $	(G) Av. Salary per Teacher $
I	18	40,686	1,861	21.86	13,872,236	7,454.18
II	13	50,644	2,308	21.94	17,680,944	7,660.72
III	6	45,574	2,089	21.82	17,947,395	8,591.38
IV	3	80,662	3,648	22.11	34,808,820	9,541.89
PROV. TOTALS	40	217,566	9,906		84,309,395	
AVERAGES				21.96		8,510.94

The discrepancies in expenditures shown are resultants of at least three major factors: pupil-teacher ratios, variations between salary schedules, and variations stemming from placement on the schedules. The effect of the first is limited, since as Table 29 shows, variations from the provincial mean here are small. The effect of the second is also rather limited: the lowest salary scale in the province in 1970 had a minimum of $4,500, (which was shared by 25 divisions) and a maximum of $12,900. The highest had a minimum of $4,775 and maximum of $13,750. These ranges are clearly not sufficient to account for the range from $7,454.18 to $9,541.80 in average salaries shown in the preceding table. Clearly the major source of disparities in average salaries is placement on the scale - ie. variations in experience and certification of teaching force, and thus these disparities are closely related to the distributional inequalities in the services of highly qualified teachers described in Chapter I.

The significance of this finding becomes clear when an attempt to estimate the cost of correcting the distributional inequalities is considered. For divisions in Groups I and II to raise salaries to provincial average levels, in order to improve teaching forces, would require additional expenditures of about $1,000 per teacher for a total of 4,169 teachers.

In the area of programs, special education can be considered as an illustration. The cost of providing special educational programs has been estimated at about twice that for the regular school pupil. (This is based, roughly, on National Educational Finance Project findings, 1971b, p. 28, but is certainly not intended to provide an accurate prediction of costs.)

TABLE 30.

COSTS OF PROVIDING ADDITIONAL SPECIAL CLASS PLACES, TO REACH EXISTING PROVINCIAL MEAN, IN MANITOBA'S UNITARY SCHOOL DIVISIONS, 1969-1970

(A) Enrollment Grouping	(B) No. of Divs.	(C) Total No. Students	(D) % of Prov. Stud. Pop.	(E) Stud. in Spec. Cl	(F) % of Prov. Spec. Cl. Pop.	(G) Discrepancy (No. of Stud.)	(H) Expend. per Stud.	(I) Add. Costs (G x H)
							$	$
I	18	40,686	18.70	690	18.15	-21	648.21	13,612.41
II	13	50,644	23.28	798	20.99	-87	614.74	53,482.38
III	6	45,574	20.95	721	18.97	-75	636.15	47,711.25
IV	3	80,662	37.07	1,592	41.88	+183	712.63	-
PROVINCIAL TOTALS AVERAGES	40	217,566	100.00	3,801	100.00		661.78	114,806.04

Table 30 uses data already provided to show the enrollment changes needed to equalize the distribution of opportunities for special education, that is to eliminate the discrepancy between percentage of provincial students, and percentage of provincial special class students. To this is added data on the cost per pupil in the various enrollment groupings. Since the students already account for expenditures at average levels, the additional funds required by the weighting factor (2 x regular costs), can be estimated by multiplying the number of additional pupils by the average cost per pupil. In the grouping of the largest school divisions, no additional funds are required since they are already above provincial averages in the provision of special education services.

With regard to financial bases of inequality in the provision of library facilities, direct data is available. Table 31 shows expenditures by some divisions on library materials, and is drawn from the Statistics Canada library survey data already referred to.

TABLE 31

EXPENDITURES ON LIBRARY MATERIALS IN REPORTING UNITARY DIVISIONS IN MANITOBA, 1969-1970, BY ENROLLMENT GROUPS

Enrollment Grouping	No. of Divs.	Total No. Students	Expenditures	Expenditures per Student
			$	$
I 0-3,000	13	29,382	76,279	2.60
II 3,001-6,000	13	50,831	78,265	1.91
III 6,001-10,000	5	37,437	110,767	2.96
IV 10,000 +	1	42,859	132,879	3.10
PROVINCIAL TOTALS	32	160,190	398,190	
AVERAGES				2.49

The smaller divisions are spending at levels near or below the provincial mean; the larger divisions are spending above this level. Rather small additional expenditures would eliminate this discrepancy in annual expenditures, but would not, of course, eliminate the discrepancy in library facilities. To do this, the smaller divisions would have to spend at levels exceeding those of the larger divisions for a number of years.

The conclusion of this part, on inequalities in expenditures, can be simply stated: some at least of the inequalities in the provision of educational services described in Chapter I have a financial aspect. Consequently, proposals to change the distribution of educational services in unitary school divisions in Manitoba must explicitly recognize the financial factors. Expenditures are important: "the per pupil expenditure does not tell the whole story of quality and equality in education, but it is a significant index of differences among school districts." (National Education Finance Project, 1971b: p. 6) This is not to say, of course, that only money is required to equalize the provision of educational services. Spending programs which purport to provide improved education are quite rightly nowadays to be regarded with some skepticism. (Levin, 1970) However, the identification of areas in which additional expenditures could possibly affect the distribution of services, and the identification of precisely how and in what terms expenditures will be provided enables the proposals here to escape the global nature of many other kinds of spending program proposals. In addition, it is hoped that the clear specification of the objectives of the policy proposals which follows in the next section will subsequently

enable policy-makers to evalute the impact of the proposals, if implemented, and this built-in set of standards of evaluation will in itself provide a limitation on ineffective spending.

There exist inequalities in revenues which seem likely to be a major cause for the pattern of expenditures which has already been demonstrated. These inequalities in revenues also seem to be related to the inequalities in the provision of services, since the grouping adopted in order to show discrepancies in services also reveals discrepancies in revenues. Two concepts used in Table 33 need some explanation. "Wealth", which is represented in the table by Balanced Assessment Per Student, has been the subject of some discussion. In the United States, it has been maintained that:

> A state aid system which recognizes only those variations in fiscal capacity which arise from the distribution of property within a state and ignores the variations in fiscal capacity which arise from the distribution of income within a state has virtually guaranteed the continuance of inequalities in fiscal capacity and tax effort at the local level. (National Educational Finance Project, 1971a: p. 100)

However, in Manitoba, the distribution of wealth in the form of income, and of wealth in the form of assessed values of property, seem closely similar, as shown by the following data.

TABLE 32

AVERAGE INCOME FROM TAX RETURNS BY REGION IN MANITOBA, 1966-1969

Year	Metro Winnipeg	Southern Manitoba*	Manitoba
	$	$	$
1966	4,763	3,629	4,425
1967	4,521	3,441	4,204
1968	4,805	3,509	4,431
1969	5,162	3,669	4,728

(Regional Development Branch, Department of Industry and Commerce, 1971: p. 288)
*Southern Manitoba excludes only two unitary divisions.

The relationship between this distribution of income, and the distribution of assessed values of property, can be seen by comparing this data with that in the next table, which shows Balanced Assessment Per Student (BAPS), by group of school divisions. It should be remembered that divisions in Groups III and IV are, with only one exception, located in the Metro Winnipeg area (See p.15) Thus these divisions are roughly co-terminus with Metro Winnipeg in the table above. Families in this area enjoy annual incomes which are on average $34 per year (9.18%) higher than in the province as a whole; similarly, when the assessed values per student in Groups III and IV are combined, the resultant is a BAPS of $9555, as compared to the provincial average BAPS of $8491. The difference of $1064 per student represents a 12.53% advantage for the Metro area. Thus the distribution of wealth in the province, whether measured by income or assessed values of property, favors the divisions grouped here as III and IV.

Additionally, it can be argued that even if there were a distributional discrepancy between the two measures of wealth, incomes and property values, the relevant figure insofar as local decision-makers are concerned is that for property values. Raising funds for the operation of school divisions by a tax levy in Manitoba is a power of divisional decision-makers, but they are limited to the property tax. Thus wealth in terms of income of the community is only relevant in considering the limits to which the rate of property tax could be raised without excessive taxpayer resistance. The present range of local effort revealed in Table 33 suggests that many divisions in Manitoba are at present far from these limits.

TABLE 33

RANGE IN REVENUES PER STUDENT AND LOCAL EFFORT
IN MANITOBA'S UNITARY SCHOOL DIVISIONS, BY ENROLLMENT GROUPS

(A) Group & No.	(B) Total No. Students	(C) Average Revenue Per Student $	(D) Range in Revenue Per Student $	(E) Average Local Revenue Per Stud. $	(F) Average Balanced Assessment Per Student $	(G) Av. Local Effort	(H) Range in Local Effort
I 18	40,686	640.38	541.95-741.99	110.91	7,227	15.35	8.88-27.96(51.30)*
II 13	50,644	610.37	521.85-672.68	115.51	6,853	16.86	11.46-34.89
III 6	45,574	637.45	551.98-691.00	171.37	7,342	23.34	15.25-28.62
IV 3	80,662	720.02	628.45-776.83	224.59	10,806	20.78	19.89-26.87
PROV. TOT. 40	217,566	144,095,916	521.85-776.83		1,847,320,270		8.88-34.89(51.30)*
AVGS.		662.31		166.79	8,491	19.64	

*NOTE: The division with local effort of 51.30 is Flin Flon, a resource frontier community in which large amounts of industrial property are excluded from assessed values, and substantial payments in lieu of taxes are included in local revenue. Both these factors contribute to the distortion of this index figure, which is consequently excluded and replaced by an alternative figure, representing the next highest index figure. See Husby, (1971) for details of educational finance in Flin Flon.

The concept of "local effort" used here needs some explanation. The figure is arrived at as follows: the local revenue per student is divided by the balanced assessment per student to arrive at an index figure which represents local effort. Conceptually, this represents the amount paid proportionate to the ability to pay, or wealth, and the higher the amount paid, and the lower the ability to pay, the higher will be the index of local effort. It is clearly a simplified index, but seems adequate for the consideration of local funding of education, given the restriction of local decision-makers to property tax as a source of revenues. The adequacy of the measure of wealth, or ability to pay, is of course critical, but this has already been argued. (See Husby, 1971 and National Educational Finance Project, 1971c for more global indices of effort.)

Contrary to expectations Table 33 reveals that the small divisions, which are currently providing low levels of service, are also making relatively low levels of effort. The average level of effort of the two groups of small divisions, in which incomes and assessed values are relatively low, is substantially below the provincial average, although as column H reveals, some individual divisions are making extremely high local effort. This finding is rather similar to one finding of some American studies. In a recent review of research, Hickrod (1971) notes that socio-economic characteristics of school districts tend to be associated with both expenditure levels and levels of local effort and that the strength of these associations seems to be rising. The Manitoba pattern, in which the less wealthy divisions spend less, and also make less local effort, may be fairly common then. It

seems important to use a minimum level, or support program, concept in the policy proposals on finance to be made here, since a simple matching system would not, apparently, serve to improve the relative financial situation of poor divisions, given the tendency for local effort to be low in these divisions.

These data also reveal, however, the extremes in range of local effort currently being made, and hence inequalities in the raising of funds for education which currently exist. The range in revenues per student is less striking than the range in local effort. If the low figure is expressed as a percentage of the high figure, the range in local effort is from 17.31% to 100% while the range in revenue per student is from 67.18% to 100%.

In general, inequalities in revenue and local effort in Manitoba, while comparing favorably with another province, British Columbia (See Table 34), and with many states, are quite large. It seems reasonable to conclude, as in the first part of this section, that proposals to equalize educational opportunity must recognize the importance of financial factors, including local effort, and that some equalization of revenues, that is, of financial power, is in many ways a necessary precursor to service equalization. Given the fact that small divisions tend not to be wealthy, in terms of assessed values, this equalization requires a redistribution of provincial resources, by means of changes in the financial policies of the province.

The next section spells out in some detail for these financial policies a group of policy objectives, intended to bring about the redistribution of provincial financial resources, so as to increase the financial power of small divisions.

TABLE 34

AVERAGES AND RANGES IN REVENUE PER STUDENT AND LOCAL EFFORT IN BRITISH COLUMBIA SCHOOL DISTRICTS, 1970, BY ENROLLMENT GROUPS

Group	Av. Total Rev. Per Student $	Range in Total Rev. $	Av. Local Effort	Range in Local Effort
I	780.79	478.20 - 1210.27	28.81	14.26 - 40.44
II	724.45	653.55 - 817.84	29.93	24.33 - 39.25
III	676.38	614.45 - 737.07	28.84	26.77 - 32.07
IV	697.95	635.09 - 771.12	32.38	26.76 - 33.56
PROVINCIAL AVERAGE	707.86	478.20 - 1210.27 (732.07)	28.17	14.26 - 40.44 (26.18)

(Based on data given in British Columbia Department of Education, 1972)

*NOTE: Assessed values per student are given in British Columbia School Trustees Association, 1970. Data were missing for one district in Group I; the provincial average was inserted.

Objectives for an Adequate Financing System for Manitoba School Divisions

The objectives proposed here can be stated fairly readily, and most of the subsequent discussion is intended to clarify and justify the proposed objectives. The three groups of objectives are labelled "Resource Equalization", "Local Autonomy" and "Flexibility". Although the specific objectives and standards of achievement proposed here may or may not prove acceptable to provincial policy-makers, there are grounds for believing that the general direction is acceptable. A position paper recently published by the Government of Manitoba asserted that equality of educational opportunity is a major goal of the government.

> The school system shall provide every Manitoban with the opportunity for achievement, the opportunity to develop distinctive and diverse talents and skills. Equitable access to resources and to educational programs of varying levels is necessary to ensure equal participation regardless of race, sex, socio-economic background and geographic location. (Government of Manitoba, n.d.: p. 9)

Note that "equitable access to resources" is specifically cited as necessary to the achievement of equal educational opportunity.

An additional goal identified by the position paper is that of "a school system responsive to community needs"; this general position is based on the view of the province as "a piuralistic society, with many communities within the larger Manitoba community". (p. 16) In general, this goal is similar to the objectives of local autonomy and flexibility asserted here, since the provision for local autonomy and flexibility seem essential to responsiveness to diverse needs. Thus there is some reason to believe that provincial policy-makers might accept the objectives for the financing of Manitoba school divisions described in some detail in this study.

There are two dimensions to the notion of resource equalization as it is used here to represent an objective of the system of financial policies. The first relates to the demonstration, in Chapter I, of distributional inequalities in services and the demonstration in the previous section of this chapter of the financial basis of some of these inequalities. The "desired quality" of a good system of financial policies, with respect to educational services, would be the equalization of revenues, and hence the equalization of expenditures on certain services, resulting from increases in the power of poorer divisions to spend, consequent on receiving a larger share of provincial resources. The "satisfactory quality" would be some reduction in inequalities in revenues and expenditures.

The case for equalization in educational financing has been argued very extensively in the United States in recent years, most dramatically in the California Supreme Court in the case of Serrano vs. Priest. (See Shannon, 1972 for a summary of the implications of this and other test cases.) In the academic literature, Wise (1968), Benson (1965), Coons, Clune & Sugarman (1970), and a series of studies under the direction of the National Educational Finance Project are the major sources. Very briefly stated, the argument runs thus:

> State governments have been concerned to reduce inequality of provision and - simultaneously - inequity in local tax burden. If there were no state grants for schools, we would see in even more extreme form than we now do the existence, side by side, of rich districts providing handsome school programs and poor ones providing meagre offerings, with local tax rates set at low levels in the rich places and at high levels in the poor. State grants, then, reduce the weight of the tax burden to which poor places must submit in order to have a modest school program. (Benson, 1965: p. 82)

Nevertheless, these grants have not been very effective in achieving these two objectives, so that state aid patterns in fact show no consistent relationship between district need and grant levels. (Wise, 1968a: p. 132) However, expenditure levels are closely related to school district wealth. (Benson, 1965: pp. 19-28; James, Thomas & Dyck, 1963).

As a consequence of these facts, Benson, Wise, and Coons, et al. severally argue that the school district of residence is an important determiner of educational opportunity:

> In effect, the state's school finance statutes classify the students in the state on the basis of the school district in which they reside. This classification largely determines the quality of the educational opportunity which the student is to receive. If he happens to reside in a school district with a high tax base, he receives a better educational opportunity. If he happens to reside in a school district with a low tax base, he receives a worse educational opportunity. (Wise, 1968a: p. 164)

Similarly, Coons, Clune, & Sugarman speak of the millions of children "for whom the accidents of residence and boundary play a decisive role in the character of their formal education". (1970: p. xviii) The link between such accidents of residence and the responsibility of state governments is important:

the scholars referred to argue that since school districts are the creation of state governments, then inequalities based on a system of school districts are also clearly and unequivocally the responsibility of state government. Overstating the case to some extent, Coons, Clune & Sugarman maintain that:

> Our state governments have embraced the philosophy that, as a rule, the quality of public education should be in direct proportion to the wealth of the school districts; in general this also means that the quality will be in inverse proportion to the needs of children. (p. xix)

It is in effect this classification by district which was tested in the Serrano vs. Priest case. The complaint ruled on by that court had as its chief contention the claim that the financing scheme at present operating in California violated the equal protection clause of the Fourteenth Amendment to the Constitution.

> The Court said that the U.S. Supreme Court measures the validity of state legislation which concerns either "suspect classifications" or "fundamental interest" according to a strict Constitutional standard. That is, any state law which purports to establish "classifications" affecting people, such as the public school financing laws which appear to benefit people unequally, is subject to a strict measurement against the U.S. Constitution's "equal protection clause"...The Court first considered the California Public School Financing Law on the basis that it is a "suspect classification". The Court affirmed as "irrefutable" the plaintiff's contention that the School Financing Law is a "classification" based on wealth. While the Court conceded that the law, through its grants of "basic" and "equalization" aid, "partially alleviates" the considerable differences in the wealth of local districts throughout the state, the Court nevertheless specifically recognized that "the system as a whole generates school revenue in proportion to the wealth of the individual district". (Shannon, 1972: p. 467)

In summary, then, the direction of the California Supreme Court to the State of California, and other similar findings and directions by other state supreme courts is that a finance formula must be found which eliminates the relationship between district wealth and expenditures on educational services,

and consequently equalizes the local effort necessary to meet those expenditures.

Clearly it is possible to claim that the case in Canada is different. However, the existence of inequalities in the provision of educational services, dependent on the school division of residence, has already been shown for Manitoba; in the next section, the effects of the current financing formula will be demonstrated, and shown to fall far short of equalization. The desire for equalization does not seem to differ between the United States and Canada, and the responsibility of provincial governments here for the creation of local school divisions is precisely the same as that of state governments in the United States, so that the responsibility for equalization is quite properly attributed to provincial governments. Additionally, it is often the case that provincial grant systems are intended to reduce inequalities.

> The primary purpose of the provincial school finance legislation is to reduce inequities resulting from school district's varying capacities to support educational programs. The underlying assumption is that a school district's fiscal capacities should not determine the quality of educational services the district provides. (Langlois, 1971: p. 15)

Thus it is possible to conclude that with regard to educational finance, equalization is considered desirable, it is the responsibility of provincial governments, and is presumably also within the reach of provincial financial policies.

In general, American consideration of the financial aspects of equality of educational opportunity distinguish differences in student needs, and attribute cost differentials, or student weightings, on the basis of these. (National Educational Finance Project, 1971b, p. 28) Such techniques are, however, clearly attempts to equalize educational <u>achievement</u> by assisting

some students, judged less capable, more than others. In effect such finance schemes are intended to provide educational opportunities unequally. In the rationale to this study, the notion of attempting to equalize achievement was specifically rejected. Hence the proposals here will make simple enrollment, not weighted enrollment, the basis on which provincial funds are distributed to school divisions. This is quite consistent with the notion of distributional equality of access to services which is the basis of the critique of the existing situation in Chapter I, and the service proposals in Chapter III. Subsequently in this chapter when a range of possible policy proposals for provincial financing is considered, it will be demonstrated that the rather strictly limited notion of equalization adopted here can be considered one level or stage in financial equalization. A subsequent level or stage is based on the notion of equalizing achievement.

It should be noted that the rigorous standard of financial equality adopted here is not intended to eliminate program proposals which attempt to provide for particular student needs. It is intended to restrict consideration of these at the provincial level. The differentials in cost associated with these programs then become a matter of local option, rather than provincial funding, and in effect the borderline between equalization and pluralism, in this study, is being drawn in such a way as to limit equalization as a concern of provincial policy-makers to a relatively clear concern with opportunity and not achievement. Differences between students are then a concern of, and justification for local autonomy, to be taken into account in local decision-making rather than provincial decision-making.

Local autonomy in educational administration is defined, for this study, as the existence of a number of administrative units, charged by provincial statute with the direct responsibility for administering a system of public school education, with boundaries between units being geographically defined. There is of course already a high degree of autonomy in the administration of education in Manitoba, as elsewhere in Western Canada. Table 35 shows the number of independent administrative units in existence with their student enrollment and average size, by province, for Western Canada.

TABLE 35

ADMINISTRATIVE UNITS, ENROLLMENTS, AND AVERAGES FOR WESTERN CANADA, 1969-1970

Province	No. of Units	Students Enrolled	Average Enrollment
Manitoba	47	244,379	5,200
Saskatchewan	76	244,316	3,215
Alberta	68	413,719	6,084
British Columbia	81	511,674	6,317
PROVINCIAL TOTALS	272	1,414,088	
AVERAGE			5,199

(Dominion Bureau of Statistics, 1971)

The range in average size of administrative unit between the Western provinces is relatively small, and suggests similar decisions by different provincial policy-makers, based on a shared notion of optimal size. However, the question of optimal size of administrative units in education has not been satisfactorily answered, either in Canada or the United

States (Subalad and Hickrod, 1971). The history of the administration of education in Canada, as in the United States, contains clear evidence of rather subjective views regarding optimal size, with the size deemed desirable growing decade by decade. (Collins, 1961) The same pattern of increasing average size in administrative units can also be seen in the United States (Campbell et al, 1970: p. 98)

The case for pluralism is usually argued in terms of the ideology of local control, as for instance in Education and Social Policy: Local Control of Education (1970). In this context, the discussion is generally based on political values and traditions, and such philosophical concepts as the conflict between community and society. (Newmann and Oliver, 1969). Such ideas can be and have been made the basis for policy recommendations regarding administrative units in education, (see, eg., Coleman, 1971), but clearly are not easily defined, and hence are not readily usable as policy objectives.

Briefly summarized, the relevant elements of the current discussion of local autonomy (or local control) seem to be these: first, local control, a nineteenth-century ideology, is inconsistent with full equalization of educational opportunity. This was recognized in the nineteenth century. (Lipset, 1970: p. 25). However, it is consistent with the preference for "the relative simplicity of smaller organizations," (Andrews, 1970: p. 56) and although no solid empirical evidence has yet been provided for the proposition that small size of unit is associated with a greater degree of citizen participation and control, this proposition seems generally accepted (See Coleman, 1972a, for further discussion.) Paradoxically, local control is seen as promoting freedom, as opposed to indoctrination, (Courtney, 1970: p. 46), and also as restricting freedom of inquiry (Bowers, 1970: p. 15).

The debate between the proponents of centralization to ensure equality, and the proponents of decentralization to ensure choice, can be considered to hinge on the question of how far central authorities are prepared to go to ensure equality. Clearly, equality in terms of input factors can fairly easily be legislated and supervised by a completely centralized school system. On the other hand, the maximum degree of pluralism conceivable is perhaps the old system of single-school districts. In effect, both of these extreme positions have been rejected in North America in recent years. The guiding principle already suggested for this study is that insofar as the school divisions or districts are by legislation or regulations created or funded in such a way as to develop or allow gross inequalities, to that extent is the provincial authority responsible and is remedial action justified. But should provincial legislation or regulations provide for a high degree of equality, and local decisions reduce this equality, this is not effectively the responsibility of the provincial authority, nor is it grounds for remedial action. Thus, because of the competing value of local autonomy, provincial authorities may tolerate some inequality of educational opportunity, if it is an outcome of informed decision-making at the local level. The responsibility for informing local decision-makers may be undertaken by provincial authorities.

One further element in the current discussion of autonomy, of particular relevance to educational finance, should be mentioned. The case for local autonomy can be argued on economic grounds:

> to the extent that majorities of different groups of people assembled within different jurisdictional boundaries exhibit variance in tastes, preferences, income, and so forth, they will wind up with differing qualities and quantities of public, elementary and secondary education. It may reasonably be assumed that the variances in tastes, preferences, and income is less within the thousands of school districts than it is within larger jurisdictions such as states, and that mobility is greater among local school districts than among states. It then follows that the local voting-budgetary process will produce an allocation of resources to education that is more efficient than the outcome to be expected under a state-wide centralized system. The importance of and the weight to be attached to this conclusion depends in substantial measure on acceptance of the value judgment that it is the preferences of individuals we seek, fundamentally, to satisfy. Moreover, efficiency in the sense employed here is but one criterion. It may be offset or reinforced by such other considerations as may arise from concern about income distribution, so-called benefit spillovers to people in other jurisdictions, and economies or diseconomies of scale in the production of educational services. (Brazier, 1970: p. 244).

Clearly, the fact that autonomy occurs as one element in the scheme of objectives for provincial financial policies proposed here indicates that the present writer has accepted the view that local control, or more generally a pluralistic system of educational administration, is justifiable. However, this does not provide a ready solution to the obvious conflicts between equalization and autonomy. Coons, Clune, and Sugarman argue that the conflict is not as severe as many opponents of autonomy and supporters of equalization would claim:

> Some argue simplistically that equality of educational opportunity is flatly inconsistent with local authority. We are convinced that this supposed antithesis between equality and subsidiarity is overdrawn:

> that both values can be preserved if only one is willing to struggle with the complexities and fine tuning required of any balanced system. (1970: p. xxii)

The "fine tuning" required certainly includes a much more elaborate system of financial policies than would otherwise be necessary. One component which seems necessary is the element of basic support for a minimum program which has been traditional in many provincial or state finance schemes. The history of such "foundation programs" is given in detail in Coons, Clune, and Sugarman, (1970), and weaknesses of such programs have been described by Benson, (1961: p. 201 ...). The basic grant remains necessary for two major reasons, which seem to have escaped the proponents of pure equalization schemes, such as Wise, (1968) and Brazer, (1970). First, such proponents assume that local authorities will spend more freely under an equalization scheme. This is not necessarily the case; the lowest-spending division in Manitoba is making less local effort than nearly a quarter of Manitoba's unitary divisions. (See Table 31; the division having revenue of $521.85 also has local effort of 11.46.) Thus some sort of spending floor, basic to the foundation program as originally devised, remains necessary. (Mort, 1926) Secondly, a basic grant is also necessary, at least as an interim measure, to prevent too great a disruption of budgets of presently affluent divisions. As Wise points out, "Few equalization programs are approved which fail to provide some revenue to even the wealthiest districts". (p. 198)

There is of course good reason for this: a new formula which improves the programs of some school divisions, but seriously disrupts the programs of other divisions, is unacceptable. As was pointed out in Chapter I, equalization to be desirable should be equalization up to some higher level, rather than down

to a mean or median level. Thus if autonomy is to be retained, it seems also necessary to retain a system of basic grants.

The other financial elements of autonomy which it seems imperative to retain are choice in expenditure level, and choice in expenditure pattern. Equalization does not require that every district should spend at the same level, but that the expenditure level should be equally painful to local taxpayers. It is not expenditures which should be equalized then, but effort. The second element, choice in the mix of resources purchased with the total expenditure, implies that different or even the same needs can be met in different ways, and that local decisions are appropriate in making such choices. Both these elements then relate clearly to the general belief that local decision-making is likely to be at least as good as, and conceivably superior to, the decisions made by administrators at the provincial level.

There are of course subsidiary advantages in the range of alternatives which have in the past been developed by such local decision-making. Much of the discussion of alternatives in education currently seems to overlook the fact that by comparison with more centralized school systems, for instance those of the United Kingdom, North American school systems already offer a high degree of variability. It is at least arguable that the ability to move one's place of residence, in order to choose a different kind of schooling for one's children, is an important cause of the high level of mobility characteristic of North America and an important benefit of a pluralistic system of school administration. As Coons, Clune and Sugarman put it: "Persons seeking better schools through centralized 'equality' often overlook the fact that the achievement of such an equality guarantees not better but

o y similar schools". (1970: p. 17) The two financial elements discussed a e of course themselves contingent on the retention of local administrative units, and hence local control in the traditional sense. Thus, there are three components in the objective of local autonomy: local control, resulting in a range of gross expenditures, and a range of patterns in expenditures. Desired quality as a standard then would be the support of current minimum expenditure levels and retention of existing ranges in gross expenditures and expenditure patterns. However, satisfactory quality in meeting the objective would be a somewhat lower level of minimum expenditures, and a somewhat more limited range in gross expenditures and pattern in expenditures.

The final group of objectives can be described quite briefly. One major characteristic of current finance formulae is their inflexibility. To adjust, for example, the California finance program to meet the requirements of the Serrano versus Priest decision is a matter of major difficulty, yet equalization as an objective of state finance policies dates back at least to the Educational Finance Inquiry Commission in New York State in 1921-1924, (Benson, 1961: p. 201). The objective of flexibility then assumes that the two primary objectives of equalization and autonomy are important and likely to remain so, that the appropriate balance between them may shift, and that more extensive public information about the current situation, coupled with greater discretionary powers, is likely to result in more responsiveness than at present. Currently, in Manitoba a rigid formula is administered within narrow limits of discretion, and with unpublicized effects, which are described in the next section.

This objective, labelled "flexibility", has two elements. The first is an information system, and the second is responsiveness to the output of the system. Although only a portion of the information system is directly relevant to finance, it is desirable to spell out the general nature of the system in full here. The basic purpose would be to provide information to school divisions on three topics - student needs, levels of services provided, and a record of expenditures, all on a comparative basis. Because of the provincial scope, and the need for sophisticated and expensive data-processing equipment, it is not possible for divisions to provide such data for themselves, although the provincial trustees' association is providing comparative analysis of school division budgets, (MAST, 1971.) in cooperation with provincial authorities.

The data, it is suggested, should be gathered on a regional basis to allow useful and convincing comparisons (perhaps through regional agencies; see Chapter III), and could be of great value to local decision-makers, resulting in much more informed decisions than can currently be made. Data on comparative expenditures, and service levels, given by divisions but otherwise similar to that provided in this study, could assist local decision-makers in resource allocation decisions; data on student achievement, attitudes, and aspirations could assist local decision-makers in program development and modification decisions.

An adequate information system, similar to the one briefly outlined here, should allow a good deal of improved flexibility by local decision-makers. Provincial authorities would also benefit from such an information system, since it would allow them to measure progress towards increased equality of educational opportunity, resulting from changes in provincial

policies, in the province as a whole. Should the desired progress not result, further changes in provincial policies could result, based on the data which would be available on a regular basis.

The three objectives, or groups of objectives, are summarized in table 36. They will subsequently be used as guidelines in developing policy proposals on educational finance, and to establish standards by which current policies and their effects can be appraised, and against which the probable real output of proposed policies can be measured.

One general point regarding the evaluation of existing or proposed policies can be made here. The main standard used for evaluating the quality of policies is "desired quality". Within this general standard a sub-category has been selected for extensive use:

> One desired quality is of dominant importance for evaluating policy-making; this is the image of quality desired by the main policy-makers for what they consider satisfactory policy-making (is the situation more or less "satisfactory" or not?); I will call this the "satisfactory quality". However undefined, difficult to measure, and heterogeneous that quality may be, it largely determines the policy-making system's propensity to change, and so is worth intense attention...the satisfactory quality, as just hinted, shapes real public policy-making to a great degree. In general, the more the image policy-makers have of their policy-making's quality approaches satisfactory quality...the less effort they will make to improve their policy-making. (Dror, 1968: p. 58)

The "satisfactory quality" will be used here as an acceptable standard of performance for the policy proposals. Thus if the probable real output reaches satisfactory quality, the proposals will be judged appropriate.

TABLE 36

SCHEMATIC REPRESENTATION OF PROPOSED POLICY OBJECTIVES IN THE FINANCING OF EDUCATION IN UNITARY SCHOOL DIVISIONS IN MANITOBA

Objectives	Components	Standards Proposed	
		Desired Quality	Satisfactory Quality
A. Resource Equalization	1. Revenues	Absolute equality	A higher degree of equalization than at present.
	2. Local effort	Absolute equality	A higher degree of equalization than at present.
B. Local Autonomy	1. Floor of minimum expenditures.	No expenditures to fall below existing minimum.	Somewhat lower minimum.
	2. Range of expenditures	Existing range of expenditures.	Somewhat less range.
	3. Range of patterns of expenditure, by budget category.	Existing range of patterns.	Somewhat less range.
C. Flexibility	1. Adaptability to changing needs.	Annual modification of expenditure levels and patterns to meet changing needs.	Frequent modification of expenditure levels and patterns to meet changing needs.
	2. Feedback devices to signal changing needs.	Annual analysis of expenditures, revenues, and effort; also of need and service levels.	Frequent analysis of expenditures, revenues, and effort; also of need and service levels.

Policy Proposals for Equalizing the Financing of Manitoba's Unitary School Divisions

It has already been argued that it is the responsibility of provincial policy-makers to attempt to ensure equalization of educational opportunity, at least in principle, that this responsibility is limited by a competing value, autonomy, and that provincial financial policies are an appropriate and necessary, if not sufficient, device for equalizing educational opportunity. Many recent studies in the United States have concluded similarly that "a prime obligation of State Departments of Education was the utilization of the fiscal apparatus of the state to achieve equalization of educational opportunity". (Hickrod, Chaudhari, & Tcheng, 1972: p. 6) Such studies have also provided a wide variety of policy instruments purporting to be appropriate for use in state financing plans, and hence a review of these studies gives some indication of the range of possibilities available.

By far the most extensive of these studies is the National Educational Finance Project, various publications of which have already been referred to. The project identified five main types of state support programs actually in operation in the United States, of which three contained some element of equalization. (National Educational Finance Project, 1971a: p. 235) The project also developed a typology, based on extent or level of equalization.

> Assuming that a given amount of state revenue is apportioned to the districts of a state:
>
> a) No equalization is obtained if state dollars are required to be met dollar for dollar from local funds.
>
> b) The first level of equalization is reached when state funds are allocated in the form of uniform flat grants per teacher or per pupil without taking into consideration necessary variations in costs and without taking into consideration variations in local taxpaying ability.

c) The second level of equalization is reached when state funds are allocated in the form of flat grants which take into consideration necessary unit cost variations but which do not take into consideration variations in local taxpaying ability.
d) The third level of equalization is reached when state funds are allocated in the form of uniform flat grants without taking into consideration necessary unit cost variations but which take into consideration variations in local taxpaying ability.
e) The fourth and highest level of equalization is obtained from a given amount of a state revenue when it is allocated in such a manner as to take into consideration necessary variations in unit costs, and also variations in taxpaying ability of local school districts. (National Educational Finance Project, 1971a: p. 238)

At least four different normative models can be generalized from this and other studies. These models are similar in that each utilizes contrasts between the actual situation and the preferred or ideal situation. The models differ in that they emphasize somewhat different policy objectives. From these differences labels have been derived, as follows: model 1 - "permissible variance"; model 2 - "inverse allocation"; model 3 - "fiscal neutrality"; and model 4 - "fiscal intervention" (Hickrod, Chaudhari & Tcheng, 1972: p. 11).

The basic purpose of the first normative model is to reduce the range in expenditures to some permissible level. It has been suggested that a range of 1 : 1.5 might be acceptable to the courts in the United States. (Wise, 1968b) However, in Manitoba the range in expenditures is already well within this guideline (see p. 45), and the prime concern is with equalizing provincial allocations. Thus this model would not seem to be very appropriate. The second model, the inverse allocation model, is certainly the most widely used and studied. If both equalization grants and large flat grants are built into the model, poor districts can benefit substantially (Hickrod, Chaudhari & Tcheng, 1972: p. 16). The third

model, fiscal neutrality, is effectively a simple block grant with no local contribution at all, with the exception that some implementations might allow additional expenditures raised locally. Absence of local funding would reduce local control very substantially, and emphasize central authority, and clearly this model is substantially a pure equalization model, with no, or little, component of the local autonomy value. Thus it seems inadequate for the purposes desired here. The fourth model, called fiscal intervention, has as its primary objective the elimination of variations in educational achievement, as opposed to opportunity. Hence this model is ruled out of consideration by the initial rationale for the study, which emphasized the desire to equalize educational opportunity, defined as access to services. The equalization of educational achievement was specifically rejected as a goal.

After reviewing the general characteristics of these four models, Hickrod, Chaudhari & Tcheng (1972) conclude that the most probable immediate response to pressures for financial equalization will be an attempt to increase the share of the state in the financing of public school education, and to use this increased share "to 'level up' the educational offerings of the poorer school districts" (p. 39) by "the manipulation of the existing grant-in-aid formulae that now distribute funds from the state to the local level." (p. 40)

This seems not only a probable but also a necessary first attempt to promote financial equalization. Clearly there are many ways in which this could be done. One alternative, which seems likely to meet the objectives reasonably well, is spelled out in detail in Appendix A. This scheme would

increase the financial power of small school divisions, to allow them at least the option of improving the availability of services to students, at their own discretion and based on local perceptions of need.

It is important to note that the probability that the proposed system would come closer to reaching the specified objectives already presented than the existing system is not necessarily a satisfactory reason for advocating it. As Dror points out:

> Appraisal by comparison with the past is particularly misleading in our generation, in which rapid increases in applicable knowledge have, in most areas, made it possible to achieve much more than in the past ... even when achievements are higher than in the past, they often lag increasingly behind what is possible, needed and demanded, and they should therefore often be evaluated as "worse". (1968: p. 29)

To demonstrate conclusively the merits of a policy change, it is probably necessary to show that it will allow first, better performance than has been achieved in the past; second, the maximization of important values; and third, performance equal to or better than policies followed in other roughly similar jurisdictions.

In summary, this chapter has maintained that improvements in the provision of services in small, and generally rural, divisions are generally contingent on improvements in the financial power of these divisions. It is suggested that a redistribution of provincial resources is the most obvious, and probably most effective, way of bringing this about.

Three interrelated objectives, resource equalization, local autonomy, and flexibility are proposed, to guide consideration of the various alternative financial policies available. In general, an "inverse allocation" form of

provincial funding is desirable, coupled with a support program element to maintain spending levels in divisions where local demand for education is weak. An extensive information system, to allow review and modification of the finance scheme if it does not achieve the desired resource equalization, is an important feature of the general proposal.

CHAPTER III

EQUALIZING ACCESS TO SERVICES: POLICY OBJECTIVES AND PROPOSALS

This chapter deals with administrative structures for providing educational services in Manitoba. The main thrust will be to provide a general policy proposal, addressed to provincial policy-makers, which is intended to improve access to educational services for students in small school divisions, and hence to reduce some of the distributional inequalities described in Chapter I. The first section will establish a series of objectives which will guide the development of the policy proposal; as part of this section, the general desirability of changing the distribution of access to specific educational services will be discussed.

The second section will present a general proposal for modifying the existing administrative structure for the delivery of educational services to students, by the addition of some form of regional service agency. The present system, with the existing range of student enrollments in school divisions, seems clearly associated with the distributional inequality of services, and consequently a general proposal for some overall modification of the existing system seems desirable.

Objectives for an Adequate System of School Decision Administration

The primary purpose of this section is to develop a set of objectives, acceptable to provincial policy-makers, by which a series of policy proposals for changes in the current system of school decision administration can be evaluated. The first concern here will be with stating a case for the importance of the services discussed here. The second will be a discussion of specific objectives in each of the areas in which it has been demonstrated inequalities in access to services and resources already exist.

The relationship between the provision of educational services and student achievement, often described as input-output relationships, or correlates of student achievement, have recently been subjected to intensive investigation in the United States, both in the Survey of Equality of Educational Opportunity, (Coleman, 1966) and subsequently as a consequence of issues raised by the survey. (See Mosteller and Moynihan, 1972.) The general conclusion of a group of consultants gathered by the Office of Education to review the recent research on pupil achievement is that:

> We can only make the not very useful observation that at the present moment we cannot make any sort of meaningful quantitative estimate of the effect of teachers on student achievement. Many investigators believe that teachers may be the most important factor in educational achievement for most children and are at worst second only to parents. That belief rests largely on judgment and it may well be true; unfortunately it does not give us any clue as to how it operates, and without that it is not of much use to policy formulation or administrative practice. (Mood, 1970: p. 7)

This is so largely because "the present rudimentary state of our quantitative models does not permit us to disentangle the effects of home, school,

and peers on students' achievement". (p. 6) It should be emphasized that these statements are intended as an overview of a volume which contains descriptions of some extremely sophisticated quantitative models, which await full testing.

Such statements leave educational policy-makers and policy researchers in almost the pre-1966 situation. However, as Mood has commented, "one consequence of the Coleman Report has been to raise a number of fundamental questions". (1970: p. 7) At least some answers, tentative as they may be, have been provided as a consequence. A number of studies, which show with varying degrees of reliability that a number of school variables do indeed affect student achievement, remain unchallenged but also unconfirmed. Thus policy-makers and researchers are left without an entirely satisfactory basis for policy proposals at the present time. One response to this uncertainty would be, of course, to maintain the status quo until the state of our knowledge improves. However, the social pressures on education make this generally an untenable position. It also seems unwise, as a general strategy, at least to one social scientist:

> The environment which confronts the educational organization today is one of immensely greater complexity than that of the not too distant past.... Indications are that both the rate of change and the level of diversity will continue to increase. Given the amount that the social sciences are now able to contribute to the solution of problems, the rate with which knowledge is increasing in the social sciences, and the rate with which the complexity of problems is increasing, there is little basis for optimism about the capability of the social sciences to contribute more substantially to the solution of future problems. In short, it is my opinion that if the problems of education are to be solved, then it will have to be done primarily on the basis of the accumulated experience, efforts, and evolutionary capacity of the existing educational systems. (Hills, 1962: p. 31)

for the time being then, until further research clarifies and confirms with more certainty the correlates of student achievement, the following statement summarizing the findings of a number of major studies on the effectiveness of school service components is adopted as a basis for considering policy objectives in the administration of education in Manitoba:

> We are impressed with the amount and consistency of evidence supporting the effectiveness of school services in influencing the academic performance of pupils. In time, we would wish for more precise information about which school service components are the most effective and in what mix or proportion they can be made more effective. Nevertheless, on the basis of information obtained in the studies we reviewed, there can be little doubt that schools do make a difference. (Guthrie, 1970: p. 46)

Table 38 presents in some detail the findings of the studies surveyed by Guthrie and his associates.

The objectives proposed here for the provision of educational services in the province are similar in form and content to those proposed for the financing of education in unitary school divisions. Once again, the main concern in this discussion will be to clarify and justify the objectives proposed in schematic form on pages 82 and 83.

The first main objective is the equalization of personnel, programs, and facilities. Again the standards, which will be used to evaluate the success of the policies proposed, allow for full or partial attainment of the objective. It is clearly not difficult to justify the general objectives, but some of the components probably require some justification. The personnel component has two main elements, teachers and administrative, referral, and consultative personnel. A glance at the list of effectiveness studies on school service components given on pages 84-86 will reveal

TABLE 37

SCHEMATIC REPRESENTATION OF PROPOSED POLICY OBJECTIVES IN THE PROVISION OF EDUCATIONAL SERVICES IN UNITARY SCHOOL DIVISIONS IN MANITOBA

Objectives			
A. Resource Equalization	1. Personnel i. Highly qualified teachers. ii. Referral and consultative personnel.	Absolute equality	A higher degree of equalization than at present.
	2. Programs i. Vocational courses. ii. Vocational programs. iii. Business courses. iv. Special education courses.	Absolute equality	A higher degree of equalization than at present.
	3. Library Materials i. Books ii. Periodicals iii. A/V materials	Absolute equality	A higher degree of equalization than at present.
B. Local Autonomy	1. Personnel i. Highly qualified teachers. ii. Referral and consultative personnel.	Wide variety of types of personnel to suit local conditions and needs.	More variety than at present.
	2. Programs i. Vocational courses. ii. Vocational programs. iii. Business courses. iv. Special education courses.	Wide variety of programs to suit local conditions and needs.	More variety than at present.

	3. Library Materials i. Books ii. Periodicals iii. A/V materials	Large Collection suited to local conditions and needs.	Larger collection than at present.
C. Flexibility	1. Feedback Devices to Signal Changing Needs, and Service Levels.	Biannual formal assessment of local needs, and service levels.	Frequent formal assessment of local needs, and service levels.
	2. Adaptability to Changing Needs.	Major changes in service levels, consistent with needs.	Some changes in service levels, consistent with needs.

TABLE 38

SUMMARY CHART OF EFFECTIVENESS STUDIES ON SCHOOL SERVICE COMPONENTS

Study Author(s)	Desciption of Sample	Measure of Pupil Performance (School Output)	Measure(s) of Effective School Service Component(s) (School Input)
1. Mollenkopf and Melville (1956)	U.S., 17,000 9th (in 100 schools) and 12th (in 106 schools) grade, male and female	Aptitude and achievement tests	1. Number of special staff 2. Class size 3. Pupil-teacher ratio 4. Instructional expenditures
2. Goodman (1959)	New York, 70,000 7th and 11th grade, male and female in 102 school districts	Achievement test	1. Number of special staff 2. Instructional expenditures 3. Teachers' experience 4. "Classroom atmosphere"
3. Thomas (1962)	Project TALENT Sample (national) 10th and 12th grade, male and female	Achievement test	1. Teachers' salaries 2. Teachers' experience 3. Number of library books
4. Green, et al. (1964)	Virginia (Primarily Negro) Secondary students	Stanford Achievement test	1. Aggregate measure of entire instructional program
5. Benson (1965)	California 5th grade, 249 school districts	Reading achievement test	1. Teachers' salaries 2. Administrators' salaries 3. Instructional expenditures
6. Kiesling (1967)	New York, 70,000 7th and 11th grade male and female in 102 school districts	Achievement test	1. Expenditure per pupil (in large school districts)

7.	Coleman Report (1966)	U.S. Sample	Verbal ability test	1. Teachers' verbal ability
8.	Shaycoft (1967)	U.S. 108 schools 6,500 9th and 12th grade, male and female	Battery of 42 aptitude and achievement tests	1. Curriculum variables
9.	Burkhead (1967)	90,000 Chicago high schools students in 39 schools. 19,000 Atlanta High School students in 22 schools and 180 small community high schools	Aptitude and achievement tests and school holding power	1. Age of building 2. Teachers' experience 3. Teacher turnover 4. Teachers' salary
10.	Plowden Report (1967)	English elementary school students		1. Age of building 2. Teachers' experience 3. Teachers' academic preparation 4. Teachers' "ability"
11.	Cohn (1968)	Iowa high school students in 377 school districts	Achievement test	1. Teachers' salary 2. Number of instructional assignments per teacher 3. School size
12.	Raymond (1968)	W. Virginia 5,000 high school students	Freshman year (college) GPA and achievement test scores	1. Teachers' salary
13.	Katzman (1968)	Boston elementary school students	School attendance, school holding power, Reading achievement, Special school entrance examination	1. Pupils per classroom 2. Student-staff ratio 3. Attendance district enrollment 4. Teachers' employment status 5. Teachers' degree level 6. Teachers' experience 7. Teacher turnover ratio

(continued)

14.	Bowles (1) (1969)	U.S. 12th grade Negro males	Verbal ability test	1. Teachers' verbal ability 2. Science laboratory facilities 3. Length of school year
15.	Bowles (2) (1968)	U.S. 12th grade Negro males	Mathematics and reading achievement test and a test of general academic ability	1. Class size 2. Ability grouping 3. Level of teacher training 4. Age of school building 5. Expenditure per pupil
16.	Bowles & Levin (1968)	12th grade Negro students and 12th grade white students	Verbal ability test scores	1. Teachers' verbal ability 2. Teachers' salaries
17.	Hanushek (1968)	6th grade white students in 471 schools and 6th grade Negro students in 242 schools	Verbal ability test	1. Teachers' verbal ability 2. Teachers' experience
18.	Ribich (1968)	Project TALENT Sample	Achievement test	1. Expenditures per pupil
19.	Guthrie, et al. (1970)	5,284 6th grade students in Michigan	Reading ability, Mathematics understanding, Verbal facility	1. School site size 2. Building age 3. % classrooms makeshift 4. Library volumes 5. Textbook supply 6. Teachers' verbal ability 7. Teachers' experience 8. Teachers' job satisfaction 9. School size (enrollment) 10. Classrooms per 1,000 students 11. % of students transferring

the importance of highly qualified teachers. If salaries are considered a proxy for qualifications (training and/or experience), then 12 of the 19 studies show qualifications of teachers to be an important variable in school effectiveness. The second main component, administrative, referral, and consultative personnel, is much more difficult to justify. Few of the studies dealt directly with the relationship between such personnel and effectiveness. However, two of the early studies listed did deal directly with the availability of such special staff as psychologists, reading specialists, and counselors. They found that the provision of such special staff was an important school input. In addition, Benson's more recent study found that in some California school districts of medium size (2,000 - 4,500 students) the mean salary of administrators was also associated with student achievement.

These studies do not, of course, tell us why or how special staff contribute to school effectiveness. It is at least possible that they do so primarily by providing support services for teachers which allow them to improve their effectiveness. It seems quite clear that for individual students referral assistance can be invaluable; virtually every experienced teacher can surely recall cases in which, had prompt assistance by appropriately trained referral personnel been available, individual students would have been greatly benefited.

It seems reasonable also to conclude that for individual teachers the existence of expert consultative and administrative support staff is a major resource. One would suspect that this would be particularly important for teachers defined in this study as less qualified. A number of writers have

suggested that the improving levels of teacher expertise, associated with degree-holding (Corwin, 1970: p. 52), are changing the role of the principal from instructional leader to organizational leader (Coleman, 1972b; Erickson, 1968; and Harlow, 1962). Presumably the reverse is also true: in schools with less qualified staff, access to expert help is important. In general, the principal does not seem to be viewed as a source of expert help. A recent empirical study of expertise in instructional leadership, and the principalship, arrived at the following conclusions:

1. Perceived expertise is the main variable determining whether or not a teacher will seek help from another individual.
2. Given four sources of assistance, department heads, principals, teaching colleagues, and central office staff, the principal is perceived as having <u>least</u> expertise.
3. The department head was perceived as possessing significantly more expertise than any other source of instructional assistance identified in the study. (Gorton, 1971: p. 16)

It seems reasonable to conclude that consultative and referral services for teachers should in general be most available in schools in which teachers are less qualified. The data already presented showed that in fact the reverse is the case; consultative and referral personnel in Manitoba at present are generally located in the large divisions, which also have most of the highly qualified teachers.

It is concluded then that the equalization of personnel, both qualified teachers and administrative, consultative and referral staff, throughout the school divisions of the province is an important element in the provision of equal access to educational services, and of equality of educational opportunity.

With regard to programs, it is of course more difficult to demonstrate effectiveness. Most educators would maintain, however, that the availability of programs suiting the needs of individual students requires the opening up of a great many more options than are presently available. In general, in Manitoba, the options available already compare unfavorably with those available in, for example, British Columbia, as can be seen by comparing departmental reports on enrollments in various programs. (Manitoba Department of Education, 1971; British Columbia Department of Education, 1971). To equalize access to existing programs in the province is then only a first step towards the provision of a greater range of options; the "effectiveness" of such a range of options is probably not arguable on any rational grounds, since it is in essence a value premise held by many educators.

Similarly, the provision of special education opportunities in Manitoba as a whole already lags behind proposed national standards (Roberts, 1970), as does the provision of such opportunities in many other provinces. Consequently, to provide equality of access in this area is again only a first step towards the provision of an adequate set of educational opportunities in special education.

With regard to provision of facilities, and specifically library materials, the appropriate justification again involves effectiveness. Although there is some disagreement as to the importance of the library as a correlate of student achievement, nevertheless two of the effectiveness studies deal with this directly, finding a positive relationship between the size of the library and school effectiveness, and at least

two others can be considered to deal with this indirectly, if science laboratory facilities are taken as a proxy for adequacy of physical facilities generally, as is suggest by Mood (1970: p. 43).

The interrelationships between the three types of services being discussed are worth pointing out. More highly qualified teachers supported by consultative staff, and providing a greater range of programs, could certainly utilize a much wider range of instructional resources and hence much improved library facilities. Again, the fuller development of school libraries is probably not solely a financial issue; the existence in a division of a library consultant, whose sole responsibility is the development of a good library service for students and teachers, also seems important. Similarly, the development of new programs for students would in some instances result from seeing new uses for already available library materials, and would be facilitated by support from central office consultants.

The autonomy objective, as before, is in general defensible on the traditional grounds of the desirability of local control. However, it can also be discussed on more technical grounds, and with specific reference to the components listed above. As with the financial objectives, equalization and autonomy are to some extent opposing principles, and this issue will recur in the discussion of several of the components. One general point can be made which has reference to virtually all of the components to be discussed. Autonomy, in personnel, programs, and library materials, presumably could quite readily result in widely divergent staffing patterns in school divisions, types of

programs available in school divisons, and varieties of library materials available. However, the provincial aggregate of these divergent patterns should certainly meet the equalization objective; stated differently, piuralism in terms of personnel, programs, and library materials, should characterize schools and school divisions, but roughly equal distribution of the various services and resources and consequently access to them, should characterize the province.

With regard to personnel, the autonomy objective can be stated as follows: over the province as a whole, it is probably desirable for a variety of staffing patterns to exist, since local conditions and needs differ to some extent. The theoretical justification for differentiated staffing presented in Coleman & Wallin (1971) suggests that a range of differentiated staffing models is becoming available, and individual schools and school divisions may well wish to adopt patterns quite divergent from present practice, and from each other. However, the provincial aggregate of these patterns should meet the equalization objectives in that whereas pluralism of staff patterns characterized schools and school divisions, relatively equal distribution of highly qualified teachers and of administrative, consultative, and referral personnel should characterize the province. In other words, the fact that one small division chooses to staff its school with relatively less qualified teachers, and to staff its central office with highly qualified consultants to balance, should be offset by the fact that a neighboring small division chooses to staff its schools with highly qualified teachers, and to employ few or no consultants.

The evidence presented earlier demonstrated the unequal distributions of highly qualified teachers and support staff. Diversity of staffing patterns does not at present characterize the whole province: most new staffing patterns utilize teacher aides in some form, and a reanalysis of the data accumulated by the Manitoba Teachers' Society (1972) indicates that the larger divisions utilized a disproportionate number of aides.

TABLE 39

DISTRIBUTION OF TEACHER AIDES IN MANITOBA'S UNITARY SCHOOL DIVISIONS, 1971-1972*

		No. of Students	% of Total	No. of Teachers	% of Total	No. of Aides	% of Total
Large Divs. (6,000+)	9	125,817	54.60%	6,134	54.32%	906	63.53%
Small Divs. (0-6,000)	37	104,611	45.40%	5,158	45.68%	520	36.47%
PROV. TOTALS	46	230,428	100.00%	11,292	100.00%	1,426	100.00%

*The Manitoba Teachers' Society data included all publicly controlled schools. Hence totals differ from those cited elsewhere. The data on the number of students and the number of teachers comes from the Manitoba Association of School Trustees 1972 membership records.

The final objective, flexibility, has two components: feedback devices, and adaptability. If the local autonomy objective is met, with regard to personnel, program, and library facilities, these objectives are probably also being met, unless the patterns of staffing, program availability, and materials availability again become frozen into semi-permanence, in which case given the pace and magnitude of social change (See Toffler, 1970: pp. 12-31.), they rapidly become

inappropriate. This is to say of course that feedback (component 1) and adaptability, (component 2) objectives are not being met. To summarize the overall expectations suggested by the objectives, for the province as a whole, it is anticipated that they will require equalization of access to educational services and resources, diversity in staffing patterns and program and materials availability, and impermanence in that diversity.

A General Policy Proposal for Improving the Provision of Services in Small Divisions

One important trend in the history of school district administration both in the United States and Canada is the reduction in the number of administrative units in operation, combined with heavy increases in student enrollments, resulting in larger administrative units. In the United States the number of school systems has been reduced from 95,000 in 1948 to less than 18,000 in 1970 (National Educational Finance Project, 1971a: p. 105). In Canada, similar trends have occurred (Collins, 1961). But in recent years the main administrative device in the United States for improving services in small school districts has not been amalgamation or consolidation but regionalization. The main device is some form of the intermediate unit of school administration. Twenty-six of the states had such units in operation in 1970 (Campbell, et al., 1970: p. 116).

Intermediate units, when specific operating details are considered, turn out to be quite varied in nature. A review of the history of intermediate

units in the United States by Campbel et al. (1970: p. 120) gives rise to the following conclusions:

1. There has been a growing recognition of education as a state function and the need for a workable number of intermediate offices to facilitate communication between the state and a great number of local school districts.
2. In the early stages the intermediate unit was seen essentially as an extension of the arm of the State Department of Education.
3. Over the years, there has been eventual transfer of the functions of the intermediate office from a lay board to professional or semi-professional officers.
4. Progress towards making the intermediate office more than a perfunctory one has been slow, for people resisted any encroachment upon their exercise of control of education at the local district level.
5. In recent years, the intermediate unit has come to be viewed by many people as an agency to provide to small local school districts services which they cannot ordinarily provide for themselves.

The final statement here is particularly relevant for this study. Colorado provides a useful illustration of this trend.

> The implementation and development of cooperatives in Colorado under the Boards of Cooperative Services Act of 1965 coincides with the phasing out of the office of the county superintendent of schools. At the 1966 general election thirty-five counties voted to abolish the office. (See Appendix E.) Since the Act of 1965 was passed, eleven cooperative boards have been organized. The county office has served as the traditional intermediate unit so common to the historical development of educational programs in many states. The reorganization of school districts in Colorado and the resultant reduction in the number of districts, together with the development of the Colorado Department of Education and the expansion of its services, have practically eliminated the need for the traditional intermediate unit in this state. Although a Board of Cooperative Services was not designed as a specific replacement for the office of county superintendent, it may, in addition to fulfilling a need for expanded services on the local level, become an increasingly important liaison between the local school districts and the Colorado Department of Education. It is anticipated that, before too long, every district will be a component of some Board of Cooperative Services. (Colorado Department of Education, 1967: p. 8)

Currently, then, the emphasis in the regional unit is on cooperative services,

and this emphasis has led to a good deal of reorganization. (Fitzwater, 1967, gives a thorough review of trends in development of state school systems.) The table which follows gives some information on presently operating intermediate units.

The objectives of equalization, autonomy and flexibility proposed in the previous section suggest that a model emphasizing service provision, to assist in the equalization of services; local initiative to meet autonomy objectives; and short-term contractual arrangements to ensure flexibility, would be most appropriate. Because their characteristics seem generally appropriate to these requirements, three state systems, New York, Wisconsin, and Colorado, will be examined in some detail.

The Boards of Cooperative Educational Services of New York State in general have the following characteristics:

1. They are intended to provide services for school districts which can be performed better and/or more economically together than by a single district alone.

2. Members of Boards are chosen at an annual meeting of school board members of component school districts, and serve for a 5 year term.

3. Any district with a pupil population of less than 125,000 may become a component of a region served by a Board.

4. Services can be received from Boards on two bases: first, a district may contract for services; second, a component district may receive without contractual obligation approved services from the Board.

5. The costs of the Boards are paid in part by state aid, and in part prorated amongst all component districts, except that the costs of specific services are prorated amongst the districts requesting and receiving that service.

TABLE 40

INTERMEDIATE UNITS IN SCHOOL ADMINISTRATION IN SOME AMERICAN STATES

State	Date of Inception	Title of Units	Control	Relationship to Local Districts	Funding
Mich.	1962	Intermediate School District.	Elected by local boards.	Service-oriented.	Tax levy & bond issue.
Iowa	1965	Regional Educational Service Agencies.	Elected at large.	Service-oriented.	Tax levy.
Neb.	1965	Educational Service Units.	Elected at large and county representative.	Service-oriented.	Tax levy.
Ore.	-	Intermediate Educational Districts.	Elected at large.	Service-oriented.	Tax levy.
Wisc.	1964	Cooperative Educational Service Agencies.	Elected by local boards.	Service-oriented.	Contracts with local boards and state grants.
Colo.	1965	Boards of Cooperative Services.	Appointed by local boards.	Service-oriented.	Contracts with local boards.
Pa.	1971	Intermediate Units.	Elected from local board members.	Service-oriented.	State and local district grants.

(continued)

State	Date of Inception	Title of Units	Control	Relationship to Local Districts	Funding
Texas	1965	Regional Educational Service Centers.	Elected at large.	Administration-coordination oriented.	State and local district grants.
Wash.	1965	Intermediate School Districts.	Elected at large.	Supervision-oriented.	County, state and federal funds.
N.Y.	1948	Boards of Cooperative Educational Services.	Elected from local board members.	Administration-coordination oriented.	State and local district grants and contracts.
N.J.	1969	Major State Department roles.	State Department.	Administration-coordination oriented.	State, federal and private grants.

(Campbell, 1970; National School Public Relations Association, 1971; State of Wisconsin, Department of Public Instruction, 1971; De La Fleur, 1961; Colorado Department of Education, 1967)

6. Personnel appointments, including the superintendency, are made by the Board, and on conditions similar to those prevailing in the school district.
7. The services provided by the Boards at present, and the annual variations in these, are described in the accompanying table.

An early analysis of Boards of Cooperative Educational Services in New York State, carried out by the New York State School Boards Association, arrives at some interim conclusions which can be tested against the data given in Table 41:

a. The prime motivation of all Boards of Cooperative Educational Services and those responsible for carrying out their functions has been service to component districts.
b. Expansion of program offerings through the use of shared teachers has been particularly noted in rural areas of New York State. Educational services through the cooperative use of non-classroom professionals have had their greatest expansion in more densely populated areas.
c. The use of shared teachers changes in character as enrollments of component districts increase.
d. There appears to be an increasing realization of the need for in-service training of local staff members.
e. In spite of differences in local situations, differences in reactions to those situations, differences in personalities, and differences of opinion, one fact stands out clearly above all: the greatest accomplishment to date, and the still greater hope for shared services boards is towards the attainment of the goal of equal educational opportunity for all children, that is, the maximum development of the potentialities of each and every child. (De La Fleur, 1961: pp. 11-15)

In 1961, 78 shared services boards provided services to 68% of the school districts in the state. These services were of three kinds: itinerant teachers, vocational educational programs and teachers, and special education programs and teachers. By 1971, there were 48 boards, providing services to virtually every non-city school district in the state. These services were,

TABLE 41

VARIATIONS IN QUANTITIES OF VARIOUS SERVICES PROVIDED BY THE 53 B.O.C.E.S. IN NEW YORK STATE, 1968-1971

	Itinerant Teacher Services	Admin. & Management Services	Pupil Personnel Services	Special Education	Occup. Education	Misc.
	Art, Driver education, Foreign language, Industrial arts, Librarian, Music, Physical education, Reading.	Consultant services, Coordinators and supervisors, Communications centers, Data Processing, Library processing.	Child adjustment or guidance centers, Dental hygiene, Guidance director or counselor, Nurse teacher or attendant, Psychological psychiatric services, Social worker.	Mentally handicapped, Physically handicapped, Emotionally disturbed, Speech and hearing correction, Gifted and enrichment.	Occupational education, Adult occupational education.	Miscellaneous services.
	UNIT=TEACHER	UNIT=PROGRAM	UNIT=TEACHER	UNIT=TEACHER	UNIT=STUDENT	UNIT=TEACHER
1968-1969	478.4	231.6	469.3	1688.4	1114.9	48.4
1969-1970	391.1	287.7	377.3	1665.4	1443.4	33.7
1970-1971	471.4	243.7	380.2	1832.5	1623.4	101.0

(Bureau of School District Organization, State Education Department, 1971)

as has already been shown, much more diverse in nature. Since membership in a board, as a component district, is by school district board resolution, this growth in districts served is a reasonable indicator of the reception of the Boards of Cooperative Educational Services by school districts, and the evaluation by these districts of the services offered. In addition, the growth in the range of services offered, since it too is at the decision of component districts, also represents an evaluation of the ability of the Boards of Cooperative Educational Services to provide useful services. The contrast between 1961 and 1971 then reveals a very positive evaluation of the work of the Boards of Cooperative Educational Services by the school districts in New York State.

Wisconsin's Cooperative Educational Service Agencies consist of 19 regional agencies, providing services to all local school districts in the state. They have the following characteristics:

1. They are "designed to serve educational needs in all areas of Wisconsin and as a convenience for school districts in cooperatively providing to teachers, students, school boards, administrators and others, special educational services including, without limitation, because of renumeration, such programs as research, special student classes, data collection, processing and dissemination, in-service programs, and liaison between the state and local district."
2. The Boards of Control are chosen at an annual meeting of school board representatives of districts within the region.
3. The Board of Control must appoint an agency coordinator, who has purely coordinating and cooperative functions.
4. Services are provided at the request of local districts, and on a contractual basis.
5. The agencies receive an annual state grant for administrative expense.
6. The services provided by the agencies, and their growth, is indicated in the accompanying table.

TABLE 42

SERVICES PROVIDED BY WISCONSIN'S CESA, 1965-1971

	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71
Shared Personnel (Dists.)	102	237	366	385	465	503
Shared Service Programs	33	38	68	64	71	94
Participating Districts	311	412	418	409	412	449
Total School Districts	562	513	490	465	456	454

(Department of Public Instruction, State of Wisconsin, 1971: p. 12)

In Colorado, the reduction of the number of districts from 2,000+ in 1935 to 181 in 1967 has still not ensured the capacity to provide specialized services at reasonable cost, and the basic purpose of the Boards of Cooperative Services is to provide both an administrative unit for the expansion and development of educational services through cooperative efforts and a safeguard for local board autonomy. (Colorado Department of Education, 1967: p. 1) These boards are clearly not arms of the state department of education, and Colorado is considered not to have a three-echelon system of administration, but a two-echelon system, with the Boards of Cooperative Services being complementary to the local districts. The characteristics of the Colorado units can be summarized as follows:

1. They are intended as administrative structures by which district boards arrange for the cooperative provision of services, which cannot adequately be provided by districts individually.
2. The Board administering the agency is elected by the participating school boards from amongst their membership.
3. "The cooperative board undertakes to provide only those programs and services which the local districts cannot provide for themselves". (Colorado Department of Education, 1967: p. 14)
4. The local districts participate in services at their discretion, and the costs of a service are prorated amongst those districts receiving it, on whatever basis (pupils enrolled, flat fee,

TABLE 43

COMPARISON OF SOME CHARACTERISTICS OF REGIONAL UNITS OF SCHOOL ADMINISTRATION (ACTUAL & PROPOSED)

Actual or Proposed	Purpose	Control	Service Initiation	Funding	Range in Stud. Enroll. in Region
Actual, New York	Provide services better or more economically cooperatively.	Board elected by school board. Members of component district.	By component local board, approved by state, or contracted for by any local board.	Combination of state and for some administrative costs and approved services and contract.	No data available.
Actual, Wisconsin	Provide co-operatively educational services to teachers, students, administrators, and school boards.	Board of Control selected at convention of school board representatives in region.	By school districts contracting with regional agency for shared services.	State grants and contracts with districts.	19,808 to 221,033
Actual, Colorado	Provide co-operatively educational services which districts cannot adequately provide individually.	Board elected by participating school boards from amongst their membership.	Local districts choose those services they wish to participate in.	Service costs are prorated amongst those districts receiving it, administrative costs prorated amongst all participating districts.	Suggested minimum 10,000
Proposed Stephens	Provision of programs and services to local school districts.	Board of Directors elected 1 from each of 7 director districts, 2 at large, in the region served.	By constituent local school districts, with contracts approved by state educational agency.	Tax levy, state grants, contracts with districts.	Minimum 30,000

assessed values, pupils receiving the service) seems appropriate. The administrative costs of the agency are prorated amongst all participating districts on a fee or per pupil basis.

The preceding chart presents in summary form the characteristics of the three systems described, and a generalized model prepared by Stephens (1970) for the Midwest Work Conference on Education.

Some of the services which have been provided by such agencies in various states are as follows:

Curriculum and Instructional Services

1. Coordination of supervision of instruction
2. Curriculum services
   a. Research activities
   b. Consultative activities
3. Special education programs for
   a. Gifted children
   b. Mentally retarded
   c. Physically handicapped
   d. Partially sighted
   e. Speech therapy
   f. Hard of hearing
   g. Homebound
4. Special teachers
   a. Art
   b. Music
   c. Homemaking
   d. Guidance
5. Outdoor education
6. Summer camping programs
7. Inservice programs
   a. Teachers
   b. Board members and administrators
   c. Service personnel (bus drivers, clerical and custodial personnel, etc.)
8. Adult education
   (specialized, academic, vocational)
9. Vocational education
   a. Agriculture
   b. Sales and services
   c. Technical training
   d. Skilled labor

10. Research activities and service
11. Educational radio and TV

Instructional Materials Services

12. Audio-visual center
    a. Share equipment
    b. Share materials
13. Publications and communications production
    a. Surveys and reports
    b. Bulletins and handbooks
14. Curriculum laboratory
15. Library services

Pupil Services

16. Pupil personnel services
    a. Attendance
    b. Guidance and counseling
    c. Testing
17. Health services
    a. School nurses
    b. Doctors, dentists
    c. Social workers
    d. Psychologists
    e. Mental health services
18. School lunch services
    a. Area workshops for personnel
    b. Cooperative purchasing
19. Pupil transportation
    a. Administrative coordination
    b. Bus maintenance
    c. Inservice training for drivers
20. Cooperative recreation programs

Administration Services

21. Centralized business services
    a. Accounting
    b. Auditing
    c. Reporting
    d. Consultative services
22. Cooperative purchasing
    a. Instructional supplies
    b. Instructional equipment
23. Data processing services

24. School plant services
    a. Maintenance
    b. Building clinics
    c. Architectural services
25. Professional personnel services
    a. Teacher recruitment
    b. Teacher Replacement
    c. Substitute teacher pool
    d. Coordination of teacher benefits
    e. Credit union services
26. Legal services
27. Federal and special programs

(Colorado Department of Education, 1967: pp. 10-12)

This review of the present status of regional service agencies in education in some American states suggests that these agencies have been effective in providing services, at reasonable costs, to students in small school divisions. Two general classes of services might be provided by such agencies in Manitoba: direct services to students and teachers in small divisions, in order to equalize access to services in the province; and support services to small divisions, in order to reduce unit costs of such services, which are higher in small divisions (see p. 45), perhaps because of diseconomies of scale. Such agencies might well contribute to resource and service equalization then.

The agencies, given careful structuring, need not infringe substantially on local autonomy, as is demonstrated by, for instance, the Colorado model. Further, they would provide a logical agency for data collection and supply to improve decision-making, as proposed on page 70, and this could contribute substantially to flexibility in administration.

These agencies might well contribute substantially, then, to resource equalization and flexibility objectives, without consequent infringement on local decision-making. Thus it is proposed that one or more regional educational service agencies be established in the province, on a trial basis. A more detailed proposal is provided in Appendix B.

CONCLUSIONS AND POLICY PROPOSALS

The conclusions which are drawn from the various sections of the study have already been given in some detail at the end of the respective sections. This summary is intended simply as a brief restatement, preliminary to the statement of policy proposals which follows.

Equality of educational opportunity is important to individuals in Canada, and in Manitoba, because of the extent to which education is a determinant of social position and life-time earnings. Because of this relationship, equal opportunity to achieve the desired level of education is a major element in social equity. Additionally, equality of educational opportunities is important to society as a whole because of the extent to which national achievement depends on the well-educated populace. These considerations make it imperative that all young people have the opportunity to achieve a level of education commensurate with their abilities and desires.

In this study equality of educational opportunity is defined as equal access to a range of educational services, irrespective of place of residence in Manitoba. Endeavours at the provincial level to equalize achievement, as opposed to opportunity, were explicitly ruled out of consideration. Provision of different services, and levels of services, to meet differing needs was considered to be primarily a responsibility of local decision-makers.

An analysis of the distribution of 10 educational services shows that these are differentially available to students, depending on the school division of residence, and that in every service and resource area for which comparative data has been published, large, and generally urban, school

divisions are favored over small, and generally rural, school divisions. There is no evidence that the levels of service provision are influenced by differential need, and the consistency of the pattern of advantage and disadvantage suggests that the provision of services is primarily related to the school division system, and to size variations.

Since the system of school divisions in the province is an outcome of provincial policies, the distributional inequalities in educational services associated with this system are assumed to be of concern to provincial policy-makers, and the remainder of the study proposes ameliorative policies for their consideration. It is maintained that equalization should be achieved primarily through raising the levels of service of small divisions, rather than reducing services in big divisions.

Since it seems possible that divisional finance plays some part in the distribution of services described, a review of the financial situation of school divisions is undertaken. This suggests that both the expenditure and revenue elements of divisional finance are troublesome for small divisions. Large divisions spend more money overall in providing better services, but also spend a larger proportion of total expenditures on direct instructional services as opposed to support services.

With regard to revenues, a substantial measure of equalization between school divisions has been achieved by current finance policies. However, the range in revenue per student between divisions remains large. Perhaps more important, the range in local effort between divisions is greater than the range in total revenue. Thus there are substantial differences between school divisions in levels of expenditure and patterns of expenditure, and in levels and sources of revenue.

In order to evaluate current policies, and also policy proposals, three policy objectives are suggested: equalization, in revenues and expenditures; local autonomy, that is a range of choices in raising revenues and patterns and levels of expenditures; and flexibility, a data system which would allow continuous monitoring of changes in needs, services, and finance, to permit informed local decision-making and encourage adaptability.

A review of recent research suggests that the most probable way of improving the financial situation of small school divisions, to allow them to improve the provision of services, lies in the redistribution of provincial resources. A financial formula of the "inverse allocation" type, in which provincial grants are inversely proportional to school division wealth, seems appropriate. A detailed finance proposal is given in Appendix A, as an example of what could be adopted. The probable output of policies of the type proposed would be substantial increases in revenues in small divsions, without infringement on local autonomy. These increases would allow local decision-makers to improve the provision of services. The system proposed would provide valid and reliable comparative information on which to base decisions regarding services. In essence, the general policy proposal here would increase the power of local decision-makers in small divisions to provide services, without determining in advance, at the provincial level, what these services should be.

Data on the costs of services in small divisions suggest the need for a second policy instrument, in addition to the finance proposal. A set of objectives, similar to those proposed for finance, is suggested for service provision. A system of regional service agencies is proposed, which is

intended to provide cooperative services, to allow small divisions to provide services economically and effectively, and thus contribute to equalization of access to services by students. Local autonomy is protected by providing for control of the agencies by local decision-makers. A detailed proposal is given in Appendix B. It is anticipated that the regional agencies would serve as data-collection centres for the proposed data system, and hence would assist in monitoring progress towards equality of educational opportunity. Thus such agencies might contribute to the achievement of equalization, local autonomy and flexibility objectives.

The policy proposals can be restated briefly: first, a substantial change in provincial policies for financing school divisions is proposed, in order to increase the power of small divisions to provide services; second, an administrative structure, the regional service agency, is proposed to encourage the cooperative provision of services in small divisions. The general purpose of both proposals is to further the achievement of equality of access to educational services. A third proposal, integral to the first and second, suggests a data system to provide comparative data on needs, service levels, and finance, to permit the monitoring of progress towards equality of access to services. These policies, it is anticipated, would yield measurable progress towards the goal of equality of educational opportunity for all students in Manitoba, regardless of school division of residence.

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APPENDIX A

A DETAILED POLICY PROPOSAL FOR CHANGES IN THE FINANCING OF UNITARY SCHOOL DIVISIONS IN MANITOBA

Some general purposes and objectives in financing school divisions have already been discussed at some length in the main text. The scheme suggested here represents one way in which those objectives could be attained.

Since the proposal attempts to meet both resource equalization and local autonomy objectives, it includes provision for three types of grant: categorical grant; basic grant; and equalization grant. The first is intended, in part, to allow provincial support of experimental programs, and to allow provincial authorities to influence service provision by means of tied grants-in-aid. (Brazer, 1970: p. 258). The categorical grant classification can also accommodate grants for services which are costly and necessarily provided in some divisions and not others, such as pupil transportation.

The basic grant is a per pupil grant intended to achieve support and minimum standards objectives, which in the past have been an inevitable correlate of local autonomy. The equalization grant is intended to meet the objective of equalizing the resources available to various divisions.

The proposed formula works as follows: each division establishes its budget, and thus a figure for total revenue required. From this figure, the categorical grant (in essence at present a transportation grant), and the basic grant per student multiplied by student enrollment are deducted, to show additional revenue required above these grants.* Then local revenue

*Should this figure exceed revenue required, the basic grant is reduced to balance.

is calculated based on the equalization factor, which is the local Balanced Assessment per Student divided by the provincial maximum Balanced Assessment Per Student. Thus local revenue and local responsibility are directly related to local wealth. (Note that the proposal provides for a floor of 5% on local revenue, to restrict the possibilities of fiscal irresponsibility in very poor districts.) Local revenue is then deducted from the additional revenue required to give the amount of the equalization grant.** This grant is essentially a matching grant to bring local revenue raised by 1 mill in the poorest district up to the same level as local revenue raised by 1 mill in the richest district. (See Brazer, 1970: p. 255, for the importance of the matching principle.) The worksheet illustrates this procedure, which each division would follow in budget preparation and submission to the Department.

The outcome of this procedure represents a four-way split in the required revenue into categorical grant component, basic grant component, local revenue component, and equalization grant component. The worksheet is based on the

**Even in cases in which local revenue is sufficient, or nearly sufficient, to raise revenues to the required level, the matching principle applies, and in some instances will help to generate revenue above the required level. In such instances the equalization grant would serve as an incentive to raise expenditures. Both the floor provision and this provision are important in principle, but when actual spending levels are considered, are not likely to be important in practice.

REVENUE WORKSHEET

Division No. 16

REQUIRED REVENUE		1,088,595
	Categorical Grant	183,302
Students 1,662 x $475 =	Basic Grant	789,450
Equal. Formula: $\frac{\text{Local BAPS}}{\text{Prov. Max.}}$ =		
$\frac{5,887}{12,718} = \underline{.4628}$		
Additional Revenue Required (Req. Rev. - Basic & Categ. Grants)		
Add. Rev. Required x Equal. Formula =	Local Revenue*	54,430
Add. Rev. Required - Local Rev. =	Equal. Grant**	84,552
Loc. Rev. per Stud. = $\frac{\text{Loc. Rev.}}{\text{No. Stud.}} = \underline{32.75}$		
÷ BAPS = Local Effort = 5.56		
TOTAL		1,090,578

*May not be less than 5% of REQUIRED REVENUE.

**Must equal $\left(\frac{\text{LOCAL REVENUE}}{\text{EQUALIZATION FORMULA}}\right)$ - LOCAL REVENUE

basic grant of $475 per pupil, and since the average revenue per pupil in the province, in the year used as an example, was $662.31, the size of the basic grant component ensures a relatively small local revenue and a relatively small equalization grant. Thus this basic grant figure would result in rather minor equalizing effects. The flexibility involved in this formula results from the fact that each year the basic grant figure could be varied, depending upon whether an emphasis on equalization or on foundation support was considered appropriate for that year.

The effects of varying the basic grant figure can be seen in the set of worksheets which follows. In the example, the basic grant varies from $425 per student to $500 per student. The figures from these worksheets are used in Table 44, which shows the change in the proportions of total divisional revenue derived from different types of grants, for the sample division.

TABLE 44

PROPORTIONS OF TOTAL DIVISIONAL REVENUE TO BE DERIVED FROM DIFFERENT REVENUE SOURCES WITH VARIATIONS IN SIZE OF THE BASIC GRANT, IN $'000'S

Revenue Source	Basic Grant $425		Basic Grant $450		Basic Grant $475		Basic Grant $500	
	$	%	$	%	$	%	$	%
Basic Grant	706,350	(64.9)	747,900	(68.7)	789,450	(72.4)	831,000	(73.4)
Categorical G.	183,302	(16.8)	183,302	(16.8)	183,302	(16.8)	183,302	(16.2)
Equalization G.	106,872	(9.8)	84,552	(7.8)	63,396	(5.8)	63,396	(5.6)
Local Revenue	92,071	(8.5)	72,841	(6.7)	54,430	(5.0)	54,430	(4.8)
TOTAL REVENUE	1,088,595	100.00	1,088,595	100.00	1,090,578	100.00	1,132,128	100.00

REVENUE WORKSHEET

Division No. 16

REQUIRED REVENUE		1,088,595
	Categorical Grant	183,302
Students 1,662 x $425 =	Basic Grant	706,350
Equal. Formula: $\frac{\text{Local BAPS}}{\text{Prov. Max.}}$ =		
$\frac{5,897}{12,718} = \underline{.4628}$		
Additional Revenue Required (Req. Rev. - Basic & Categ. Grants) =	198,943	
Add. Rev. Required x Equal Formula =	Local Revenue*	92,071
Add. Rev. Required - Local Rev. =	Equal. Grant**	106,872
Loc. Rev. per Stud. = $\frac{\text{Loc. Rev.}}{\text{No. Stud.}} = \underline{55.40}$		
BAPS = Local Effort = 9.41		
TOTAL		1,088,595

*May not be less than 5% of REQUIRED REVENUE.

**Must equal $\left(\frac{\text{LOCAL REVENUE}}{\text{EQUALIZATION FORMULA}}\right)$ - LOCAL REVENUE

REVENUE WORKSHEET

Division No. 16

REQUIRED REVENUE		1,088,595
	Categorical Grant	183,302
Students 1,662 x $450 =	Basic Grant	747,900
Equal. Formula: $\frac{\text{Local BAPS}}{\text{Prov. Max.}}$		
$\frac{5,887}{12,718} = \underline{.4628}$		
Additional Revenue Required (Req. Rev. - Basic & Categ. Grants) =	157,393	
Add. Rev. Required x Equal. Formula =	Local Revenue*	72,841
Add. Rev. Required - Local Rev. =	Equal. Grant**	84,552
Loc. Rev. per Stud. = $\frac{\text{Loc. Rev.}}{\text{No. Stud.}} = \underline{50.87}$		
BAPS = Local Effort = 8.64		
TOTAL		1,088,595

*May not be less than 5% of REQUIRED REVENUE.

**Must equal $\left(\frac{\text{LOCAL REVENUE}}{\text{EQUALIZATION FORMULA}}\right)$ - LOCAL REVENUE

REVENUE WORKSHEET

Division No. 16

REQUIRED REVENUE		1,088,595
	Categorical Grant	183,302
Students 1,662 x $500 =	Basic Grant	831,000
Equal. Formula: $\frac{\text{Local BAPS}}{\text{Prov. Max.}}$ =		
$\frac{5,887}{12,718} = \underline{.4628}$		
Additional Revenue Required (Req. Rev. - Basic & Categ. Grants) =	74,293	
Add. Rev. Required x Equal. Formula =	Local Revenue*	54,430
Add. Rev. Required - Local Rev. =	Equal. Grant**	63,396
Loc. Rev. per Stud. = $\frac{\text{Loc. Rev.}}{\text{No. Stud.}} = \underline{32.75}$		
÷ BAPS = Local Effort = 5.56		
TOTAL		1,090,578

*May not be less than 5% of REQUIRED REVENUE.

**Must equal $\left(\frac{\text{LOCAL REVENUE}}{\text{EQUALIZATION FORMULA}}\right)$ - LOCAL REVENUE

The consequences of this proposal for Manitoba's unitary school divisions, had it been in effect in 1970, can be illustrated in tabular form. Tables 45 and 46 illustrate two possible alternative effects: in the first it is assumed that the additional funds made available by the equalization aspect of the proposed formula will be used to reduce local effort; in the second it is assumed that the additional funds made available will be used to raise expenditures. In other words, the first alternative takes total revenue as fixed and varies local effort; the second takes local effort as fixed and varies total revenue. Additionally, each table presents the data at two different basic grant levels, $475 per student and $500 per student. In the second alternative the retention of a high level of local effort elicits a substantial equalization grant, making the total grants available noticeably higher in alternative II than in alternative I, and hence raising the revenue level without undue local effort.

Since it is impossible to predict the local choices between alternatives I and II, the impact of this proposal can really only be discussed in terms of ranges. For instance, with the basic grant at $475 per student, if all local decision-makers chose to minimize local expenditures, provincial average local effort would be 14.11, and average revenues would be $669.69 per student. If they chose to maximize expenditures, without increasing local effort, local effort would be 19.64 and revenues would be $769.15. In either case, the proposals would have produced funds in excess of actual levels in the smaller divisions, even with lower effort. Thus the funds required for improving the provision of services in the smaller and relatively disadvantaged divisions would be available.

TABLE 45

ONE POSSIBLE EFFECT OF THE PROPOSED FINANCE FORMULA ON RANGES IN TOTAL REVENUES AND LOCAL EFFORT IN MANITOBA'S UNITARY SCHOOL DIVISIONS

(Alternative 1: Minimizing Local Effort

	ACTUAL					PROPOSED			
			Basic Grant $475 Per Student						
A Grp.	B Av. Total Revenue	C Range in Total Revenue	D Av. Local Revenue	E Av. Local Effort	F Range in Local Effort	G Av. Total Revenue	H Av. Local Revenue	I Av. Local Effort	J Range in Local Effort
I	640.38	541.95 - 741.99	110.91	15.35	8.88 - 27.96 (51.30)*	659.21	50.19	6.94	3.76 - 13.24
II	610.37	521.85 - 672.68	115.51	16.86	11.46 - 34.89	626.98	52.29	7.63	4.13 - 14.74
III	637.45	551.98 - 691.00	171.37	23.34	15.25 - 28.62	637.45	87.86	11.97	5.10 - 16.74
IV	720.02	628.45 - 776.83	224.59	20.78	19.89 - 26.87	720.02	215.31	19.93	11.63 - 23.37
PROV. AVGS.	662.31	521.85 - 776.83 (254.98)	166.79 (25.18%)	19.64	8.88 - 34.89 (26.01)	669.69	119.79 (17.89%)	14.11	3.76 - 23.37 (19.40)
			Basic Grant $500 Per Student						
I	640.38	541.95 - 741.99	110.91	15.35	8.88 - 27.96 (51.30)	669.73	42.38	5.86	2.80 - 11.27
II	610.37	521.85 - 672.68	115.51	16.86	11.46 - 34.89	638.03	46.37	6.77	4.13 - 12.78
III	637.45	551.98 - 691.00	171.37	23.34	15.25 - 28.62	638.59	74.11	10.09	3.61 - 14.68
IV	720.02	628.45 - 776.83	224.59	20.78	19.89 - 26.87	720.02	194.07	17.96	9.66 - 21.40
PROV. AVGS.	662.31	521.85 - 776.83 (254.98)	166.79 (25.18%)	19.64	8.88 - 34.89 (26.01)	674.47	106.19 (15.74%)	12.51	3.61 - 21.40 (17.79)

TABLE 46

ONE POSSIBLE EFFECT OF THE PROPOSED FINANCE FORMULA ON RANGES IN TOTAL REVENUES AND LOCAL EFFORT IN MANITOBA'S UNITARY SCHOOL DIVISIONS

(Alternative II: Maximizing Revenue)

Basic Grant $475 Per Student

	ACTUAL					PROPOSED		
A	B	C	C	D	E	F	G	H
Grp.	Av. Total Revenue	Range in Total Revenue	Av. Local Revenue	Av. Local Effort	Range in Local Effort	Av. Local Revenue	Av. Total Revenue	Range in Total Revenue
I	640.38	541.95 - 741.99	110.91	15.35	8.88 - 27.96 (51.30)	110.91	793.64	694.92 - 872.60 (1,128.83)*
II	610.37	521.85 - 672.68	115.51	16.86	11.46 - 34.89	115.51	762.09	667.56 - 817.82 (988.28)**
III	637.45	551.98 - 691.00	171.37	23.34	15.25 - 28.62	171.37	785.46	681.05 - 849.44
IV	720.02	628.45 - 776.83	224.59	20.78	19.89 - 26.87	224.59	752.02	732.58 - 833.84
PROV. AVGS.	662.31	521.85 - 776.83 (254.98)	166.79 (25.18%)	19.64	8.88 - 34.89 (26.01)	165.79 (21.68%)	769.15	667.56 - 872.60 (205.04)

Basic Grant $500 Per Student

I	640.38	541.95 - 741.99	110.91	15.35	8.88 - 27.96 (51.30)	110.91	815.61	694.92 - 897.60 (1,153.83)*
II	610.37	521.85 - 672.68	115.51	16.86	11.46 - 34.89	115.51	781.88	667.56 - 842.82 (1,013.78)**
III	637.45	551.98 - 691.00	171.37	23.34	15.25 - 28.62	171.37	810.46	706.05 - 874.44
IV	720.02	628.45 - 776.83	224.59	20.78	19.89 - 26.87	224.59	777.02	757.58 - 858.84
PROV. AVGS.	662.31	521.85 - 776.83 (254.98)	166.79 (25.18%)	19.64	8.88 - 34.89 (26.01)	166.79 (21.05%)	792.37	667.56 - 897.60 (230.04)

* See note to Table 33.

**The highest figure is so much in excess of the second highest (bracketed) that it is excluded from consideration as an improbable spending level for a rural division.

The policy objectives presented in schematic form on page 72, under equalization, required the proposed policies to produce "a higher degree of equalization than at present in revenues and local effort. The proposal, had it been in effect in 1970, would have reduced the ranges in revenues and local effort and hence would have contributed substantially to resource equalization, even at the extreme possible positions. The equalization effect is somewhat more marked at the $475 basic grant level.

The objectives under autonomy required, first, that little or no change in minimum expenditures occur, and the proposal performs satisfactorily in this respect, with the new average being $626.98 of revenue per student compared to $610.37 in the actual figure. (Presumably this revenue would be translated into expenditures.) The second requirement was a somewhat lower range of expenditures than at present, and this too is achieved, although it should be noted that in principle, since local revenue remains open-ended, the range of expenditures could increase. The third requirement under autonomy was the retention of an extensive range of patterns of expenditures. The formula, since it is concerned with revenue rather than expenditures, cannot ensure this, but it provides for local decision-making in precisely the same measure as the existing formula.

The policy objectives listed under the heading of flexibility require the proposed policy to be adaptable to current needs, which is interpreted as providing for a heavy equalization tendency at the present time, but also allowing for a ready shift to support as a primary purpose. The key provision allowing this is of course the discretionary power to set the per pupil grant at any level. The second requirement under flexibility is the availability of

feedback devices to signal changing needs. The primary instrument here would be the worksheets, of which samples are given on pages 109, 111, 112 and 113. Summarized into a table, this data is virtually all that would be needed to keep a record of the provincial pattern of changes in expenditures, revenues, and effort. Naturally it would be necessary to compare these predictions on the worksheets with audited statements of expenditure subsequently, but the addition of this worksheet information to the information which divisions already provide to the Department of Education would allow provincial policy-makers adequate feedback devices to signal changing needs. These two elements it is claimed make the proposed policy significantly more flexible, in the sense of providing for adaptability, than existing policies. Of course, to establish a means by which policies can be adapted to changing needs is not necessarily to ensure that such change takes place. However, the primary purpose of the proposal here is to provide policy instruments which are capable of reaching the proposed objectives; the ways in which such instruments are in fact used in practice is beyond the scope of this study.

It can reasonably be concluded, then, that by reference both to the existing financing policies, and to the objectives proposed, the proposed policies seem likely to perform successfully; the "probable real output" meets the objectives, and would provide additional funds to allow the smaller divisions to improve the provision of services. One final evaluation is still necessary: the comparison of the performance of the proposal with that of finnance policies in effect in another similar jurisdiction, in this case British Columbia. Table 47 presents the output of British Columbia finance policies, for 1970, retaining the groupings used in Chapter 1. (It repeats Table 34, in the main text.)

The provincial average local effort, at 28.17, is noticeably higher than Manitoba's 19.64, but the range is much the same, 26.18 in British Columbia, 26.01 in Manitoba. Again, total revenues are at a much higher average in British Columbia, $707.86 per student, compared to Manitoba's $662.31, and the range in total revenue in British Columbia is very large, at $732.07, compared to Manitoba's $254.98. The reductions in ranges in local effort and total revenue per student made possible for Manitoba by the proposed policies, particularly at the $475 level, offer significant improvement over the British Columbia system, in terms of equalization objectives.

By reference to the objectives proposed, then, the suggested finance policies offer a reasonable probability of better performance than existing policies in British Columbia and Manitoba.

TABLE 47

AVERAGES AND RANGES IN REVENUE PER STUDENT AND LOCAL EFFORT IN BRITISH COLUMBIA SCHOOL DISTRICTS, 1970, BY ENROLLMENT GROUPS

Group	Av. Total Rev. Per Student	Range in Total Rev.	Ave. Local* Effort	Range in Local Effort
I	780.79	478.20 - 1210.27	28.81	14.26 - 40.44
II	724.45	653.55 - 817.84	29.93	24.33 - 39.25
III	676.38	614.45 - 737.07	28.84	26.77 - 32.07
IV	697.95	635.09 - 771.12	32.38	26.76 - 33.56
PROVINCIAL AVERAGE	707.86	478.20 - 1210.27 (732.07)	28.17	14.26 - 40.44 (26.18)

(Based on data given in British Columbia Department of Education, 1972)

* NOTE: Assessed values per student are given in BCSTA, 1970. Data was missing for one district in Group I; the provincial average was inserted.

The proposal clearly requires additional contributions to school division financing by the provincial government. In 1970, provincial grants accounted for approximately 75% of school division revenues. Under the proposal, provincial grants would increase to approximately 80% of total revenues (Tables 45 and 46). The choice facing provincial policy-makers is in effect whether such expenditures are desirable in order to improve the equalization of educational opportunity. If support levels at about 80% of the total program are required in order to do this, it would seem reasonable to urge the shift from approximately 75% support to approximately 80% support.

One further point can be made, with regard to this shift in support levels. Because provincial operations are substantially financed by federally rebated income tax payments, increasing the provincial grant level to approximately 80% support represents in fact a shift from property taxes to income taxes as a source of funds for education. The case for such a shift has been argued frequently, (see for example Due, 1971,) and can be summarized as follows: the property tax is generally considered economically unsound, because of its distorting effect on the economy, its inequity, and its inelasticity. On the other hand, the income tax is the most equitable, as well as the most flexible form of taxation. The fact that income tends to correlate with years of education, at present, supports the view that the use of the income tax as a primary source of funds for education is both rational and equitable. An assessment prepared for the Economic Council of Canada suggested that if 8 years of schooling was taken as the base for 100% of income, high school graduation would given an equivalent of 148.1% of income, and university graduation would give an equivalent of 241.2% of income (Bertram, 1966). Since the consumption of years of education by the individual gives high earning potential, his subsequent payment of the costs of education via his income taxes becomes a delayed user fee for education.

APPENDIX B

A DETAILED PROPOSAL FOR A SYSTEM OF REGIONAL EDUCATIONAL SERVICE AGENCIES IN MANITOBA

The general purposes of such agencies have been described in the text. This proposal spells out in detail some apparently desirable characteristics of such agencies.

Regional educational service agencies, it is proposed, should:

1. Be created by statute, with the purpose of providing those services to students, teachers, and administrators in contiguous school divisions and districts in a region, which can be better or more economically provided cooperatively than autonomously.
2. Be controlled by regional boards consisting of one trustee representative from each administrative unit in the region, serving a three-year term. A chairman should be elected by the board, and decisions should be by majority vote.
3. Be funded by a combination of provincial grants to meet operating expenses and contracts with divisions and districts to provide services. In general, the costs of contracted services, if provided to more than one division, will be prorated on the basis of students, teachers or administrators served.
4. Be made responsible for accumulating data on student achievement and needs, levels of service provision, and school division finance, and providing it to the school boards of the region, and to provincial decision-makers.
5. Appoint a coordinator, and whatever other staff might be necessary to provide contracted services.
6. Receive requests for services from the local administrative units; however, the provision of the services will require the approval of the regional board, and the existence of a valid contract between the local administrative unit or units and the regional board.
7. Have the power to themselves cooperate in the provision of some services to two or more regions.
8. Provide for an advisory committee consisting of a senior administrator from each administrative unit in the region, to develop proposals for shared services and ensure the appropriateness and effectiveness of services provided by the agency.

The reasons for selecting the characteristics described here can be

described briefly, in order to demonstrate that more than personal preference is involved. The desirability of creating such agencies by statute rests on two main requirements: first, since provincial funding is envisaged, statutory creation seems desirable; second, since these agencies will enter into contractual agreements with local administrative units, statutory creation becomes almost essential.

The reason for suggesting control by regional boards of trustee representatives is somewhat more complex. In essence, what is sought is the maintenance of good communications via the "linking pin" notion of joint membership, which is stated theoretically in Likert (1961). As described by the National Commission on the Intermediate Administrative Unit (which provides a good though early statement of the case for such units): "coordination of intermediate unit and local district efforts is greatly facilitated when members of the intermediate unit board have experience as members of a local district board". (1955: p. 8) A second important reason for this device is to prevent the development of a third level of policy-making body in the administration of education: since the regional board will consist of representatives of local boards, the policies developed will in effect be extensions of the policies of local boards. A third reason for this device is to ensure that regional boards do not infringe on local control more than is absolutely necessary to provide regional services. In the development and effective operation of intermediate units, "the crucial issue may well be whether the agency is primarily responsible or responsive to the interests of the state educational agency or to the local districts located within its geographic area". (National Educational Finance Project, 1971a: p. 108)

agencies is desirable, in order rapidly to equalize access to educational services in the province.

The emphasis in funding will certainly be on contractual arrangements with divisions, however. It is envisaged that this will have two substantial advantages: first, continuing pressure to provide good services economically can be exerted on regional agencies by their school division clients. Thus the agencies are effectively performance-contracting. Second, decisions on whether or not to contract for service provision are very likely to be made on cost-effectiveness bases, and the agencies will be required to develop and maintain service provisions which take advantage of the economies of scale which seem particularly important in support services, the area in which small divisions are at present spending heavily. (see page 46.) This method of funding the agencies may well reduce per student costs of providing some services, and hence improve returns on dollars expended.

The suggestion that regional agencies be made responsible for the accumulation and provision of data is based on the flexibility objective spelled out on p. 70 and such data is important to both school divisions and provincial authorities, to allow informed decision-making, and more specifically, the monitoring of progress towards a higher level of equality of educational opportunity.

Generally speaking, the regional coordinator might well hold the only permanent staff appointment in a regional center. Since other staff would be appointed to provide contract services, their terms might well expire with the expiration of the contract with the local school district or division. The coordinator however will provide a continuing link and be responsible directly to the regional board. Useful candidates for such positions might be found amongst existing divisional superintendents who have had experience in more than one division, or provincial inspectors who have familiarity with a region and its needs already.

An interesting example of regional educational agencies in Canada is the system of College Councils operating in British Columbia. These councils are charged, by legislation, with operating junior or regional colleges in regions of the province, and the majority of their members are representatives of local school boards. The school boards also provide operating funds, on a prorated basis. The stated intent of these devices was to ensure local control of the colleges, and the responsiveness of the colleges to local needs. The dual function of the trustee clearly raises difficulties, and these are discussed by a trustee who is also a college council member, as follows:

> His fellow trustees must understand the dual role which they have committed him, in terms of its demands on loyalty and dedication. Inevitably, direct involvement in college affairs will engender a point of view not always easily shared by those less directly involved. It is important that school boards appoint to College Councils people who are able and who have demonstrated a positive interest in colleges. It is just as important that board representatives recognize their responsibility to act as a communication link between their board and the council. (Beinder, 1971: p. 8)

The desirability of provincial grants to meet some costs of the regional units has four justifications: first, some reporting functions, important to the administration of education at the provincial level and to local decision-making (see page 70), will almost certainly devolve onto the regional agency, particularly if computer facilities are available there. The administrative costs of such reporting are quite appropriately borne by the province, since the service is not a local one. The importance of data-gathering, and its provision to local decision-makers was emphasized in Chapter II, in connection with the flexibility objective. Second, professional development of teaching staff and school administrators at present partially funded by the province, might also be focused on these agencies. Third, and perhaps most important, some incentive for encouraging the development of the

The fifth point above regarding service initiation is a most important limitation of the powers of the regional agency. Frequently, intermediate units in American states have leadership functions, that is they are expected to identify services which can usefully be offered by the unit. Such initiatives are not considered desirable for regional agencies in Manitoba, since the agency then becomes effectively a third level of administration. The history of county units in the United States certainly accounts for the notion that leadership functions should be provided by the intermediate unit; however, the difference between the Manitoba situation and the history of educational administration in various states offers some justification for restricting the functions of the regional agencies in the way suggested here.

The suggestion that the regional agencies should themselves have the ability to cooperate is based on the rather significant discrepancy between the size of pupil enrollments in regional agencies proposed here, and those elsewhere. For example, in Pennsylvania the range in weighted average daily membership from the smallest intermediate unit to the largest is 28,329 to 294,493. (State Board of Education, Pa., 1967) The range in enrollment proposed in Manitoba is 9,539 to 79,498. (See p. 128). It is certainly the case that in the provision of, for example, data processing services for educational information the regional agencies suggested here are probably individually too small. A study made prior to the establishment of a regional data centre in British Columbia suggested substantial economies of scale were available, and recommended development of units serving 100,000 students. (Howe & Totheroh, 1969) The British Columbia Regional Centre, the first in Canada, became operational in 1971 (Jensen, 1971) serving five school districts with a total enrollment of 44,610 in 1970-71. (British Columbia Department of Education, 1972)

Finally, the expectation of the importance of the committee of senior administrators is based on the experience of the senior administrators in Toronto's two-tiered administrative system. The committee of directors, and also careful composition of the Metro Board, which is made up of representatives of school districts in the metropolitan area, are considered the two most important elements in the success of the system (McCordic, 1969).

Additionally, the importance of this committee of senior administrators seems to follow quite logically from the general functions of the agencies, which, as viewed here, can be summarized as supplementary, articulative, and co-ordinative. (Based on Rhodes, 1963: p. 5, but with order of importance reversed.) For such functions to be performed, it seems indisputable that mandatory regular meetings of senior administrators are necessary.

The regions to be served by these agencies might be composed as in the following chart, which is based on the regions specified in the by-laws of the Manitoba Association of School Trustees (MAST, 1972). These regions have the advantage of familiarity and acceptability to school boards, and since these bodies are key decision-makers in the proposed system, this advantage seems important. It should be noted that the Winnipeg School Division has been omitted from the Suburban Region, since it has an enrollment larger than that of many of the regions, and hence can and already does provide all the services considered necessary, without membership in a regional agency.

On the basis of the experience of the states presently operating regional service agencies, it seems clear that these agencies do provide useful services which are increasingly utilized by local districts. They do generally have

UNITARY DIVISIONS* COMPRISING PROPOSED RESA REGIONS, WITH 1971-1972 ENROLLMENTS

NORTHWESTERN REGION		CENTRAL REGION		SOUTH CENTRAL REGION		INTERLAKE REGION		SOUTHEASTERN REGION		WESTERN REGION		SUBURBAN REGION	
Div. No.	Enrollments**	Div. No.	Enrollments	Div. No.	Enrollments	Div. No.	Enrollments	Div. No.	Enrollments	Div. No.	Enrollments	Div. No.	Enrollments
32	2163	20	1803	18	1850	11	5256	14	4136	31	2345	2	20544
33	3532	24	5258	19	2029	13	4158	15	4608	37	2415	3	4472
34	1997	28	2003	25	2334	21	3453	16	1552	38	2575	4	9217
35	3299	29	2013	26	586	22	2670	17	2014	39	3532	5	6078
36	2807	30	2301	27	1413	23	2608			40	8419	6	7613
				47	1327					41	2981	8	2916
										42	1630	9	13391
										43	1750	10	6907
										44	2569	12	8360
TOTALS***													
5	13798	5	13378	6	9539	5	18145	4	12310	9	28216	9	79498

* The number of unitary divisions has increased since the 1969-1970 school year.

** Enrollments for 1971-1972 based on MAST membership reports.

*** School districts contiguous to these divisions should also be included in the regions, thus increasing somewhat the total student enrollment to be served.

an equalization objective similar to the one proposed for Manitoba. The provisions, common to several, that services be at the request of the local district, and that agencies be controlled by representatives of local districts, generally school board members, ensures the retention of local autonomy. The changing patterns of service provided are evidence of flexibility. Thus such agencies seem to offer a useful administrative device for improving services in small divisions, which seem likely to meet the policy objectives described in detail in the main report.