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ABSTRACT

The final volume in a series on educational policy and planning in Canada, this review concentrates on the western provinces--British Columbia, Alberta, Saskatchewan, and Manitoba. Sections of the document discuss the educational foundations of the Canadian west; the educational system as it was in 1974--its purposes and institutions, attendance, structure and general characteristics, and tertiary and postsecondary levels; resources and support for education--basic requirements, technology, personnel, facilities, and finance; and emerging developments and future prospects--the shaping of the future of education in the region, trends and prospects, and educational planning, research, and decision-making. (Author/IRT)

EDUCATIONAL POLICY AND PLANNING

CANADA

VI

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

PARIS 1975

REVIEW OF EDUCATIONAL POLICIES

in

CANADA

W E S T E R N R E G I O N

Submission

of the

MINISTERS OF EDUCATION

for the Provinces of

British Columbia, Alberta, Saskatchewan and Manitoba

1975

REVIEW OF EDUCATIONAL POLICIES IN CANADA

WESTERN REGION

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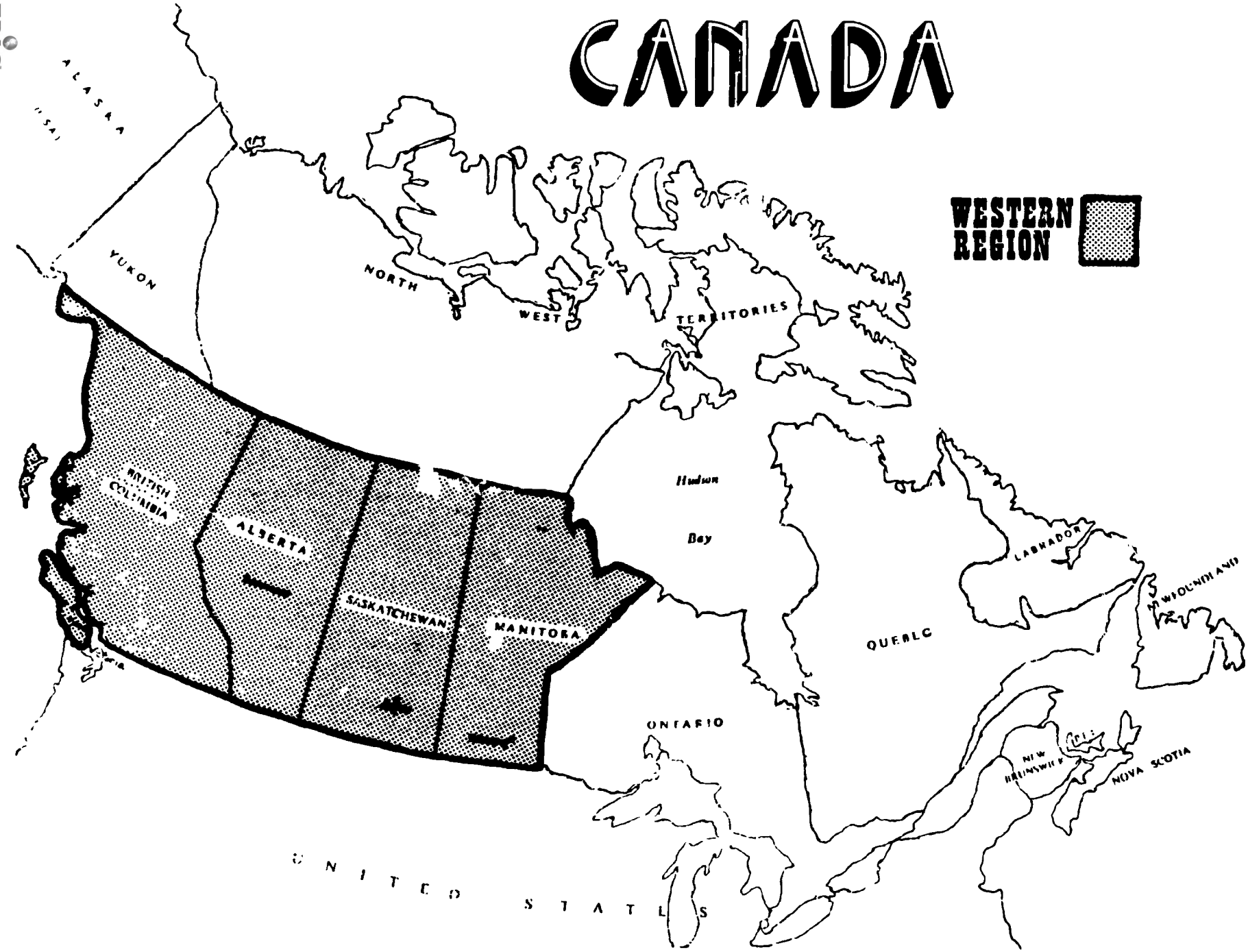
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FOREWORD

This document is one of five Regional Reports submitted by the Council of Ministers of Education, Canada, in cooperation with the Government of Canada, as a contribution to the O.E.C.D. Review of Educational Policies in Canada.

The Western Region comprises the four most westerly Provinces of Canada, namely British Columbia, Alberta, Saskatchewan and Manitoba, and in common usage is referred to as Western Canada.

To assist in the preparation of this Report, the Ministers of Education of the four Provinces established a Regional Advisory Committee of eight members, two senior officials from the ministries of education in each of the four Provinces, and acquired the services of a full-time Regional Director.

In consideration of the objectives and design of the Report as an integral component of the Canadian Review, the Advisory Committee carried out an analysis of educational developments intended to portray as far as possible characteristics common to the Region but with due regard for significant features of developments in the individual Provinces.

To this end and to furnish the Committee with up-to-date and authoritative information and analyses on a regional basis, thirteen research studies were commissioned and undertaken by leading researchers, all recognized experts in their respective fields in the Western Region and in Canada.

Although an effort has been made to reflect as much as possible of the broad panorama of educational developments in the Region, some limitations were inevitable by reason of the complexity of the subject and necessary constraints on the length of this Report. For example, discussion of education and the educational system has been focused on 'public' education, on those sectors and features of the system which lie in the purview and competence of public authorities and are therefore subject to policies, control and direction of one or more of several levels of government. It follows that without minimizing the role and influence of other agencies in the educational mosaic of the Region, it has not been possible to make more than passing references to various forms of private education, to the educational activities of cultural organizations, museums, art galleries and voluntary organizations in such fields as travel, recreation and sports. Moreover it has been necessary in the public sector to treat the large mass of information and data available selectively with a view to highlighting that which is perceived to contribute best to an exposition of the current status of educational development in the Region and to indicate significant tendencies, issues and priorities pertinent to future planning and evolution of policies. The same constraint with respect to selectivity extends to the treatment of similarities and dissimilarities among the Provinces. Because

commonalities are more striking and predominant in the regional context, these may appear to have been accorded major prominence. This should not, however, obscure the fact that there are significant individual differences which afford an element of uniqueness to developments in each Province. Some of these have been identified and discussed and others alluded to but not as fully elaborated.

The preparation of this Report would not have been possible without the extensive involvement of many officials in the ministries of education who responded generously and painstakingly in their contributions toward interviews, submission of documents, data and reports, and in their participation in the several research studies. Individually and collectively the research group produced a series of reports which were invaluable in the preparation of this document. These contributions, together with the interest and assistance of individuals, groups and agencies throughout the Region, of the universities and other organizations, including school trustees' associations and the teaching profession, are sincerely and gratefully acknowledged.

April, 1975

TABLE OF CONTENTS

CHAPTER I

THE CANADIAN WEST: EDUCATIONAL FOUNDATIONS IN PERSPECTIVE

Young in a young country, the Western Region has an educational history scarcely 100 years old. Indeed many still living have been eye-witness to the evolution of its public educational system from the pioneer one-room school and its rudimentary curriculum of the 3-R's to the modern complex of institutions and programs, from a few simple textbooks and the writing slate to modern laboratories, libraries and learning resource centres, and from education of the few to education for all. The remnants of the frontier school are still to be seen, albeit now as monuments to the aspirations of pioneer peoples for their children.

A. Exploration, Settlement and Cultural Heritage

2. Although the written record of the history of Western Canada spans a period of little more than 200 years, the first human habitation is believed to have occurred some 20,000 to 25,000 years ago - its first immigrants, probably from Asia by land bridge over the Bering Sea. These immigrants became the North American Indians who, when the French explorer Jacque Cartier arrived on the Atlantic shore in 1535, had established tribal groups from coast to coast in Canada. Not large in number, estimated in 1750 to be about 35,000, the Indian people developed a culture and mode of life largely shaped by the physical environment in which they lived and by the necessities for survival. Unlike the later European immigrants, they did not attempt to cultivate the land.

3. In the prairie region, the millions of buffalo which thrived on the grasslands and semi-forested areas, along with fish, wild fruit, roots and herbs, were the mainstays of life, providing food, shelter, clothing, tools, utensils and medicine. Life was nomadic, for the Indians followed the buffalo herds in their search for food. On the Pacific Coast, where climatic conditions were less severe and where fish were plentiful, tribal life was less nomadic and settlements more permanent. Hunting was mainly on foot and with the bow and arrow or spear, for until the early 18th century, Western Indians had not seen firearms and horses.

4. Unlike earlier exploration of Canada, motivated in the main by a desire to discover a sea route through Northern waters to the Orient, the story of exploration of Western Canada is the story of the fur trade. From Eastern Canada came the fur trader and explorer in search of the highly profitable beaver pelt and from the West the explorer and trader in seal and sea-otter skins. Adventurers from the East were for the most part agents or employees of the Hudson's Bay Company (London) under its land charter of 1670, or of its rival, the Northwest Company (Montreal).

5. The adventurous explorers and traders of the early 1700's did not know the vastness of the distances separating Hudson Bay and the Pacific - over 1,200 miles of plains, forests, mountains and thousands of lakes and

rivers. The major thrust of exploration, moving from East to West, mainly along waterways, was followed immediately by the establishment of forts and trading-posts some of which are now the sites of large urban centres such as Winnipeg, Edmonton and Vancouver.

6. Settlement of the Western Region by non-Indian people had its origins in the arrival of the traders and their employees to man the trading posts which dotted the million square miles of territory, extending from the western boundary of Ontario to the Pacific Ocean and for a distance of 750 miles North from the international boundary with the United States. Few if any of these early Europeans, mainly from England, Scotland and Eastern Canada, regarded themselves as settlers, but they were in fact the only non-native residents of the Region for more than half a century, until the early 1800's. In this period, the traders did little to alter or interfere with the life style of the native population, being concerned only with locating their posts with a view to convenience for trading and encouraging expansion of hunting and trapping to produce more furs. To this end, the hunters and trappers were supplied with firearms, horses, iron tools, trinkets - and by a few less scrupulous traders, with liquor.

7. Although some of the company managers had recognized possibilities of stabilizing and improving food supplies by cultivation of the land near their forts and trading-posts, it was not until 1812 that a serious attempt was made to establish a settlement based on agriculture. In that year the Earl of Selkirk, a major shareholder of the Hudson's Bay Company having obtained a land grant for the purpose, organized and led a small group of Scottish crofters and Irish farmers to a site on the Red River near the present location of the city of Winnipeg. The new settlers brought with them cattle and sheep, wheat, barley, oats and corn seed, intended to form the basis of an agricultural enterprise which would find a market in the fur trade and, more importantly, establish a new life for the settlers themselves. The new colony suffered the vicissitudes of harsh climate, unfriendly traders and fearful natives, but eventually survived to become the nucleus and harbinger of the 'mother industry' of the three prairie provinces, agriculture.

8. On the Pacific Coast, the earliest settlements appeared somewhat later, with the establishment of Fort Victoria in 1843 by the Hudson's Bay Company and creation of the Crown Colony of Vancouver Island in 1850. Again agriculture played an initial role, but was soon overshadowed by discoveries of gold and coal and by the potential of rich forest resources, all of which attracted immigrants from the United States as well as other parts of Canada and to a lesser extent Europe, mainly the British Isles.

9. The period preceding Canadian Confederation in 1867 was not generally conducive to settlement. Virtually the entire Region was under effective control of the Hudson's Bay Company and the fur trade was king. Travel was primitive and reports of explorers and other investigators were generally pessimistic as regards the potential of a large portion of the Region to sustain life. Nevertheless, the success of the Selkirk Settlement attracted an influx of new settlers from Ontario and the frontier commenced to move slowly westward. Likewise permanent settlements had become established on the Pacific Coast, mainly on Vancouver Island and the adjacent mainland.

The area between, the prairie region, had numerous small trading post settlements. The total population in 1870 in the entire Region was little more than 100,000, including Indians, Metis, and immigrants from England, Scotland, Ireland, Eastern Canada and the United States.

10. Following Confederation of Canada in 1867, federal legislation pertaining to land transfer and ownership and the proposal of a railway linking East and West, combined to stimulate a new interest in settlement. In 1901 the population of the Western Region was about 600,000, slightly over 10 percent of that of Canada as a whole. By this time, the trans-continental railway having been completed in 1885, cheap land at $10 per quarter of a square mile under the Canadian Homestead Act was attracting wide-spread interest in Western and Central Europe. The main body of immigration to 1905 was from Ontario, and other parts of Eastern Canada. However many also came from the British Isles, the United States, Iceland, Germany, Hungary, Poland, the Ukraine, Scandinavia, Austria, and China, the latter mainly to British Columbia. The great majority of these new-comers were oriented to agricultural pursuits and strongly motivated by hopes of a better life in a new land, of religious freedom and of relief from the political tensions and economic distress then prevailing in Europe.

11. The hundreds of thousands of new settlers who arrived in the next two decades, account in large measure for the population increase in the Region to 1.7 million in 1911 and in 1921 to 2.5 million. They brought with them their languages, traditions, culture and skills, all of which contributed to the foundations upon which institutional life subsequently developed. Of the 5.8 million residents of the Region in 1971, including those of one or more generations as Canadian citizens, five major ethnic groups, British, German, Ukrainian, French and Scandinavian, account for almost 80 percent of the population. Persons of Indian ancestry, the seventh largest group, represent about two and one-half percent of the population in British Columbia and Alberta, and four and one-half percent in Saskatchewan and Manitoba.

B. Origins of the Educational System

12. A consideration of origins of education in terms of the present school system should not obscure the fact that informal education and training of the young has been a natural characteristic of human society at every stage of its evolution. For numberless generations before education in an institutional sense appeared in Western Canada, native peoples educated their young, not in schools, but in their own environment of family, social structures and cultural traditions. In their formative years, children learned from their elders and in the natural environment in which they lived, the skills, understandings and qualities of character necessary to survival and maintenance of a way of life. It is significant that in modern societal circumstances which dictate formalization and institutionalization of education, the much older tradition of informal education remains a strong and persistent influence in shaping current educational developments.

13. Prior to 1870 the Hudson's Bay Company exercised de facto powers of government in the Western Region but technically had no responsibility for education. However, almost concurrently with the development of the fur trading settlements, missionaries made their appearance, built churches and initiated the first schools. Among the earliest schools were those established in the Selkirk Settlement in the early 1820's under auspices of Roman Catholic and Anglican missionaries, in the early 1840's in Saskatchewan and Alberta, and in 1849 on the Pacific Coast. Notwithstanding the absence of any legal responsibility for education, the Hudson's Bay Company provided some financial support of schools to the religious authorities. Moreover, a Company directive in 1836 urged upon its trading post officials and staff that they "devote part of their leisure hours to teach the children their ABC's and Catechism, together with such further elementary instruction as time and circumstances may permit". [1]

14. From these embryonic beginnings came a proliferation of mission schools, both Protestant and Roman Catholic across the entire Region, together with scattered private ventures financed by individual parents. Initially confining themselves to the rudiments of elementary education, several had commenced instruction at the secondary level by 1870. The evolution of colleges as institutions of higher learning, which occurred almost concurrently, led later to the first universities - the University of Manitoba in 1877, the University of Alberta in 1906, the University of Saskatchewan in 1907 and the University of British Columbia in 1908.

15. Although the concept of public non-sectarian education had already emerged in Eastern Canada (in Nova Scotia in 1811), it did not at first affect public education in Western Canada where the denominational orientation of the private school sector was well established by 1870. However as settlements grew in size and diversity of population and as colonial and provincial governments were established, a body of public opinion favouring 'public' schools took shape and gathered strength, more especially in British Columbia where the first legislative action was taken by the colonial government of Vancouver Island in promulgating The Free School Act in 1865. This legislation, together with The Common School Ordinance in 1869 of the Colony of British Columbia, were the bases for The Public Schools Act, 1872, passed by the government of British Columbia shortly after becoming a Province of Canada, confirming the principle of public non-sectarian schools in that Province.

16. In the territorial area which in 1905 became the Provinces of Alberta and Saskatchewan, the School Ordinance of 1884 placed education under public control and assigned responsibility for it to the territorial government. This law, predicated on recognition of schools already in existence, some of which were denominational, established the principle of publicly supported separate schools whose basic orientation might be either Roman Catholic or Protestant. Since these schools already had legal sanction in 1905, the statutes creating the two provinces reaffirmed their status as separate schools entitled to support on the same basis as public schools.

17. In Manitoba, which entered Confederation in 1870, provincial legislation initially provided for denominational schools, but was replaced by The Manitoba Public Schools Act in 1890, which established the non - denominational character of the public schools system in that province.

18. Although the major emphasis prior to 1900 was on elementary education, some of the early denominational schools also provided limited instruction at the secondary level, and in some instances teacher-training. Normal schools did not appear until the 1890's. Secondary education, for the most part regarded as an extension of elementary education, commenced its rapid development early in the present century. The courses offered were generally limited to the language arts, mathematics and science, drawing heavily on the educational patterns of Ontario. Pestalozzi-Froebel philosophies were also in evidence, emerging for example, in the introduction of manual training in the schools.

19. The early colleges, some of which later became universities or affiliated with universities, appeared almost concurrently with the first high schools. For example, St. Boniface College in Winnipeg had its origins in a school established by Fr. Provencher in 1818, which expanded its program to the higher grades in the 1840's, and was one of the three Colleges which affiliated with the University of Manitoba in 1877. In 1899 the Vancouver High School established an association with McGill University, offering first and second year arts courses and in 1906 became the McGill University College of British Columbia. This arrangement ended in 1915 when the University of British Columbia became fully operational. In the Alberta - Saskatchewan territory, the first two institutions of higher learning, Emmanuel College and The Academy, were founded at Prince Albert in 1879.

20. By 1910 the basic principles governing development of the educational system at the elementary, secondary and post-secondary levels were firmly established. Education was to be under public control, financed and administered by public authorities and universally accessible to the people. The history of subsequent years is the story of the evolution and elaboration of the systems and sub-systems which constitute the basic elements of the educational enterprise of the 1970's.

C. Constitutional and Legislative Bases for Jurisdiction, Planning and Administration of Education

21. The British North America Act of 1867, which created and broadly defined the status of Canada as a federal state, a confederation of provinces, allocated authority over and responsibility for education to the provinces and their governments, subject only to safeguards of existing minority rights. Subsequent statutes which created the Provinces of Manitoba (1870), British Columbia (1871), Saskatchewan and Alberta (1905) and provided for their status within Confederation, explicitly confirmed the principle of provincial autonomy in educational affairs.

22. To give effect to their authority and responsibility for education within their respective provinces, the provincial governments passed legislation creating departments of education headed by a cabinet minister, and setting out the basic features of the educational system including a system of local government to administer education at the community level. Except for minor variations of detail attributable to local circumstances, historical and political, this legislation was very similar in all four

provinces and was strongly influenced by Ontario experience and by educational philosophies which had moved westward in Canada from the older New England States. These influences are particularly pertinent to the evolution of a system of local government for education, to theories of financing education and to aims, objectives and professional practices associated with the educational processes.

23. Initially authority and responsibility for education were highly centralized in the provincial departments of education, and for all practical purposes the exercise of autonomy at the local government level was confined mainly to employing teachers, building and managing the local community schools and providing funds from local taxation to supplement government grants. Over the years, the allocation of powers and duties between provincial departments and local governments has undergone many changes, marked chiefly by a trend toward decentralization of powers, particularly those which relate directly to the educational programs of the schools.

24. Planning and policy-making functions, which necessarily flow from competences set out in law and from custom or usage based on mutual accommodation, may be said at the present time to have three main features. A provincial government through its education department and responsible minister expresses its role by defining the major over-all educational objectives of the province and by giving direction and leadership toward the attainment of those objectives, in part by direct action and in part through collaboration with local governments. At the local government level, elected school boards exercise planning and policy-making functions applicable to the areas of their jurisdiction with respect to matters delegated exclusively to them under provincial law or in which implementation of provincial guidelines are subject to local options, variations and conditions. The third characteristic of increasing significance in the Region is the growing scope of the authority and responsibilities of teachers in professional aspects of the educational processes, for example, in curriculum selection, instructional techniques and student evaluation.

D. Social, Economic and Political Factors in the Growth and Development of the Educational System

25. The educational system of Western Canada in the mid-1970's is the product of its historical foundations and of the inter-play of social, economic and political forces, more especially those of the period since World War II. This was a period of economic expansion, massive and rapid developments in science and technology and of challenge of social values and systems, indeed of the role of education itself.

26. In the circumstances and environment in which the earliest schools appeared on the scene, the predominant motivation was religious. In a time when religion, morality and education were popularly regarded as synonymous, the zeal of the missionaries provided virtually the sole initiative for attending to the education of the young. Subsequent events and developments, more especially the rapid growth of widely-dispersed settlements, increasing diversity of the religious background of immigrants, expanding requirements

of resources to support schools, and the emergence of challenge to sectarian education on philosophical grounds, combined to cause a shift in the focus of responsibility from private to public auspices. Moreover, the creation of provincial jurisdictions and adoption of the principle of responsible government through the electoral process, gave to the people of the provinces a means of expressing their aspirations through political action. As a consequence, after 1870 political influences and initiatives assumed an increasingly important and effective role in shaping the growth and development of the educational system. Given the constitutional mandate of virtually exclusive control of education at the provincial level, it was and is in the legal competence of the provincial governments to plan and determine basic policies for educational development and to prescribe the means by which these policies are formulated and executed. In practice, provincial governments have by law delegated to local governments many of the functions which pertain to management of educational services at the local or community level.

27. In the political processes at the provincial and local government levels, social and economic influences bear directly and indirectly on planning and decision-making. The former predominance of religious motivation has receded to become but one of many factors relevant to educational policies, with some differences in individual provinces. While policies of non-sectarian public education were adopted in British Columbia and Manitoba, Alberta and Saskatchewan made legislative provision for separate schools. These are sectarian to the extent that they serve either a Roman Catholic or a Protestant minority in a school district but are otherwise in a legal sense public schools, administered and financed in the same manner as any other public school. Private and parochial schools, now mainly in the secondary field, and falling in number, continue to serve a small segment of the population who prefer this alternative to the public system.

28. The period 1900 to 1930 was marked by a consolidation of basic educational structures, by vast expansion of school enrolments, from 92,000 to 656,000, by the organization of thousands of school districts in urban and rural areas, with the one-teacher one-room school predominating in the then largely rural society of the Region, and by the emergence of an effort to produce a 'Canadianized' version of the educational system. In pursuance of the latter, legislation appeared in the Provinces with respect to compulsory school attendance, health and welfare of students, narrowing of the range of languages of instruction to English and French, and expansion of the curriculum, for example to include training in manual arts, citizenship (civics), and other practical skills appropriate to the social, political and economic environment of that period. The central objective of the elementary schools was to produce facility in the use of basic skills of reading, writing and arithmetic. The secondary schools were strictly academic in character, intended for the most able students who might be expected to proceed to a university. Courses of study at both levels were highly prescriptive. Teaching was didactic and management under authoritative control.

29. The depression years of the 1930's and the War Years 1939 to 1945 imposed severe restraints on all but barest maintenance of the status quo of the end of the third decade of the century. At the same time the disparity

in the level of services between urban and rural areas tended to widen, particularly in the three prairie provinces whose economy was almost entirely based on agriculture. These years did, however, bring into sharper focus the needs for new and better modes for delivery of educational services, for revision of educational programs, for improvement in methods of financing education. In spite of, or perhaps because of, the vicissitudes of the time, governments, educators and the public at large became increasingly concerned with the future of education, its objectives and the manner of its evolution to serve the needs and expectations of Western Canadian society. The general outlook as regards educational purposes of that period is expressed by Johnson in referring to trends in British Columbia "to make the school system meet the trends of a rapidly changing world", and "to make future British Columbians more socially minded, more cooperative in their attitude to society as a whole" and "better equipped for using their leisure". [2]

30. It was in this period that governments, government commissions and other concerned groups examined with heightening interest various new structures and systems to improve education. Themes such as school consolidation, 'progressive' education, compulsory education, 'practical' education, health and welfare programs for children, enlargement of local areas of administration, educational broadcasting, Canadianization of the schools, teacher education, expansion and liberalization of secondary education and, not least of all, more adequate and equitable methods of financing education figured prominently in concerns of those years. If the trauma and constraints of depression and war had held development to a minimum, the mounting pressures of those years set the stage for the vast expansion and dramatic changes which ensued in the post-war period.

31. Although immigration after 1945, particularly from Europe and Asia, added materially to population growth in Western Canada (from 3.5 million in 1941 to 5.8 million in 1971), the very large majority of Canadians in the Region were one to three or four generations removed from their immigrant forbears. The earlier isolation of ethnic groups in 'colony' type settlements gradually disappeared and the cultural heritage of diverse origins has become an integral part of the meld of Western Canadian society. This process had few of the characteristics of a 'melting pot' society, and many ethnic groups have succeeded significantly in perpetuating traditions of language and custom in the context of the Canadian setting of institutions and life-style.

32. In terms of impact on education, three factors tend to dominate the recent scene: the relative affluence of the Region, the rural - urban population shift, and an intense public determination to develop the educational system to meet the needs of modern society.

33. The partial revival of the Western economy during World War II was followed immediately by an era of expansionism, of growth and development and of changing conditions heretofore unknown in the Region. The agricultural industry, which had nurtured development of the three prairie provinces for three quarters of a century, not only came under the influence of technological advances but also was joined by extensive discovery and expansion in the

field of mineral resources. Science and technology increased greatly the productivity of the land and helped to minimize the natural hazards of dry-land farming typical of the prairie provinces which together possess 75 percent of the arable soil of Canada. Likewise, the forest and fisheries resources of the Pacific Coast felt the impact of scientific advances on production and conservation.

34. The presence in the Region of mineral deposits, especially of coal gold and silver was known before 1900, particularly in British Columbia. Others such as lead, zinc, copper and nickel had appeared in widely dispersed areas of all four provinces. However until the 1940's, major mineral resources activity was mainly confined to the West Coast. The discovery of oil at Leduc, Alberta, in 1947, marked the beginning of major new developments which extended into Saskatchewan, and to a lesser extent into Manitoba and British Columbia. Subsequent exploration confirmed the existence in the Region of over 95 percent of Canada's known reserves of oil, gas and coal, and in Saskatchewan, of half the world's supply of potash. Other minerals which have a growing impact on the Western economy, uranium, iron, sulfur, cobalt, cadmium and nickel, are found in increasingly valuable amounts in all four provinces. Apart from resource development as such, a wide variety of raw materials and energy including hydro-electric developments have combined in the past 25 years to produce a strong trend to industrialization and urbanization, and to a measure of affluence and economic stability not usually associated with a basically agricultural economy. While the major impact of industrialization has been felt in Alberta and British Columbia, the same trend has influenced significantly the general economy of the entire Region and indirectly the nature and scope of educational developments.

35. The initial impetus for urbanization and rural depopulation in the post-war period arose within the agricultural industry itself. By 1930 almost all of the arable land had been occupied for agricultural purposes, primarily for production of grain and livestock, and provided the homes and occupations of almost 75 percent of the population. After 1945, the apparent shortage of new land and the development of new agricultural technology combined to set in motion forces which were to have the effect of reducing the number of people in that industry while at the same time increasing productivity. Pioneer farming was labour intensive and required the assistance of the entire family to produce the life needs of a family on an average of 160 acres. By 1940, advancing technology had enabled a farmer to manage 400 acres and by 1970 between 700 and 800 acres with no additional manpower. In a matter of less than half a century, the productive capacity of a farmer in terms of manpower input had increased 35-fold. The consequent reduction in number of farms and farmers produced major changes in rural life patterns and rapid movement of rural people, more especially the young, toward urban centres and employment in industry. Not the least of these changes was the disappearance of the pioneer one-room one-teacher school which had for half a century been for most of the population both the local centre of learning and the centre of community life.

36. By 1970 the traditionally rural West had almost half of its population in major urban centres - more than half of the population of Manitoba in Winnipeg, half of British Columbia's in Greater Vancouver, half of Alberta's in Edmonton and Calgary and one-third of Saskatchewan's people in its three major cities, Regina, Saskatoon and Moose Jaw.

37. The generally strong economy of the Western Region, the result of diversification and expansion in the post-war period, has been a major factor in recent educational developments. This is illustrated in the growth of expenditures on education at all levels which, in the two decades between 1952 and 1972, rose from $167 million to $1,800 million. In per capita terms, expenditures rose from $43 to $306 in the same period, and in terms of personal income from 3 percent to 8 percent. In these two decades total full-time enrolment more than doubled.

38. Quite apart from the concern of governments at all levels with respect to educational priorities the growing intensity of public interest in education is perhaps best represented in the fact that in 1972, one in three of the population were full-time students, compared with one in five in 1952. This general trend in educational participation is to a very large extent attributable to interest in and expansion of higher education at the post-secondary level and of other forms of continuing education for adults. While enrolments in elementary and secondary education in the last 20 years increased from approximately 700,000 to 1,500,000, or 114 percent, enrolments in post-secondary and other adult education increased from 22,000 to 164,000 or 640 percent. Educational expenditures in the same period reflect the same trend, those for higher education rising from $20 million in 1952 to $530 million, almost 2,600 percent, against increases in basic education from $146 million to $1,249 million, or 750 percent.

39. The motivations which underly expansionism of these magnitudes can be attributed first to a general public pressure to bring about qualitative improvements in the educational system as well as access to a greater variety of services seen to be necessary in a society in which technology and science generate rapid changes in the economic and social patterns of the times. Higher levels of education were needed to meet the requirements of industrialization, to facilitate adjustments to conditions of high mobility of the population, and to enhance the creativity and adaptability of people as participants in modern democratic processes and purposes. In short, public authorities and the public at large assigned to education a very high priority as an instrument of preparation for life in an age of rapidly changing conditions in the social and economic environment.

40. Proliferation of vocations, the result of industrialization, created not only new opportunities in the vocational and employment fields but also some new problems. Specialization and rapid advancements in technology produced a train of consequences, for example, vocational obsolescence, the need for training and retraining, problems of adaptation to employment in which the individual suffers a loss of personal identity and involvement in his craft and becomes but a small part of a mammoth machine.

41. Notwithstanding the positive effects of growing affluence and a rising standard of living among the public at large, recent years have witnessed a gathering tide of concern with seemingly increasing materialistic trends attributed to industrialization and to the influence of science and technology on the quality of life of people as individuals and citizens of a democracy. As a result, a great deal of the attention to and study of educational issues of the past five years by governments and by interested groups

and community agencies has focused on the imperative of ensuring the prior claim of society itself to determine not only the shape of society in the future but also the role of education in developing the individual capable of full participation in those determinations. Numerous government commissions, task forces and inquiries, not to mention studies of various other interested groups have expressed these concerns. One of the most recent inquiries, the Worth Report (Alberta), exemplifies the tenor of much of which is being expressed throughout the Region in these words:

> Since tomorrow will be substantially different from yesterday and today, it is also imperative that a futures-perspective be maintained when defining goals of education. Only in this way can new elements be injected that will aid us in shaping our own destiny in a period of accelerating change. [3]

CHAPTER II

THE EDUCATIONAL SYSTEM - 1974

A. Educational Purposes and Institutions - An Overview

42. By its very nature, particularly the directness and immediacy of its contact with the lives of people individually and collectively, education and the educational system as such tend to be both a mirror and a barometer of the times. At any given point in time many influences, historical, social, political and economic, interact to identify and give definition to issues and aspirations relevant to time and place, and through that interaction to give general direction to the future. But whatever the time and circumstance, more especially in the current age of rapid change, no other issue looms larger than the question of purposes, of aims and objectives, of the educational system. Western Canadian educational authorities have in recent years focused increasing attention to what the Faure Report refers to as a current imperative in these words:

> We can and we must, given the present state of affairs, inquire into the profound meaning of education for the contemporary world and reassess its responsibilities toward the present generations which it must prepare for tomorrow's world. We must inquire into its powers and myths, its prospects and its aims. [4]

43. To speak of educational purposes in the Canadian West is to recall its heritage of philosophies and traditions, transmitted from European and North American sources through the people who have populated the Region and created a society, a structure of institutional life, compatible with the realities of its environment. Moreover, evolution of the educational system of the four Western Provinces has taken place in a relatively short span of years and under pressures for change and development in keeping with the moods and circumstances of a young and growing society. From an historical perspective the schools grew up in a societal environment of changing needs and purposes ranging from focus on physical survival in pioneer days to religious salvation, to citizenship, to various forms of humanism, to science and technology, to vocational competence and most recently to changing social values.

44. Given the constitutional autonomy of provincial governments in educational matters, together with the breadth and diversity of conditions attributable to the geography of the Region, differences in approach to the question of purposes are to be expected. These differences are however more apparent in terms of definition than in the ultimate sense of purposes or objectives. To speak of educational purposes in a regional sense is therefore to identify the commonalities apparent in the four provinces, however differently these may be described in individual statements of policy, programs and plans. Despite the seeming anomalies of development of the Canadian West in a regional context, the common elements of the educational enterprise at all levels far outweigh the differences.

45. Official statements of provincial educational authorities, while replete with detailed descriptions of aims and objectives of basic education, do not ordinarily emphasize or elaborate the general aims of the educational system as a whole, probably because the very nature of the relationship of education to society does not permit the luxury of a definitive statement which will be valid even in the short-run future. In his analysis of the current scene, Baker comments that "No Department of Education, however naive or arrogant, would pretend to this degree of omniscience". [5] In the realm of higher education, traditionally further removed from the scope of public education authorities, official statements of general purposes are even less common and definitive.

46. Notwithstanding the foregoing, specific aims and objectives are necessarily anchored to perceived purposes of education, however generally these may be stated in official documents. For example, Baker [6] reports that Saskatchewan emphasizes development of social ideals (individual responsibility, love of learning and love of truth) in the context of the developmental specifics of "academic, cultural, vocational, social, moral and spiritual, physical" pursuits. By contrast, British Columbia stresses "developing individuals in a group situation" in a democratic setting in which the autonomous individual functions within a social context. Manitoba expresses a concern "that the traditional objectives of the school are no longer sufficient to cope with the uncertainties of modern industrialized society", and cites the priority attaching to social and emotional maturation and to skills in personal decision-making. Alberta treats the issue in terms of developmental goals related "to citizenship, social and physical change, communication, vocation, leisure, health, aesthetics, general information", emphasizing the stresses of change, and the needs of individuals and of the society in which the individual functions.

47. These citations do not necessarily reflect major differences of basic philosophy. In his extension of this discussion, Baker found commonality in the four provinces with respect to objectives in the categories of basic skills and general knowledge, personal - cultural goals (achievement of maximum potential), social - political goals (the autonomous and responsible individual in a cooperative and democratic society), moral - spiritual goals (from humanistic to theological), vocational goals (from 'learning about' to skill development), leisure and health goals. In essence, the educational system of the Region rests on philosophical foundations concerned with basic knowledge and fundamental skills, character development, personal attributes related to attitudes, standards and moral values, individual - social rights and responsibilities, problem solving, physical, mental and emotional development, aesthetic appreciation and promotion of creativity.

48. Aims and Objectives. The broad sweep of purpose inherent in the educational system is more precisely displayed in terms of aims and objectives at the several levels of the system.

49. At the elementary level, the schools are assigned specific responsibilities for training in the basic skills, for development of character, citizenship, intellect and creativity. Alberta's proposition that the major purpose of elementary education is to foster "the fullest development of each child's potentialities" [7] with specific reference to behavioral goals

pertaining to abilities and skills, understandings, attitudes and appreciations, exemplifies a position common to all four provinces, although expressed somewhat differently in each case. For example, Manitoba envisages the responsibility of the elementary school "to present a basic body of knowledge, to develop fundamental skills, to inculcate intellectual and moral values, to provide for physical activities and for aesthetic satisfaction".

50. In secondary education aims are expressed in terms of extension of basic preparatory education, intellectual development, and preparation for further education and employment, but with increasing emphasis on attitudes, skills and knowledge essential to effective living and cultivation of self-confidence, sense of responsibility and maturity as intellectual, social, emotional and spiritual beings. According to Baker [8], all four provinces have a common concern for recognition in secondary education of the implications of a continually changing world, of the importance of human and social worth and values, of positive attitudes toward work and leisure and of the need to take account of individual differences and goal preferences among students. To illustrate the concern over a changing society Manitoba emphasizes "growth and development so as to achieve confidence and capacity to cope with a problematic future world, and to live and work with others in a society in which values and life styles will become increasingly complex and changeable". Likewise Saskatchewan reflects the theme of human worth and social values by pointing to the importance of "positive influence on the behavior of students as adolescents and later as adults in all aspects of living - as wage earners, members of families, citizens of communities, and as unique human beings". In similar vein, British Columbia enunciates a position with respect to work and leisure by its reference to "provision of opportunities for further education and employment, for the development of personal interests and avocational values, and for the development of positive habits and attitudes to work". Alberta puts the situation in perspective as regards the focus on students as unique individuals in its reference to "serving more adequately the needs of every individual through increased flexibility in organization of students and staff".

51. At the post-school, or more precisely, beyond the scope of basic education, public education authorities have not been disposed traditionally to define or prescribe educational purpose. Having been influenced in their origins by European and United States models, Western Canadian universities basically reflect functions of those traditions of higher education, the teaching of disciplines and conducting of research. This interpretation of purpose is put by a Western university president in his 1974 convocation address, from which McCalla [9] quotes as follows:

> The objectives of a university education are easy to state, difficult to attain, and completely defy numerical analysis. These objectives are now, and have been for over a thousand years, the preservation and transmission of knowledge through teaching, and the discovery of knowledge through research.

52. Within this broad frame of reference, Western Canadian universities have, each in its own way, evolved institutional characteristics which reflect a response to the environment in which each lives and grows. As a consequence, while all adhere to the central roles of teaching and research, each has features unique to it which are attributable to its own interpretation of universal purposes. Moreover the university stands alone among educational institutions in its mandate and responsibility to do research.

53. Other post-secondary institutions, colleges, technical institutes, community colleges which have grown up over the past several decades as a response to more specific educational needs are predicated on purposes more intimately associated with the immediate aspirations of people in vocations, self-improvement, aesthetics and general interest. Perceived as an alternative to university education, these institutions tend to pursue specific objectives of education and training, and present less of the general education purpose of universities [10].

54. Summing up his analysis of educational purposes, aims, objectives and goal-setting, Baker [11] refers to two over-riding motivations in Western Canadian education, first, "an insistent personal-social emphasis", and second, "an orientation to the future". Portents of the future as regards reformulation of educational goals may well be seen in the following extracts from reports, studies and statements emanating from provincial authorities and sources:

> The function of the school system in a democratic society is to provide the type of education for every citizen that will make him an effective person . . . The education system must prepare each person for a society with changing environments, goals and priorities. (British Columbia)

> The pervasiveness and rapidity of change in things, or technological change, have placed stresses upon the relationships of people to each other and on people to things . . . The goals of education must meet the needs of the individual and society. (Alberta)

> Purposes can no longer be established as a body of absolute values, nor only from philosophical theory except where that theory relates meaningfully to the facts of personal and social experience, to what is relevant to people as individuals and to the successes, failures and goals of society. (Saskatchewan)

> The education system must satisfy the needs of society for an educated and productive citizenry. These needs, as those of society, are changing at such a pace that we must enhance the capacity of the system to educate for social change. (Manitoba)

55. There is little doubt that the processes for reformulation of purposes, or improved strategies for goal-setting and of planning techniques are crucial to the directions in which Western Canadian education continues its evolution, and to the enhancement of its relevance to the society of which it is both a servant and an agent of change.

B. Attendance in Educational Institutions

1. K to XII - Basic Education

56. The school year prescribed for purposes of basic education, is typically, though not universally, confined within the period September 1 to June 30 in all four provinces and varies in length from 195 to 200 days. A school day is normally defined as five hours of study between the hours of 9:00 o'clock in the morning and 3:30 or 4:00 o'clock in the afternoon. Kindergarten attendance is typically half-time. Except for a limited number of statutory holidays, school boards are empowered to adapt operational schedules of their schools to local circumstances, subject only to the minimum number of days prescribed by the provincial ministry of education. That number includes days authorized for meetings of teachers for purposes of planning and organization of school programs, in-service activities and for non-classroom features of the curriculum, for example, field trips, student exchange and camping.

57. In the traditional pattern of organization, the school year consists of two terms, a fall term ending in December and a winter-spring term ending in June, with vacation periods at Christmas and at or near Easter in spring. In this pattern students ordinarily pursue their subjects of study for the full year. However, at the secondary school level various forms of semester organization have appeared in all four provinces in the past decade or more. In schools in this pattern, the number of subjects taken by a student in each semester is approximately half the number which would be taken in a year-long course. By doubling of class and study periods, a student completes a normal year's work for the subjects taken in the semester. The number and selection of subjects is therefore a matter of determination for each semester, depending upon the program of a student, and his individual needs and upon the number of subjects or courses available in a school. Except in Alberta where virtually all secondary schools have been semestered for some years, the development of semester organization in the provinces (including Saskatchewan where more than half of the secondary schools are organized under various forms of the semester system) remains a matter of continuing experimentation. Allowing for variations in the approach to semester organization among and within the provinces, the central objective is common to all - to maximize flexibility in selection of subjects or courses, to promote individualization of learning experience, including independent learning, and to optimize deployment of the human and material resources of a school.

58. School attendance is compulsory between the ages of seven and sixteen (fifteen in British Columbia), subject to exceptions which vary from province to province. Exemptions which may be granted usually relate to special circumstances in individual cases where health and location are factors or when suitable alternative instruction is available. School boards may admit students to primary schools at ages five or six and it is almost universal practice for students to enroll in the first year following kindergarten if they are or become six years of age during the fall term of the year in which they are registered for attendance. Although compulsory attendance laws remain in force, traditional procedures for enforcement have become virtually unnecessary and have been replaced by functions which are more typical of a welfare worker than of the traditional truant officer. Compulsory attendance laws are not generally applicable to kindergarten and secondary education.

2. Tertiary and Post-Secondary: Admissions and Transfer

59. Admission policies of universities, which are entirely in the prerogative of these institutions, have been traditionally based on formal graduation from secondary schools, that is, after completion of twelve years of basic education. For many years, however, most universities have made provision for admissions of "mature" or "adult" students, ordinarily persons who have been out of the educational system for several years and who either have not successfully completed secondary school or whose level of standing was below that normally applicable to other students. Apart from minor variations of detail in individual institutions, all recognize and admit students from any province and from other countries, subject to limitations of accommodation and to contingencies arising from fluctuations in the level of demand for certain programs, usually in professional faculties, such as medicine, dentistry and law. Admission to graduate programs is much more restrictive, mainly by reason of rigorous academic requirements, and by limitations on the number of student places available.

60. Other institutions such as technical institutes and the colleges, generally regarded as schools in the tertiary category, vary considerably in their admission requirements, but the standards required for post - secondary programs are similar to those of the undergraduate faculties of universities.. The customary requirement for admission to trades courses is typically predicated on completion of the tenth or eleventh year of basic education, although there are numerous variations depending upon the course concerned and the objectives of individual applicants.

61. Policies on transfers of students are matters of institutional determinations but tend to reflect formal and informal arrangements among the several institutions, arrived at in consultation with each other through the medium of matriculation boards or joint committees of institutions and education departments. This type of collaboration has recently been supplemented in Alberta with the establishment of the Council on Admissions and Transfer, whose mandate includes the whole range of matters pertaining to articulation, transfer and admission within the post-secondary sector.

A trend of increasing mobility among students, particularly at the university level, reflects a growing liberalization of policies which permits students to complete undergraduate and graduate programs by attendance at two or more universities. In recent years, some universities and institutes of technology have entered into arrangements for transfer of post-secondary credits, enabling students to move from one institution to the other in parallel fields, for example, engineering, health sciences, and the like.

3. Enrolment Trends - All Levels of Education

62. The plateau in educational enrolment of the period of the depression and World War II gave way in the early 1950's to a wave of expansion, first in the elementary schools and in due course, in secondary and higher education. In the period 1951 to 1971, a higher birth rate, a revival of immigration and a buoyant economy combined to produce an over-all increase of 54 percent in the population of the Region, details of which are shown in Table 1. Table 2 shows that in the same period the population in the age groups 5 to 14 and 15 to 24 years increased by 88 and 89 percent respectively.

TABLE 1

TOTAL POPULATION AND PERCENTAGE INCREASE

SELECTED YEARS 1951 TO 1971

Total Population (Thousands) - Percentage Increase from Previous Decade ( )

Years	British Columbia	Alberta	Saskatchewan	Manitoba	Western Region
1951	1,165	940	832	777	3,713
1961	1,629 (40)	1,322 (42)	925 (11)	922 (19)	4,808 (29)
1971	2,185 (34)	1,628 (22)	926 (0)	988 (7)	5,727 (19)

Source: Statistics Canada, Population, 1921-1971.

TABLE 2

POPULATION AND PERCENTAGE CHANGES
IN AGE GROUPS 5 TO 14 YEARS and 15 TO 24 YEARS
SELECTED YEARS 1946 TO 1971

a. Population 5 to 14 Years (Thousands)
Percentage Change from Previous 5-Year Period ( )

Years	British Columbia		Alberta		Saskatchewan		Manitoba		Western Region	
1946	141		145		157		120		563	
1951	178	(26)	170	(17)	156	(-1)	133	(11)	637	(13)
1956	249	(40)	223	(31)	177	(13)	164	(23)	813	(28)
1961	322	(29)	289	(30)	201	(14)	192	(17)	1,004	(23)
1966	386	(20)	337	(17)	213	(6)	205	(7)	1,141	(14)
1971	434	(12)	363	(8)	201	(-6)	201	(-2)	1,200	(5)

b. Population 15 to 24 Years (Thousands)
Percentage Change from Previous 5-Year Period ( )

Years	British Columbia		Alberta		Saskatchewan		Manitoba		Western Region	
1946	158		141		156		128		583	
1951	150	(-5)	150	(6)	131	(-16)	116	(-9)	547	(-6)
1956	173	(15)	163	(9)	127	(-3)	118	(2)	582	(6)
1961	208	(20)	188	(15)	130	(2)	130	(10)	656	(13)
1966	288	(38)	231	(23)	150	(15)	155	(19)	824	(26)
1971	386	(34)	303	(31)	165	(10)	182	(17)	1,036	(26)

Source: Statistics Canada, Population, 1921-1971.

63. In terms of school enrolments, Table 3 indicates the growth of elementary-secondary enrolments from 863,000 in 1955-56 to 1,520,000 in the peak year of 1970-71, followed by a very gradual down-trend of 1.3 percent over the next three-year period to 1973-74. At the same time enrolments in colleges, technical institutes and universities, as indicated in Table 4, rose from 24,000 in 1955-56 to 122,000 in 1970-71, followed by a decline in universities in the next two years. By reason of continued growth in the non-university sector, over-all post-secondary enrolment in 1973-74 reached a new peak of 123,000.

TABLE 3

FULL-TIME ENROLMENT IN ELEMENTARY AND SECONDARY SCHOOLS

SELECTED YEARS 1955 TO 1973

(Thousands)

Years	British Columbia	Alberta	Saskatchewan	Manitoba	Western Region
1955-56	260	242	189	172	863
1960-61	347	305	219	206	1,077
1965-66	463	378	246	242	1,329
1970-71	563	442	252	263	1,520
1971-72	559	448	249	260	1,516
1972-73	571	445	240	254	1,510
1973-74	573	441	231	248	1,493

Source: Statistics Canada

64. Full-time enrolment in all levels of the educational system, excluding students in vocational training courses and private commercial colleges, grew from 887,000 in 1955 to 1,616,000 in 1973. In 1961, 23.2 percent of the entire population was in full-time attendance in educational institutions. By 1971 this figure had risen to 28.7 percent.

TABLE 4

FULL-TIME ENROLMENT IN POST-SECONDARY INSTITUTIONS

SELECTED YEARS 1955 TO 1973

(Thousands)

a. Non-University

Years	British Columbia	Alberta	Saskatchewan	Manitoba	Western Region
1955-56	1	2	2	1	6
1960-61	2	3	3	2	10
1965-66	4	5	2	2	13
1970-71	13	11	2	3	29
1971-72	13	13	2	4	32
1972-73	13	13	3	3	32
1973-74	13	16	3	3	35

b. Universities and Colleges

Years	British Columbia	Alberta	Saskatchewan	Manitoba	Western Region
1955-56	7	4	3	4	18
1960-61	13	7	6	6	32
1965-66	22	14	11	11	58
1970-71	31	30	15	17	93
1971-72	29	29	15	17	90
1972-73	28	28	13	17	86
1973-74	29	29	13	17	88

Source: Statistics Canada

65. Other enrolment tendencies may be summarized as follows:

- Elementary enrolments grew rapidly in the 1950's, at a decelerating rate in the 1960's and peaked in all four provinces between 1968 and 1971. Secondary enrolments expanded rapidly after 1955, and at a decelerating rate after 1970, peaking in Manitoba and Saskatchewan in 1971-72, with the probability of peaks in Alberta and British Columbia after 1975. The decline of elementary and secondary enrolments is attributable mainly to a falling birth rate.
- University enrolments increased five-fold from 18,000 in 1955 to 92,000 in 1970, then declined in the next two years to 86,000 in the fall of 1972, followed by an increase to 88,000 in 1973. The apparent temporary drop in university attendance is in part attributable to the economic recession in the early 1970's and to some doubts among students concerning choice of university education against other educational options then open to them.
- Post-secondary enrolments in non-university institutions which rose from 6,000 in 1955 to 32,000 in 1971 (and to 35,000 in 1973), at a rate even more spectacular than in the universities, did not experience the decline of these institutions. It is generally conceded that many potential university students selected this alternative as a more likely means of qualifying for employment in a period of relatively high unemployment and when industrial demand indicated a higher priority on qualified technicians than on professionally educated personnel. Because the institutes of technology did not appear on the educational scene in significant numbers until the 1960's, a long-standing imbalance in the ratio of professional personnel to trained technicians in the labour force tended to persist for several years, an imbalance apparently quickly recognized by students during a period of recession.
- The emergence and wide-spread acceptance of the concept of recurrent and continuing education has produced a proliferation of short-term training and retraining programs in the manpower field and a major development of community colleges which offer a wide variety of courses keyed to adult needs and interests, academic up-grading, skill-training, aesthetic and leisure-time pursuits and general interest activity. Enrolments are not as readily defined as in institutions normally requiring full-time attendance. However, the growing popularity of part-time attendance is exemplified in Table 5 with respect to universities in which part-time registrations in credit courses alone almost quadrupled between 1962 and 1971.

4. Participation and Retention

66. Educational authorities at the provincial and local government levels, together with their administrative and professional staff, including school principals and teachers, have traditionally pursued policies to encourage young people to continue their education as long and as far as their native

TABLE 5

PART-TIME UNIVERSITY ENROLMENT [1]

SELECTED YEARS 1962 TO 1971

Years	British Columbia	Alberta	Saskatchewan	Manitoba	Western Region
1962-63	2,086	2,295	1,?''	2,025	7,653
1965-66	3,214	3,474	2,563	2,465	11,716
1970-71	6,971	7,775	3,493	7,523	25,762
1971-72	7,974	8,410	3,543	8,558	28,485

[1] Enrolment in credit courses only.

Source: Statistics Canada

abilities, aptitudes and interests permit and warrant in the context of facilities and programs available to them. General attitudes of parents and the public at large have been strongly supportive of these policies and of the measures necessary, including major financial commitments, to give effect to this objective.

67. In terms of school attendance, Table 6 shows in the period 1960 to 1972 that at the pre-elementary (kindergarten) level, participation rose from 13.3 percent to 60.5 percent of the relevant age group, the five year olds. Elementary grade participation of the age group 6 to 13 years held steady at approximately 105 percent to 1970 and then fell slightly; secondary schools increased their attendance from 79.9 to 95.6 percent of the age group 14 to 17 years by 1970, then dropped to 91.3 in 1972. At the post-secondary level, participation in university education rose from 7.5 percent to 14.8 percent of the 18 to 24 year age group in 1970 but fell to 12.8 in 1972, and non-university from 3.4 percent to 5.8 percent of the 18 to 21 year olds in the same period.

68. Retention within the educational system beyond the limits of compulsory attendance legislation tends to be influenced by the attitudes of parents and students toward education and by prevailing social and economic conditions.

69. Experience at the kindergarten level, where attendance is not compulsory, indicates that parental motivation is ample to ensure substantial participation and regularity of attendance. The enrolment trend shown in Table 6 is expected to continue, more or less at the rate at which facilities and qualified teachers become available, and as strategies are evolved to solve the problems of servicing sparsely populated rural areas.

TABLE 6

FULL-TIME ENROLMENT BY LEVEL AS PERCENTAGES OF RELEVANT AGE GROUPS

SELECTED YEARS 1960 TO 1972

Province and Year	Total Enrolment		Elementary and Secondary					Post-Secondary		
			Pre-Grade I	Grades I-VIII	Grade IX & Higher	Blind & Deaf	Sub-Total	Non-University	University	Sub-total
	0-99+ Years	5-24 Years	5 Years	6-13 Years	14-17 Years	6-17 Years	5-17 Years	18-21 Years	18-24 Years	18-24 Years
British Columbia										
1960-61	22.6	70.3	12.9	105.6	83.9	0.1	91.7	2.1	9.6	10.8
1965-66	25.9	73.6	33.8	106.1	87.8	0.1	97.3	2.4	13.3	14.8
1970-71	27.9	74.4	52.1	105.2	97.0	0.1	100.8	5.2	14.4	17.5
1971-72	27.0	71.8	56.6	102.8	91.7	0.1	97.8	4.7	13.2	15.9
1972-73	27.0	72.5	65.5	103.8	92.2	0.1	99.3	4.8	11.8	14.6
Alberta										
1960-61	24.4	68.8	1.9	106.7	84.9	0.04	91.3	3.6	5.0	7.9
1965-66	27.4	72.0	17.7	103.9	90.4	0.03	92.6	5.3	10.3	13.5
1970-71	30.3	74.2	28.8	104.5	97.8	0.03	96.8	7.8	16.4	21.1
1971-72	30.0	73.4	42.5	103.0	95.0	--	96.5	8.9	15.3	20.5
1972-73	29.4	72.2	46.3	102.9	93.4	--	96.3	9.0	14.2	19.5
Saskatchewan										
1960-61	24.8	69.7	14.9	106.2	76.8	0.1	90.4	5.1	6.8	9.8
1965-66	27.2	72.2	17.1	105.0	85.8	0.1	92.3	3.1	11.7	13.6
1970-71	28.6	72.2	22.4	104.6	91.6	0.1	94.6	3.6	13.7	15.9
1971-72	28.7	72.7	31.3	104.4	89.6	0.1	94.9	3.8	14.3	16.6
1972-73	27.9	70.5	33.2	104.6	87.0	0.1	94.5	3.9	12.0	14.5

Province and Year	Total Enrolment		Elementary and Secondary					Post-Secondary		
			Pre-Grade I	Grades I-VIII	Grade IX & Higher	Blind & Deaf	Sub-total	Non-University	University	Sub-total
	0-99+ Years	5-24 Years	5 Years	6-13 Years	14-17 Years	6-17 Years	5-17 Years	18-21 Years	18-24 Years	18-24 Years
Manitoba										
1960-61	23.6	68.1	30.4	105.4	70.1	0.02	89.6	3.5	7.4	9.5
1965-66	26.4	71.8	42.8	105.6	82.2	0.1	93.7	3.4	11.4	13.5
1970-71	28.3	74.1	90.8	105.0	92.7	0.1	100.3	4.9	14.0	17.0
1971-72	28.4	73.3	98.8	105.0	88.5	0.1	99.6	5.6	14.0	17.3
1972-73	27.7	71.7	101.2	103.0	90.1	0.1	99.0	4.6	13.5	16.2
Western Region										
1960-61	23.7	69.3	13.3	106.0	79.9	0.05	90.9	3.4	7.5	9.5
1965-66	26.6	73.6	33.8	105.2	87.3	0.06	94.4	3.6	11.8	14.0
1970-71	28.9	73.9	52.1	104.9	95.6	0.05	98.5	5.6	14.8	18.2
1971-72	28.4	72.7	55.3	103.5	91.7	0.1	98.0	6.0	14.1	17.6
1972-73	27.9	71.9	60.5	103.5	91.3	0.1	97.5	5.8	12.8	16.3

Source: Statistics Canada, Education in Canada, 1973, Table 2, p. 210-211.

70. Elementary and secondary education are universally regarded as essential basic education, although retention after the tenth or eleventh year tends to fluctuate somewhat. In periods of strong demand in the labour force, as has been the case since 1971 the drop-out rate tends to rise, for it is possible under labour legislation in most provinces to employ persons at age 16; moreover, on completion of the tenth or eleventh year of school, students are qualified to proceed to training in trades courses (normally of less than one year's duration), and then to enter the labour force. In periods of decline in employment opportunities, retention at the secondary level remains high and has tended to increase with the expansion of programs designed to correspond with the individual characteristics and interests of students.

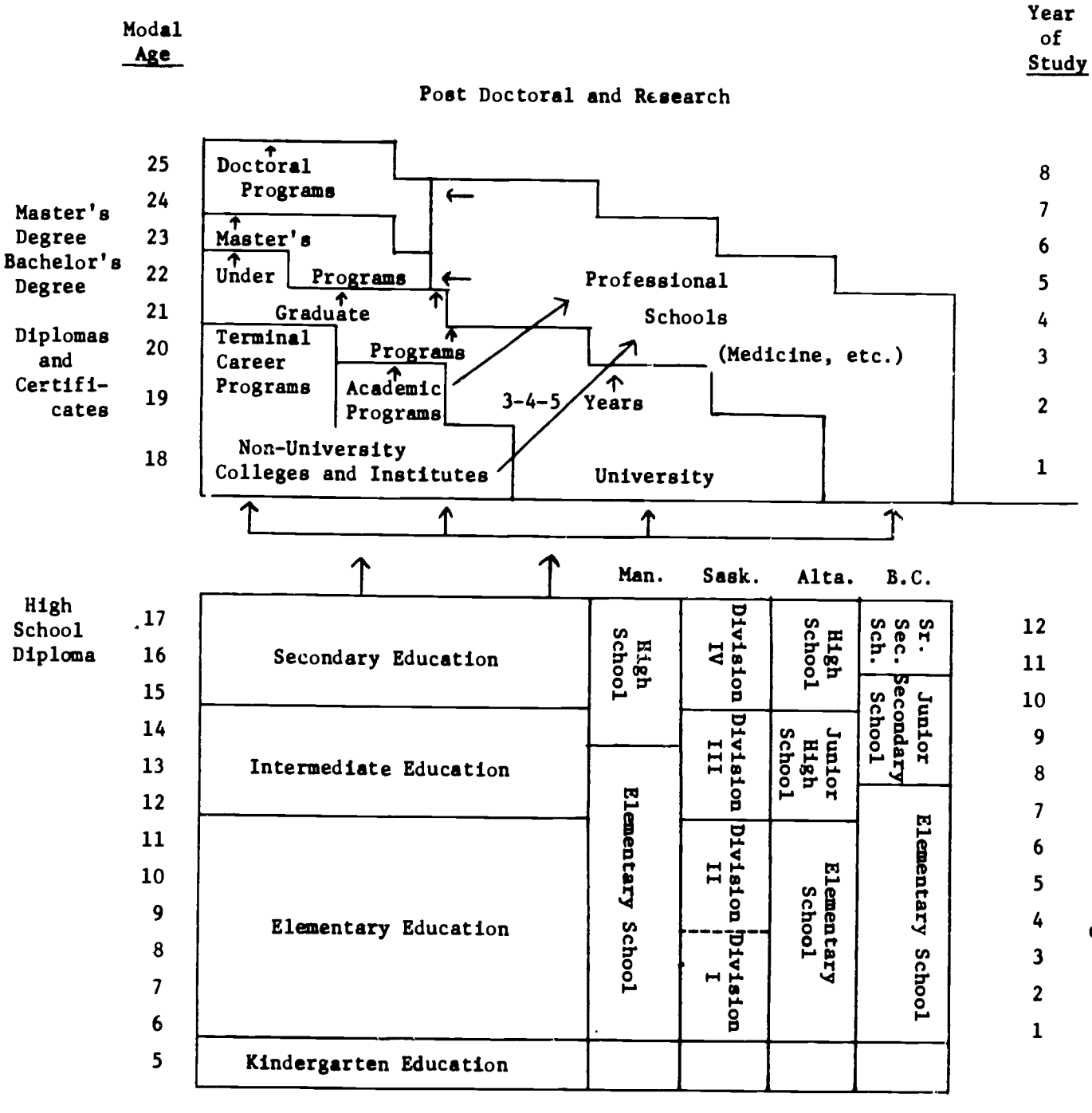
71. The extent to which post-secondary education is to become a feature of universal general education remains a question for the future. Universities and other post-secondary institutions encourage and admit, as a matter of policy, all students who have completed secondary education and whose academic fitness meets their standards. Policies of public authorities, provincial and federal, in part reflected by their programs for funding and administering student assistance, are predicated on the principle that every student whose ability and motivation enable him to profit from higher education should not be prevented from doing so by reason of lack of personal resources to finance his education. In essence, participation in higher education lies in the decisions of students and their families, influenced to some extent in their choice of options, academic or professional, by financial incentives, future prospects and expectations in the vocational field, and by social and economic influences emanating from the society around them. In periods of economic expansion and industrial development, professional education in scientific, engineering and resource development fields tends to be attractive and to influence decision-making of students. In like manner, public policies emphasizing advancement of social services, for example, in health, education and welfare, promote the interest of students in the social sciences and professional education related to these fields. These influences, part and parcel of post-war developments in science, technology, industrialization, urbanization, evolution of the welfare state, changing social values and societal structures, have been powerful forces in shaping both the character of higher education, and more importantly, the decisions of students in charting their educational plans. One of the consequent by-products has been a trend away from the traditional academic programs, conventionally in Western Canada those leading to degrees in the Liberal Arts, and instead a tendency to elect professional programs with either a scientific or social science bias.

C. Structure and General Characteristics of the Educational System

72. The general structure of education in the Western Region, set out in Chart I, is basically similar to the pattern of organization in other Canadian provinces. Differences among the provinces, including those of the Region, are more in matters of detail than in over-all concept of the educational enterprise.

CHART I

GENERAL STRUCTURE OF EDUCATION



73. Although the Chart presents the principal components of education in terms of levels within the system, and indicates approximately the route or routes a student may follow from kindergarten to graduate study, it may be useful to elaborate certain features which are not immediately apparent.

74. Basic education, ordinarily including kindergarten, elementary and secondary education comprises a 12 or 13 year program of studies for the age group 5 to 18 years. Exit points to other education and training or to the labour force initially occur at age 15 to 16 years or on completion of eight or nine years of the educational program at this level. Although the various student-grade classification systems (8-4, 6-3-3, 7-3-2) suggest the traditional notion of progress on the basis of one-year-one-grade, schools are encouraged to regard the term 'year' as referring to a curricular component of studies rather than to a period of time, and therefore, to develop systems of continuous progress keyed to individual differences of students. In elementary education for example, students may in practice complete a three-year program in a two, three or four-year period, depending upon the capabilities of the students and the program variations selected by the teachers. Although legislation does not prescribe attendance beyond age 15 or 16, educational authorities have for many years given strong encouragement to completion of at least 12 years of formal basic education, including graduation from secondary school.

75. Given the normal distribution of native abilities of students, it has been necessary for the schools to develop a variety of program adaptations for students who are unable to master basic secondary programs. The objective has been to provide every student with a program which will ensure maximum personal growth and development at this level and a foundation for such further training as his natural attributes and preferences dictate, whether in higher academic education or in vocationally oriented preparation in keeping with ability and interest.

76. Post-school education, generally defined as that following basic education, embraces both post-secondary education (degree programs of the universities and the one-year certificate and two or three-year diploma programs of technical colleges requiring secondary school graduation) and a wide variety of vocational or special interest programs based on various admission requirements. Other post-school education, including trade and vocational courses, variously referred to as tertiary, continuing and adult education, is provided in community colleges, technical institutes, public and private secondary schools, trade schools, and through correspondence, extension and apprenticeship programs.

77. Education of handicapped students, traditionally assigned to specialized institutions, for example for the blind, deaf and retarded, has in recent years tended to become a shared responsibility of these institutions and the regular school system. Special schools, usually administered by provincial authorities, serve the needs of those severely handicapped, physically, mentally or emotionally, but the basic school system is gradually expanding services for students whose handicaps are less severe and amenable to modified programs which can be given in the educational environment of the regular school.

1. Basic Education - K to XII

Types of Systems

78. Although its origins lie in the private denominational schools of the nineteenth century, the system of basic education in 1974 is almost entirely in the control and administration of public authorities. The private schools presently in operation, over half of which are in British Columbia, serve less than 2.7 percent of the school population of the Region, mainly at the kindergarten and secondary education levels. While some of the private institutions retain a nominal denominational identity, the religious affiliation of students is not usually a requirement for admission. They are financed from private sources, tuition fees and to a greater or less extent from government grants or allowances, depending on policies of the provinces concerned.

79. In the public sector of education, two provinces (Alberta and Saskatchewan) have statutory provision for denominational separate schools. The right to establish a separate school district lies with the minority religious group, Roman Catholic or Protestant, as the case may be, within a public school district in which the majority of the resident ratepayers are respectively of Protestant or Roman Catholic faiths. While the number of separate school districts is small, predominantly Roman Catholic and located in larger communities, these schools afford their supporters a school program with a more pronounced and specific denominational orientation with respect both to the general curriculum of basic education and to religious instruction as such. The right and requirement to attend a separate school is predicated on the religious faith of an individual family, but it is not uncommon for the school boards of public and separate school districts to enter into tuition agreements under which students may be admitted from one system to the other. Both systems are subject to the same requirements under provincial law and regulations with respect to educational programs, administration, financing and general management. Although there are no publicly administered denominational schools in British Columbia and Manitoba, some provincial financial assistance is given by those provinces for certain services to students, for example, textbooks. In general, private schools experience considerable difficulty in the face of escalating costs and limited revenues.

General Features of the Educational Processes

80. Languages of Instruction. Historically the most widely used language of instruction in the Western Provinces is English. However, in recognition of the bilingual (English-French) tradition of Canada and the multi-cultural composition of the population of the Region, the provinces have made various provisions for other languages, either as languages of instruction or as second languages. French, taught for many years as a second language, mainly at the intermediate and secondary levels, has been formally adopted in recent years in three provinces as a language of instruction in schools where the parents and local school boards indicate a desire to implement such programs

under the relevant provincial regulations. Typically these regulations permit use of French as the language of instruction for 75 to 100 percent of instruction at the primary level, with gradual introduction of English to a division approximating half-time for each language in the upper grades.

81. The tendency of recent years toward greater flexibility in the choice and use of languages in the educational program is further exemplified by Manitoba's authorization of Ukrainian as a language of instruction and by the increasing attention being devoted in the Region to the use of native languages in schools which serve the Indian population. Moreover, policies concerning the teaching of second languages, for many years confined mainly to the secondary schools and to a limited number of languages, have tended in recent years to enhance the scope of planning and decision-making by local school authorities. Under present regulations schools may, subject to the extent of local interest and to other program priorities, select from a broad list of language options and provide instruction at the grade levels desired.

82. School Curricula. Development and prescription of courses of study have been traditionally the prerogative of provincial ministers of education, whose departmental officials are charged with the responsibility for giving direction to teachers and school boards in matters of the curricular program. However, the growing professionalism of teachers, together with mutual recognition of the importance of planning in terms of student needs, have resulted in a gradual process of decentralization of these functions. Typically the current role of the ministry of education is to define the broad framework of educational objectives, policies, and standards applicable to the school system. This role of leadership, itself predicated on extensive consultation involving a network of committees of educators, administrators and often other members of the public, results in publication of departmental policy statements, curriculum guides, outlines of courses of study and professional bulletins with respect to development and organization of class curricula and instructional plans. Individual teachers and teaching staffs have wide latitude in selection of course content and teaching techniques, and use the departmental materials as general guidelines for the preparation of their own plans in the context of the school or system in which they teach. Although courses of study are issued by the ministry of education, teachers expect and are expected to modify, add or delete, and to develop the teaching and learning activities which in their judgment are most appropriate to the needs and circumstances of their classes.

83. Role of the Teacher. Having considerable flexibility in developing classroom curricula, teachers are encouraged to use a wide variety of teaching techniques and to experiment with new and innovative practices. Although it is customary in the elementary years for individual teachers to have responsibility for a class of students for a specified period of the school year, they may have the assistance of other teachers or teacher aides, or may function as members of a group in team-teaching. Subject to physical limitations of the school plant itself, as is the case in older buildings which do not have open space, moveable walls or ready access to learning resources such as library and electronic aids, teachers are trained, counselled and given every encouragement to apply methods which involve individual, small group and larger class learning experience. The role of

the teacher is seen as the interpreter of educational objectives, the analyst of a student group, the planner of the learning experiences of a class, the guiding influence and counsellor of the students and the evaluator of learning among the students for whom each is responsible. As students move progressively through the intermediate and secondary school years, their learning experience involves larger numbers of teachers, for at these levels the teachers tend increasingly to be specialists in particular subject fields.

84. Class Size. The traditional concept of class size as the measure of the number of students assigned to a teacher for instructional purposes is gradually giving way to a measurement in terms of student-staff ratios. While classrooms in most of the older schools were designed for classes of 25 to 35 or more students the newer schools are designed with more emphasis on instructional areas of various types and sizes, often with moveable walls. At the same time, staffing of such schools tends to be based on requirements of the program rather than on the traditional basis of one teacher to a classroom with an assigned group or number of students. A teacher may at times be involved with groups of various sizes, depending on the teaching purposes relevant to a group. The tendency therefore is to relate the total enrolment to total staff in terms of student-staff ratios. The ratios of 35 to 40 students of a quarter century ago have gradually been reduced to ratios approximating 22 at the elementary level and 17 to 18 at the secondary level.

85. Evaluation and Standards. Ministries of education, traditionally responsible for maintenance of standards in the performance of the educational system, primarily by devices of inspection and external examinations, have developed other strategies in keeping with the general trend toward decentralization and local autonomy. Evaluation of progress and promotion of students have been delegated to the teaching staff and departmental examinations virtually abandoned. In some provinces in which external examinations are prepared essentially for other purposes, for example, for students who are studying privately, a school may use these tests as an additional measure of student achievement. Diplomas or certificates of standing, together with transcripts of 'school' marks, are accepted by departments of education and other educational institutions as evidence of the educational status of a student. Although the provincial school inspectors have been largely replaced by locally employed superintendents and supervisors, or by provincial superintendents of education, provincial supervisors and consultants may perform functions which are regulatory as well as developmental. While evaluation is an integral feature of supervision, its purpose is focused on identification of ways and means for implementation of qualitative improvements rather than on rating for purposes of official reports.

86. Discipline. Relationships between teachers and students, in part set out in school law and regulations of departments of education, are based on the principle of delegated parental authority. For example, departmental regulations of Saskatchewan, essentially in common with the other provinces, provide that a student "shall conform to the rules of the school and submit to such discipline as would be exercised by a kind, firm and judicious parent",

and "shall be accountable to the teacher for his conduct on the school premises ...". Traditional forms of enforcement, such as the use of the strap, suspension, and exclusion, have tended in practice to give way to more positive methods of moulding behavior patterns by cultivating desirable attitudes and self-discipline as features of personal growth and development. Corporal punishment has always excluded any form of violence beyond reasonable use of the strap, and even the latter has become virtually non-existent in schools of the Region (in British Columbia, it is prohibited by law).

Kindergarten Education

87. The concept of educational services at the pre-primary level, though formally recognized in provincial legislation as early as 1890 as an optional feature of the school system, has only in recent years achieved a priority status comparable to other components of publicly supported education. With few exceptions, notably in major urban school systems, developments of the period to the late 1960's resulted from the initiatives of voluntary and private agencies.

88. By definition pre-primary education was perceived as a kindergarten program, loosely modelled on Froebelian philosophy, for children in the age range four and one-half to six years and based on half-day or half-time non-compulsory attendance in the year immediately preceding admission to the first year of primary education in the elementary school. Notwithstanding the informal bases for organization of kindergarten classes, and the limited involvement of public authorities in administration and in financial support, increasing participation in kindergarten education over the years, clearly reflected the importance attached to it by many parents. In 1973-74, 50 to 80 percent of the children of kindergarten age, depending on location, attended classes.

89. Philosophical argument of the past concerning a rationale for kindergarten education - whether to be oriented to educational as opposed to social experience - has abated, probably hastened by the necessity of coming to gripe with issues of aims and objectives in designing a program in the public sector. Policies in Western Canada reflect a fusion of the positions of the traditional and progressive educators. Kratzmann cites a statement from British Columbia which in effect summarizes the situation in all four provinces:

> There seems to have been a resolution of two slightly opposing views in the function of kindergartens:
>
> (a) To prepare a child for formal learning experience in Grade I through selected "readiness" experiences which in some cases involved actual reading and arithmetic.
>
> (b) To limit the program to activities largely in the play, social activities and exclude anything that might be labelled as learning to read, etc. ...

> In over-simplified terms, the resolution seems to have been on the basis of treating the child as an individual and meeting his educational needs. This parallels the movement towards the "continuous learning" idea exemplified in non-graded schools, individualized learning plans, evaluation based on personal growth rather than expressed through competitively determined grades. [12]

In similar vein Manitoba's manual Kindergarten states in part:

> This program (Kindergarten) is different from that of the nursery school or the more formal grade one. It is one in which the numerous informal learning experiences help to develop readiness for the various school subjects but it does not include the formal teaching of any of these. [13]

Likewise Alberta's Early Childhood Services is predicated on a less formalized approach to learning at this level. While recognizing the importance of "stimulating mental processes and skills, with particular attention to conceptual and verbal aspects", the importance of "strengthening emotional and social development by encouraging self - confidence, spontaneity, curiosity and self-discipline" is equally stressed. Emphasis is also given to programs for developing and refining parental skills pertaining to the education of their children.

90. Policy statements, curriculum guides and bulletins to educators emphasize that kindergarten is not to be construed in any sense as a downward extension of grade one. Curriculum guides of the four provinces, notwithstanding different modes of presentation, clearly indicate a high degree of commonality of objectives of kindergarten education. All emphasize:

- learning experiences which enable children to become aware of self-identity, and to cultivate feelings of self-worth and adequacy and ability to cope with self;
- opportunities for work and play experience with peers directed toward development of self-reliance, initiative and independence, as well as awareness of the needs and rights of others;
- promotion of socialization and commitment to learning;
- development of awareness of abilities and interests and of means of growth to self-actualization;
- early detection and treatment of physical, mental and emotional handicaps which may affect subsequent educational growth and development.

91. While kindergarten has traditionally occupied the position of a somewhat loose appendage to the elementary school, it can now be said to be an integral feature of basic education and to lie as the foundation upon which primary education rests in the continuum of maturation and educational growth of the individual.

92. Legislative measures, especially those of the past three or four years, with the exception referred to in the next paragraph with respect to Alberta, have assigned the responsibility as well as the authority for administering kindergarten education to the ambit of school boards. At the same time the provincial authorities have extended funding arrangements which enable school boards to provide services in a manner generally comparable with their responsibilities at other levels of basic education.

93. In summary the current status of early childhood education may be described as follows:

- its basic component is a kindergarten year, based on the equivalent of half-time attendance;
- it is a recognized feature of public education for purposes of provincial grant support;
- services are provided and administered by local school boards on an optional basis, except in British Columbia, where legislation in 1974 has made provision of services mandatory. Alberta's approach to kindergarten is unique in that it is perceived as one feature of a larger concept of early childhood education, which in turn is defined in its manual, Operational Plans for Early Childhood Services as "but only one part of a comprehensive system of Early Childhood Services". 14 Distinctive features of Alberta's implementation plan are found in its relationship with other departments of government (for example, Health and Welfare) and grant support to public and private institutions with respect to provision of services.
- the age group for kindergarten is from four and one-half to six years, although in Manitoba a school board is empowered under The Schools Act to "provide, if expedient, a course of instruction and training for children between three and six years of age in nursery and kindergarten schools".

94. Enrolment. Although very recent comparable data on enrolments are not available, participation of the relevant age group in Manitoba rose from 82 percent in 1971-72 to more than 90 percent in 1973-74 (over 80 percent in public schools) and is expected to continue at that level in the foreseeable future. Saskatchewan's participation was 66 percent in 1973-74, but is expected to increase with the implementation of kindergartens in the rural areas under current grant programs. Alberta's percentage in the same year of 53 percent is projected to rise to 83 percent in 1974-75. In British Columbia in 1973-74, 85 percent of the eligible pupils were enrolled in public kindergartens. Recent estimates indicate that private kindergartens accommodate 2 percent of the kindergarten population in Manitoba, 4 percent in British Columbia, 26 percent in Saskatchewan and 27 percent in Alberta.

95. Future Prospects. Kindergarten education is presently at a stage of development characterized by the growing pains of expansion, by continuing study and planning aimed at more precise definition of objectives and program, and by experimentation with systems for delivery of services, more especially in the sparsely populated rural areas.

96. In terms of future prospects, the kindergarten movement in Western Canada has undoubtedly opened up the issue of the wider dimensions of early childhood services, the leading edge of which is apparent in the comprehensive approach initiated in Alberta. In that province, kindergarten is perceived as but one feature of early childhood services, which may comprehend educational or developmental services at even earlier ages and for other services which bear on the growth and development of the young. Somewhat similar tendencies are increasingly apparent in the other provinces, in part peripheral to studies of kindergarten and in part in urgings of special interest groups with respect to nursery schools and child-care centres. The Alberta planning model is predicated on the principles that needs relating to growth and development in early childhood can be identified and priorized and that the educational response or in-put is to be fully integrated with other services, which bear on the condition of children and their families, more especially health and welfare. Accordingly, services are to be provided in terms of "Needs Categories of Children and Their Families", which are broadly defined in terms of handicapped children, disadvantaged children, and normal children. The Alberta model offers the prospect of a comprehensive approach to planning, to involvement and cooperation of other government departments and interested agencies and to systematic ordering of implementation priorities which are consistent with over-all educational planning.

Elementary Education

97. The objectives of elementary education, perceived generally in Western Canada to relate to the six years of education commencing at age six immediately following the kindergarten year, tend in all four provinces to reflect the basic purpose as a process of maturation in terms of discovery of self, of latent powers and interests, and of awareness and growing sensitivity to the environment involving other persons, knowledge, ideas and things. The elementary school years encompass a period of rapid physiological growth and change, of the unfolding and exercise of intellect, of development of emotional patterns and of widening experience in living with oneself and others, more especially outside the family group. Although policy statements emanating from provincial departments elaborate purposes in various ways in terms of aims, objectives and goals, the elementary school in Western Canada is perceived to concern itself with development of the individual potentialities of children with respect to:

- basic skills and abilities, including the language arts, meaning and use of numbers and mathematical processes, simple basic science, expression through artistic media, and maintenance of health. Reading, writing, viewing, listening and speech are to be taught as communication skills which enhance capabilities of students to relate to other persons, to find, organize and use information, and as tools for developing abilities for independent study and learning. In like manner, mathematical skills focus on insights pertinent to the meaning and manipulation of numbers and application of these insights in the processes of gaining knowledge and problem-solving. Elementary science, mainly natural science, provides an introduction to knowledge

and understanding of the laws of nature which are fundamental to discovery and appreciation of the physical environment. Cultivation of artistic skills is intended to provide a means for the young to express their aesthetic tastes and tendencies. Health knowledge at this level is in turn related to development of capabilities for self-preservation and maintenance of physical, mental and emotional powers.

- understandings and insights into the nature of human living, including a sense of the individual as a social being, the interdependence of all forms of life, the influence of the environment on human life, the contributions of the past to the present, mankind's knowledge of the world of science and social development, democracy as a way of life and the role of the individual in the evolution of society. Although knowledge is basic to insight, the emphasis at this level is on growth of understanding of the social, historical and physical environment in which the individual grows, matures and participates in life.
- attitudes which may be cultivated and brought to bear on the quality of life experience. Educational experience, both didactic and through the processes of other curricular activity is purposed to inculcate and cultivate behavior patterns characterized by self-control, initiative, creativeness, cooperation, sense of responsibility, concern for others, reverence with respect to religious faith, and thoughtful judgment and decision-making.
- appreciation of the dignity inherent in the individual both of self and others, of the values of mankind's achievements in science, religion, philosophy, art, music and literature, of the worth of work of all kinds as a major preoccupation of life, and of the manifestations and beauties of nature.

98. The task of the elementary school is to provide the educational environment and learning experience by which growth and development will conform to these ends. Provincial departments of education prepare and furnish curriculum materials to teachers, including courses of study, statements of educational philosophy, aims and objectives, certain core materials, and guidelines with respect to learning resources and teaching methods. However, direction from the education departments is less prescriptive than suggestive. Therefore it remains for the schools and their teachers to make the ultimate decisions and teaching plans with respect to their schools and classes.

99. Curriculum Organization. Courses of study for elementary schools, as distinguished from the curriculum or educational regimen of a school or class, in all four provinces provide for the following 'subject' areas:

- language arts - reading, writing, language usage (oral and written) and spelling;
- arithmetic - numbers, mathematical functions and social arithmetic,

- social studies - history, geography, civics;
- health education - basic physiology, physical education and health practice;
- fine arts - music, art, dancing, drama, literature and manual arts.

100. Up to 40 percent of school time is devoted to the language arts, indicating the major emphasis given to the development of communications skills. Arithmetic, science and social studies in varying proportions by grade level and province, require about 35 percent while health education and fine arts receive the remaining 25 percent of school time.

101. Although individual schools may vary in their selection of course content and time allocations in the several subject areas, they are expected to make provision for the five subject areas referred to above.

102. The School and the Teacher. The physical setting of elementary education ranges from the now rare one-teacher school with three or four to eight classes or grades to the older large multi-room school typically organized on a one-teacher-one-class basis, to the modern open area design of school. Many of the older schools have been remodelled to provide the learning resource centres, laboratories, auditoria, gymnasia and other types of work space which enable the teaching staff to practice a greater variety of teaching and learning methods.

103. Although the traditional didactic methods of teaching, lecturing and class recitation tend to persist, the current trend in curriculum planning and in designing learning experience is toward a combination of large class presentations, small group activities, individual and independent study, and toward increasingly extensive use of learning resources such as libraries, audio-visual materials, field trips (museums, galleries, visits to industries, offices and institutions). The role of the teacher is therefore, either alone or in collaboration with colleagues, to create and organize the setting and substance of learning experience and to direct these activities toward stated objectives.

104. Despite the retention of the grade system of student classification in three of the four provinces of the Region, schools are encouraged to organize their curricular programs to provide for individual differences among students and for promotions based on progress rather than on time spent in school. The concept of continuous progress, with its curricular corollary of units of work in place of units of time, is gradually replacing the traditional one-grade-one-year type of instructional planning. Coincidentally, the concept of 'grade' is giving place in the elementary school to that of a three-year segment of primary education and a three-year segment of subsequent elementary education.

105. Promotions. Evaluation of student progress in the context of the foregoing considerations has made the traditional year-end promotion examinations obsolete. While promotions in elementary schools have long been the prerogative of teachers, current practice is to encourage a wide

variety of measures of progress, including periodic achievement tests, observation of behavioral changes, assessment of activity in class or group learning projects, and completion of individual studies as well as general participation - all fully integrated in the over-all educational plans of the teacher. One of the consequences of this approach to evaluation has been the evolution of a system of reporting which, instead of setting out number or letter grades and ranks as absolute measures, describes in qualitative terms the manner and extent of individual growth and development of the student.

106. Formal requirements for advancement at the end of elementary school are not prescribed by ministries of education. The professional judgments of teachers are relied upon to determine the fitness and readiness of students to proceed to the next level, the intermediate school

107. Enrolment Trends. In the period 1951 to 1971 the age group 5 to 14 years, from which the major part of elementary enrolment is drawn, rose from 637,000 to 1,200,000 or 88 percent, resulting in major expansion of elementary school facilities. The rate of increase commenced to decline in 1956 and, following the peak year of 1971, has levelled off, with moderate decreases in prospect for the next 6 to 10 years. Changes in over-all enrolments vary within the provinces of the Region, as is shown in Table 3. The provinces which rely chiefly on an agricultural economy (Saskatchewan and Manitoba) anticipate larger decreases in elementary enrolments in the foreseeable future than are likely to occur in the more industrialized provinces of British Columbia and Alberta.

108. Future Prospects. To anticipate the future prospects of elementary education in the Western Region is to take note of current trends, problems and issues upon which provincial and local school authorities are focusing major attention. These may be summarized in terms of purposes and objectives of elementary education, qualitative improvements with respect to the teaching-learning processes, reduction of rural-urban disparities in levels of services available, elimination of gaps in services, for example, to the handicapped, and of ways and means for effectual involvement of parents and the public generally in educational planning.

109. Declining elementary enrolments since the early 1970's has reduced very considerably the imperatives of quantitative expansion of school plant facilities and has permitted a realignment of priorities with a new emphasis on qualitative improvements. School authorities will take advantage of this situation, in new building and in existing buildings, to adapt space to programs and functions for which accommodation was not previously available. Evidence that this trend is gaining momentum is borne out by an increasing number of projects being undertaken to remodel present space for purposes of kindergarten classes, expansion of libraries and learning resource centres, art and music rooms, laboratories and other work and study areas designed to facilitate individual and group activities, and for accommodating health and welfare services. Design of new schools reflects current philosophies of teaching and learning in their emphasis on flexibility in allocation and use of space. Coincidentally, there is an increasing tendency to equip the schools with a view to maximizing use of modern audio-visual instructional program.

110. Centralization and consolidation of the small elementary schools in rural areas, a major feature of the period to 1960, has been decelerated in an effort to minimize excessive travel by the younger children. Moreover, the evolution of curriculum organization based on non-graded schools and continuous progress plans has enhanced the prospect of relatively small elementary schools located closer to the homes of the children. The tendency for the future seems likely to be a continuing effort to take advantage of the values inherent in both the non-graded but small rural school and the larger centralized graded school.

111. Recognizing that the potential for improvement of the performance of the elementary school lies in the final analysis in the school itself, in the professional competence and motivations of teachers, the focus of public policy is on ways and means of providing conditions conducive to better teaching and learning. Quite apart from the importance they attach to improved physical facilities, instructional materials and equipment, educational authorities are as a matter of policy investing increasingly in up-grading the qualifications of teachers, and in experimentation and innovation. These are reflected in rising levels of financial support for facilities, materials and equipment, scholarships, bursaries and educational leave, innovative projects and research.

112. Prospects of change in the character of elementary education in the foreseeable future will almost certainly be in the areas of up-graded qualifications of teachers, of further evolution of the non-graded school and the concept of continuous learning, of more extensive use of educational technologies, and of curriculum planning at the school-community level. Recent legislation with respect to education of the handicapped, the effect of which is to establish these services as fully integrated features of the school system, assures that existing gaps in these services will be eliminated as expeditiously as possible. The trend toward decentralization of policy - making functions from provincial departments of education to local school authorities is in part motivated by the desire of educational authorities at all levels to involve the public more fully and directly at the community level in the plans and decisions which apply to the schools of a community. Given the continuing wide-spread discussion of aims and objectives of education, currently the subject of numerous studies, inquiries, seminars under sponsorship of departments of education, teachers' organizations, trustees' associations, parent-teacher groups, business and labour organizations and others, the shape and direction of developments in elementary education will undoubtedly be influenced and moulded to mirror changing expectations and purposes in a rapidly changing society.

Intermediate Education

113. By definition intermediate education refers to the educational program of the seventh, eighth and ninth years of school (in British Columbia, the eighth, ninth and tenth, and referred to as junior secondary) immediately following the six-year program (seven-year in British Columbia) of elementary education. In terms of school, this component of education is provided in junior secondary schools in British Columbia, junior high

schools in Alberta, Division III schools in Saskatchewan and in elementary (seventh and eighth year) and high schools (ninth year) in Manitoba. In communities where enrolments at this level range from 300 to 500 or more, these schools may be separate institutions. Otherwise, and more commonly, they are associated with, and may even share the same building facilities with an elementary school or a secondary school. Because basic education - K to XII - is perceived as a continuum of educational growth and development, intermediate education is not viewed as a separate and discrete entity either in terms of program or in an institutional sense. It is however recognized as a bridge between elementary and secondary education, a period in which some features of elementary education are continued and expanded and in which new elements of learning serve as preparation for secondary education. Intermediate education is not designed to furnish a convenient exit point for students to discontinue school but by its nature and intent tends to encourage students to proceed to secondary education.

114. The objectives of intermediate education take account of the fact that it is concerned with students of early adolescence whose growth patterns, physiologically and psychologically, present them and their teachers with new challenges and problems in the process of maturation and personal development. Its basic purposes, having much in common with those of elementary education, focus on the intellectual, physical, mental, emotional and social growth of the individual on a broader base of learning experiences but in keeping with the nature of the processes of maturation in early adolescence. In this phase of development the importance of positive concept of self and of others is re-emphasized and reinforced toward the end that the individual may be the better enabled to cope with life and the environment in which it is lived.

115. Curriculum guides, courses of study and other publications of departments of education in the Western Region show a high degree of unanimity in their interpretation of the educational purposes at this level. These may be summarized generally as follows:

- to cultivate an environment for learning marked by sympathy and understanding by the teachers and their students concerning the nature and problems of growth and development in this phase of education, and by ample opportunities for successful achievement;
- to continue and extend development of competence in the basic skills and general knowledge on the foundations laid in the elementary school years;
- to widen opportunities for experience in critical thinking and generalization;
- to afford new elements of curricular activities, beyond those of elementary education, which meet the needs and interests of this age group and from which students are given opportunities for making choices in the shaping of their individual educational experiences;
- to widen the scope of opportunities for students to respond to their intellectual and aesthetic needs or interests and to cultivate talents in these areas;

- to explore and develop understandings and appreciations of social, moral and spiritual values;
- to discover special interests, aptitudes and abilities which enable students to make intelligent decisions with respect to their educational and vocational goals;
- to acquaint students with the relationships of their education to living successfully in a changing world.

116. Curriculum Organization. It will be apparent from the foregoing that the educational program of intermediate education is in part an extension of elementary education, in part a broadening of the curricular regimen, and in part the introduction of educational and vocational guidance. In terms of organization of courses, despite some differences in terminology, the first year comprises a group of core subjects including the language arts, mathematics, social studies, health, and physical education, science and in some instances, fine arts (and/or industrial arts and home economics). In the second and third years, the program of subjects is modified by introduction of optional subjects variously including and referred to as industrial arts, business education, home economics, creative writing, a second or third language, public speaking, assorted sciences (astronomy, geology, biology, physics), special music (choral, instrumental, band) and fine arts. The so-called optional subjects are accommodated by adjustments in the time allocation to the continuing basic core subjects. Moreover in the second and third years but more especially in the third year, a time allocation is made for group guidance and counselling, averaging in the order of 5 percent of school time. The over-all intent with respect to curricular program is to ensure that each student will, in so far as his individual program is concerned, include both a continuity of basic core studies as well as an optional component based on special needs, interests or abilities. Moreover, at this stage, guidance services are focused on educational interests and purposes rather than on vocational concerns which will loom larger in secondary education. The basic roles of the teaching staff with respect to curricular planning, evaluation and promotions parallel those of the elementary school, modified to take account of the characteristics of this age group.

117. Enrolments. In as much as the intermediate education age group lies generally within compulsory education legislation in the four provinces, enrolment patterns are similar to those of elementary education. For practical purposes, it may be said that there are virtually no drop-outs at this level. Regional enrolment, which peaked in the early 1970's, has reached a plateau and will show reductions in the next six or seven years except in British Columbia and Alberta where immigration may continue to offset the effects of declining birthrate.

118. Trends. Current trends in the evolution of intermediate education indicate that future developments will be focused on gradual extension of the continuous progress and non-graded school concepts to this level, on an increasing emphasis on basic skills, on expansion and improvement of guidance services, especially in the smaller schools in rural areas, and on modified

programs for handicapped children in this age g[illegible]. Among the latter, the special programs developed in recent years consisti[illegible] of a combination of school study and work experience will almost c[illegible]tainly become a regular feature of educational services at this level. The [illegible]ntermediate sector of basic education is among the most active in terms of [illegible]esearch, experimentation and innovation.

Secondary Education

119. Despite sporadic attempts in the first half of thi[illegible]entury to develop a system which would serve the needs of the great majority [illegible]f students in the secondary age group, approximately 16 to 18 years, the s[illegible]ondary school continued to be essentially academic in orientation until th[illegible]1950's. In this period, basic education was perceived generally to compr[illegible]eight or nine years of schooling, then normally available in the el[illegible]ement[illegible]y schools. Secondary education, existing primarily in larger urban communit[illegible]s tended, by reason of its strong academic emphasis, to eliminate all but t[illegible] intellectual elite, those whose native abilities, motivations and [illegible]pportunities warranted or permitted pursuits in higher education in the universities. The few technical-vocational secondary schools which existed prior to the late 1940's were designed to serve students of more modest intellectual capacities to the end that they might be trained in useful skills, trades and occupations leading directly to employment. However by the mid-1940's, educational authorities and the public generally were fully committed to the objective of basic education comprising 12 years of schooling accessible to all young people. To give effect to this commitment, subsequent legislative action in the provinces has required all school boards to provide free secondary education services to all students of the relevant age group in their jurisdiction. Concurrently, provincial ministries of education devoted a great deal of attention to the evolution of policies by which this goal would be accomplished.

120. Studies, commissions and conferences, some as early as the 1920's, had over the years brought to bear a variety of views concerning objectives, instructional programs and organization for secondary education. In the retrospect of subsequent developments, the more significant influences on policies were those which advanced the notions of secondary education as a fundamental right of all students for a basic period of 12 years of education, of general as opposed to specialized purpose oriented to the individual characteristics and attributes of the students. The concept of the composite high school emerged strongly as the most practical option to replace or supplement the existing academic secondary schools and specialized technical - vocational high schools. Its development was enhanced by the reorganization of school districts into larger administrative units which occurred almost concurrently. These schools, variously referred to as composite or comprehensive schools, appeared in all four provinces mainly between 1950 and 1970, with very considerable financial encouragement of the federal government in respect to construction costs of shops, laboratories, auditoria, gymnasia, libraries and equipment and furnishings necessary to the non-academic aspects of the courses offered. This type of school, offering a wide range of courses with a vocational bias as well as an academic program, [illegible] facilitated [illegible] in rural areas and the development of transportation [illegible] students who might live as far as 35 or more miles

from their school. Many other centralized schools, with enrolments from 100 to 300, consist of expansions of older schools with vocational wings, laboratories and other facilities which permit program offerings which are basically academic but enlarged to include such optional courses as business education, home economics and industrial arts. In the more isolated rural areas which cannot be served by the larger centralized schools, the traditional two, three or four-teacher academic high school has been retained.

121. Objectives. The current philosophy of secondary education which emphasizes the major purpose of education as general rather than specialized also focuses on the student as an individual. For example, Manitoba's administrative handbook [15] reflects a view generally characteristic of the Region:

> A definite attempt is made to provide differentiation to meet the needs, interests and abilities of students.

In a recent Alberta publication [16] reference is made to the secondary school "organized and equipped to serve ... the needs of every individual in it ... This will be brought about through increased flexibility in organization of staff and students, through the use of a greater variety of instructional and learning experiences, and through new concepts in building design".

122. In more specific terms the objectives of secondary education in Western Canada may be summarized as follows:

- to provide the setting and opportunity for all students to continue their education in a form to ensure to every individual a maximum of general and basic preparatory education and of optimal individual development regardless of social or economic status;
- to increase emphasis on learning which contributes to intellectual development, to capacity for critical thinking and intelligent decision-making, and to good mental health;
- to extend recognition to non-academic subjects, some new and some older (for example, industrial arts, music, art) as learning disciplines of equal status with the traditional academic subjects for class credit purposes;
- to permit an arrangement of subjects of study into broad patterns or programs based on individual needs but organized to provide a meaningful unity and whole in terms of preparation for further education or employment. This does not envisage 'tracks' or 'streams', both of these concepts of organization having been largely abandoned. It does, however, take account of the vocational needs of students who are likely to go directly into employment on leaving school.
- to encourage and facilitate a measure of student participation in the design of his educational regimen in the last year or two of his basic education;
- to provide opportunities for studies chosen on the basis of personal interests and avocational values;

- to inculcate social values and appreciation of the democratic culture;
- to encourage individual schools to plan and execute instructional programs adapted to the needs, conditions and aspirations of the communities which they serve.

The secondary school is therefore concerned with creating the opportunities for learning experiences which promote growth of the individual in terms of essential knowledge and skills, of ability to formulate and communicate ideas, of realistic understanding of self, of regard for human worth and values conducive to ethical and moral behavior, of constructive and positive attitudes toward other persons and the societal structures within which life is lived, and of increasing capacities for self-direction and initiative.

123. The Schools. Although the composite or comprehensive high school has during the past 20 years increasingly dominated the field of secondary education development, more than one-third of the enrolment is located in a variety of schools ranging from small rural schools with two or more teachers and an exclusively academic program to large urban high schools with enrolments from 1,000 to 1,500 whose programs are basically academic but usually modified to include business education, home economics and industrial arts. The 'technical high schools' of the 1920's and 1930's, designed in their time for non-academic type students, have been transformed to the model of the composite school or assigned to other specialized purposes in the technical education of adults. Except for a small number of private high schools, which typically offer an exclusively academic program, all secondary schools are administered by local public authorities, school boards or boards of education. Apart from the remnants of Saskatchewan's high school districts (administrative units with school boards responsible for secondary education only), school boards in the Region are responsible for the entire range of basic education services and are therefore under the necessity of planning and administering secondary education as an integral part of the whole range of basic education from Kindergarten to Grade XII.

124. The Secondary School Curriculum. Courses of study in the four provinces, notwithstanding the commonality among them of purposes and objectives of secondary education, have features which reflect provincial circumstances and traditions.

125. British Columbia. In British Columbia the secondary program, referred to as 'senior secondary' and pertaining to Grades XI and XII, is organized in two general categories of courses, the 'general education constants' and 'selected studies' courses. The general education constants, consisting of courses in general education (English, social studies, physical and health education), are required of all students. The selected studies, from which various options may be chosen, are further grouped in sub-divisions of programs under designations such as academic-technical, commercial, industrial, agricultural, visual and performing arts, from which students elect within prescribed limits to ensure a broadly based but coherent total program in respect of each individual student. Schools may also receive approval of the

school board for a maximum of two locally developed courses to be offered as credits for graduation. Students are expected to register in a total of 14 courses in the two-year program of Grades XI and XII and to complete successfully 12 courses at prescribed levels in those courses.

126. Evaluation of student achievement and granting of graduation status lies entirely with the school and in the prerogatives of its principal and teaching staff. External examinations, traditionally prepared and marked by the department of education, are no longer used in the schools and school standing is accepted for purposes of admission to post-secondary and other institutions for further education. Although the secondary schools are for practical purposes fully accredited, the department of education issues bulletins with respect to the preparation and use of tests and other evaluative instruments and procedures for the guidance of teachers in maintaining standards. The provincial responsibility for standards is exercised in part through the processes of accreditation which emphasize maximum efficiencies in school organization and qualifications of teachers, and in part through continuing liaison between the schools and departmental field staff of consultants and superintendents.

127. Alberta. In Alberta secondary education comprises a three-year program for Grades X, XI and XII. Courses at each grade level are classified in groups designated language arts, second languages, mathematics, science, social sciences, personal development, fine arts, home economics, industrial education and business education, together with a series of groups in career fields (mechanics, construction, electricity-electronics, personal services, performing arts), special projects and work-study experience. Locally developed courses to meet special circumstances in a school or community may be offered on being approved by the department of education.

128. Individual courses carry a 'credit' value based on the number of hours of instruction allocated to the course, one credit for each 25 hours. Students are expected to undertake a program of 35 credits each year, but the total required for graduation is 100 credits. Students may elect, under guidance, to undertake more or less than 35 credits a year and thus complete diploma requirements in more or less than three years, for example two and one-half, three and one-half or four years. Where the program of a student is to lead to a diploma, it must provide for a minimum of 15 credits in English, 10 in the social sciences, 5 in mathematics, 3 in science and 2 in physical education. In addition to these basic requirements, amounting to approximately one-third of a student's program, those planning to enroll in universities must also take into account prerequisite requirements for admission to those institutions. Apart from these prescriptive elements, a student may elect from a wide range of options with regard to 40 to 50 percent of his program.

129. Typically the program of a student in his Grade X year will be selected from the courses offered at that level in the five prescribed areas of study together with optional courses totalling the equivalent of 35 credits. In his second year his courses may be chosen from those offered at the Grades X and XI levels. In his third year, Grade XII, he may select from the course lists of Grades X, XI and XII. This type of organization is designed to permit the flexibility necessary on the one hand to enable

some students to widen the base of their educational experience without attempting levels of achievement beyond their ability, and on the other to enable the better endowed student to study in the depth necessary to qualify for admission to higher education.

130. The number of courses offered in each of the groups of courses is necessarily dependent upon the size of the enrolment and staff as well as upon the facilities available in a school. Each school therefore has its own program of offerings, the minimum of which is sufficient to enable students to assemble the number of credits necessary for graduation. The number of options will therefore be minimal in a small school, but increasing more or less in proportion to enrolment in the larger schools. Every secondary school submits annually its proposed program of courses to be offered for credit purposes to the department of education for approval. Where program approval has been given, the credits awarded by the school are accepted by the department of education for purposes of a student's record of attainment and on graduation for the issuance of an official diploma and record of standing. The department maintains a central register of the standing of all secondary students in all subjects.

131. Although evaluation and promotions are in the prerogative of the schools and their teaching staffs, the department of education prepares examinations in English, social studies, mathematics, biology, physics, chemistry and French at the Grade XII level. These examinations are available for evaluating the standing of students who study privately or are preparing to apply for scholarships, or who for various other reasons wish or need to have marks other than 'school' standing. Maintenance of standards is a combined function involving self-evaluation by the schools themselves, supervision by departmental officers from regional offices, and various program committees charged with responsibilities for continuing assessment of courses of study, teaching methods and school organization.

132. Saskatchewan. Saskatchewan's secondary education program comprises, as in Alberta, a three-year segment for Division IV (Grades X, XI and XII). The program is structured in terms of major fields of study including the humanities, mathematics and science, social sciences, fine arts, industrial education and business education. Each broad field consists of a number of subjects or courses from which the curricular regimen of an individual student is assembled. Each subject carries a credit value for purposes of obtaining standing in a grade and for completion of Division IV which requires a minimum of 21 course credits. In general terms the program of a student in any one year includes a minimum of seven subjects, some of which are prescribed by the department of education, some of which must be selected from the group of subjects in the major fields of mathematics and science and of the social sciences, and the remainder from the optional subjects which are offered by his school.

133. Prescribed courses in Grade X include English, mathematics, science and social studies, and in Grades XI and XII, English only. In the Grade X year, a student may select from any of the optional courses available to complete the basic requirement of credits for that year. In the Grades XI and XII years, in addition to English, a student must select at least one course from the mathematics-science field, at least one from the social

science field, and the remainder from options in these fields and/or in the fine arts, industrial and business education fields. In their selection of optional courses in these grades, students may elect from any of the three grade levels subject to prerequisite requirements where applicable, and further to the condition that at least five are at the grade level in which they are registered. Physical education, not regarded as a subject but as an integral feature of school experience, is continued through the Division IV years. The level and scope of guidance and counselling services assume larger proportions in the over-all program, with increasing emphasis on vocational guidance in the eleventh and twelfth years. While departmental prescription and guidelines are designed to ensure basic standards and coherence in course selection, both the teaching staff and the students have a large measure of latitude to design the programs of individual students in conformity with their preferences and the advice of guidance personnel.

134. Evaluation of achievement of students in Grades X and XI lies solely with the schools. For Grade XII the department of education prepares terminal examinations, written in January, June or August, in the major subjects of Grade XII. These examinations are taken by students of that grade who are studying privately or whose teachers have not been accredited and account for approximately 40 percent of the marks awarded. The remaining 60 percent are awarded by accredited teachers. Accreditation of teachers by the department is based on their qualifications and competence in the subject field taught. The department of education maintains a complete register of all marks of secondary students and issues official transcripts certifying as to their educational status.

135. Manitoba. Secondary education in Manitoba, organized as a four-year program for Grades IX through XII, features two stages or levels of program, the ninth year of general education followed by a three-year component of courses paralleling those of the other provinces in their secondary schools and emphasizing differentiation of studies to meet the variety of needs, interests and abilities of the students. Prescribed courses in Grade IX include language arts, mathematics, social studies, science, physical and health education plus two optional courses. In Grades X and XI, the compulsory courses are reduced to four, English, social studies, science and mathematics, and in Grade XII to one, English. Physical education is required in Grades IX, X and XI, but students may elect from a wide assortment of listed courses, together with approved locally developed courses which may be academic and technical-vocational, or oriented to interests in fine arts, industrial arts and languages. For graduation a student must accumulate a minimum of 20 subject credits, two of which may be for study projects initiated by the students during the three-year period. In terms of individual student programs, the selection in each year ranges from seven to nine courses, of which half or more are options elected by the students themselves under guidance of their teachers and counsellors. As in the other provinces, the number of optional courses offered varies with the size of the school.

136. As Manitoba's secondary schools are all fully accredited, assessment of student achievement and promotions are functions of the schools and their teaching staffs. The standing of students is reported to the department of education for purposes of the record only. Transcripts which serve a

student as evidence of his educational status for purposes of admission to other institutions of learning or employment are issued by the school. In common with the other three provinces, maintenance and improvement of standards is a function first of the schools themselves, supported by departmental consultant and supervisory services, and of organized and continuing committee activities involving teachers, administrators, departmental and university personnel, and frequently, interested community groups.

137. Enrolment Trends in Secondary Education. Enrolment trends in secondary education follow the characteristic pattern of elementary and intermediate education, but are influenced to some extent by the return to school of adults who need or wish to up-grade their educational status and by fluctuations in drop-out tendencies. Although approximately 96 percent of students in the relevant age group are in secondary school a few leave at the end of the first year, Grade X, to pursue training in trades. In periods of high employment the drop-out rate at Grade XI and Grade XII characteristically rises temporarily. Future prospects are that secondary enrolments in the Region, apart from differences in individual provinces, will be held at present levels. While declining elementary enrolments are already affecting intake at the secondary level, those declines will be offset in large measure by a growing influx of adults and recent drop-outs.

138. Future Prospects - Secondary Education. Future developments in secondary education seem likely to be influenced by issues related to refinement of the role of the secondary school, to qualitative improvements, to the rising costs of current programs and to developments in tertiary and post-secondary education. Although the social commitment to a minimum of 12 years of basic education is deeply rooted and widely held, there is evidence of some reconsideration of the question of whether or not all young people should be expected to complete formal secondary education, or whether the secondary school is the only or best setting for some students to complete the last year or two of basic education. The search for alternatives appropriate to the interests and abilities of students is still somewhat hampered by persistence of traditional assumptions concerning the 'superiority' of university preparatory programs over other learning disciplines. Although understandable in terms of student and parental aspirations, the tendency to pursue programs leading to university education frequently results in disappointment, needless failure and loss of time for students whose personal attributes and interests would dictate other choices. The emergence of the community college, with its great flexibility and responsiveness to community and individual needs, offers one alternative for students who by reason of personal attributes of ability, interest and motivation do not adapt well to formal secondary education, particularly in its last one or two years.

139. In terms of purpose, there is growing concern as to whether the secondary school can maintain or improve standards of academic excellence if its mandate and responsibility requires it to be all things to all people, more especially in the face of rapidly escalating costs attendant upon efforts to build and equip schools necessary to implement a constantly growing number of courses. Undoubtedly, current discussion of these concerns

and questions will loom large in future consideration of the role of the secondary school and the purposes of secondary education, and of its articulation in relation to education below and above this level.

140. Although the principle of accreditation in relation to evaluation and promotion of students is widely approved as an educational practice, there are indications of some concern over 'uniformity' of standards, particularly with respect to admissions to post-secondary institutions. Whether differences among secondary school evaluations are sufficient to render them significantly less valid than the examination marks formerly awarded by education departments on the basis of external examinations remains to be demonstrated, but will be a matter of mutual concern to the schools and other institutions for some time.

141. Other prospects at the secondary level include complete elimination of costs to students, for example, for textbooks and school supplies, expansion and improvement of guidance services, more extensive application of educational technology, introduction of new studies in consumer education, family life education, environmental education, alcohol and drug education. Modified or special programs of the study-work experience type, already in existence in some schools, are very likely to receive increasing emphasis. Current activity in the area of organization for instruction, such as implementation of the semester system, indicates a continuing high priority on development of strategies for improving the quality of learning experience at this level.

Guidance and Counselling in Schools

142. Informal guidance and counselling of students by their teachers has a long tradition in Western schools. However, with the evolution of the concept of universal secondary education and the consequent necessity of providing services conforming to the needs of students of widely varying abilities and interests, educational authorities have gradually developed guidance and counselling functions as specific program services of the school system. Systematization of these services has been characterized by more precise definition of purposes of the service and by the development of specialized personnel to work with the regular teaching staff and directly with students. Guidance and counselling, primarily directed toward achievement of the objectives of the schools and the educational system as a whole, have then as their central purpose maximum growth and development of students as individuals in conformity with those objectives in the context of the school setting. More specifically these services focus on educational experience and activities which enable students to understand themselves, to gain a realistic appreciation of their capabilities, interests and potential, to develop capabilities for independent and intelligent decision-making and to cope successfully with the social environment.

143. Guidance functions have a two-pronged thrust, educational and vocational. Educational guidance, whether as a built-in feature of teaching or with the support of specialized personnel, is a feature of the full range of basic education, although its emphasis and impact assume increasing importance in the years following elementary school. Vocational guidance,

on the other hand, emerges first in the intermediate school years but plays an increasingly more important role in the secondary years, more especially the last two, when students must make decisions as to what may follow graduation. Because basic education is essentially perceived as general preparatory education and not, at least until the last two years of its duration, particularly concerned with vocational considerations, the functions of guidance and counselling are not prescriptive. The much greater concern is with general maturation of the individual.

144. The response to these considerations is reflected in the attachment to school staffs of personnel with special training and skills, usually referred to as guidance officers and counsellors who work directly with teachers and students. Their professional roles, apart from psychological and testing services, are collaborative with the teachers in activities pertaining to understanding of student characteristics, attributes and problems, to selection and development of student programs and to assessment and treatment of problems of individual students. Counsellors as such are concerned less with advising students than with helping them to understand themselves and make realistic judgments and decisions in the pursuit of their studies.

Student Transfers

145. Modern tendencies of mobility in the population necessitate increasingly frequent changes of schools by students, both within provinces and inter-provincially. Problems associated with transfers, whether within a province or to another province, are generally of two kinds, first of placement in the program of the receiving school and second, of adaptation by students to an unfamilar school environment. In so far as elementary and secondary education are concerned, there is a sufficient degree of comparability in classification of students by grade levels that students may expect to find themselves in the same grades in their new schools. The greater problem lies in adapting to program changes which may be necessary. This is mitigated in part by the system of student records currently in use (including cumulative records), which, unlike the traditional report cards, contain a variety of descriptive data useful to receiving teachers in determining course selection and placement of new students.

146. Equally important to minimization of problems of transfers is the degree of interprovincial cooperation which has developed over the years. For example, provincial curriculum directors of the Western Region have met on an organized basis for many years for purposes of sharing information and plans concerning courses of study and general programming of the schools. In like manner, department of education officials responsible for student evaluation, as well as those in charge of supervision of instruction and school organization, also meet periodically to discuss educational matters of common concern. Among other values arising from such consultation are understandings which have influenced internal policies of individual departments in respect to recognition of the educational status of students from other provinces. There are some indications that, in the opinion of students themselves, transfer problems related to program adaptations now involve less difficult adjustments than those which relate to reestablishment of personal relationships with students and staff.

Support Services

147. By definition support services refer here to services somewhat peripheral to the normal range of functions of the schools as such in relation to the age group for which they are responsible. Among these are included education of the handicapped which is treated at some length in Chapter IV, school transportation, discussed in Chapter III, consultant and supervisory services, educational broadcasting, film services and correspondence education. All are purposed either to be supportive of the schools in the performance of their roles or to assume responsibilities beyond their scope and present capabilities.

148. In the early stages of development of the system of basic education, education of the handicapped was not regarded to be in the purview of the regular schools, for until recent years schools could under school law exclude or exempt from attendance children of school age who were deemed "so mentally deficient as to be incapable of responding to class instruction by a skilful teacher, or whose presence is detrimental to the education and welfare of other pupils . . .". Notwithstanding such regulatory powers, the great majority of the schools, especially in the elementary school years, have for many years endeavored to provide services to children of moderately handicapping conditions. Teachers, relying on their own professional resources and upon such encouragement and assistance as could be provided by departmental supervisors, were frequently limited to whatever individual attention they could give in special cases. In larger schools, various types of special classes, 'opportunity rooms' and the like were organized and staffed in an effort either to overcome learning difficulties or to provide special instruction adapted to the capacities of the children. In the area of severe handicaps, only blindness and deafness were recognized under prevailing public policies, and for some 50 years these services have been provided by provincial departments of education in special institutions, normally residential and administered directly by those departments.

149. School transportation emerged as a major feature of support services in the 1940's and 1950's when school consolidation and reorganization of local government administrative units took place. More than half of the rural school population utilizes these services, the development of which has necessitated very large public expenditures for equipment and all-weather roads. Given the low density of population in rural areas, students frequently travel distances up to 35 miles to school. While conditions and circumstances vary somewhat among school jurisdictions, transportation policies tend tc be governed by the time required rather than the distance travelled in reaching school, up to one hour for elementary students and one and one-half hours for older students.

150. Supervision. From their early beginnings, departments of education maintained direct contact with the schools through provincial school inspectors. Each inspector was assigned a group of schools in a designated geographical area. His duties were to oversee the work of teachers and school boards, to act as liaison officer between his department and the schools, and as an advisor to both, and to prepare reports of his assessment of the state of education in his area of responsibility. The 'inspectoral' features of this role decreased in significance when the larger units of school

administration were established in the 1940's. Although still a provincial official he became identified with a single major school board whose powers and prerogatives were greater than those of its predecessors. In this relationship his regulatory and reporting functions tended to become less relevant and to give place to collaborative functions as an advisor working closely with a board. This change in the role of the provincial inspector or superintendent led logically to policies of ministries of education under which school boards of the larger units of administration were empowered to employ their own superintendents or directors of education in the same manner as had been applicable to boards in large urban districts for many years.

151. Concurrently with the trend to local supervision, provincial departments of education in Alberta and Saskatchewan have developed a system of regional offices, usually headed by a regional director, coordinator or superintendent of education with a staff of consultants and supervisors. The regional director functions as a line officer of the department of education in his administrative relationships with local school authorities although he is also a professional advisor. His professional associates serve essentially in a staff relationship to the schools and work directly with the principals and teachers, but may also as occasion requires perform duties of an administrative nature.

152. There is minimal reporting to the department of education on individual teachers except with respect to those with probationary status and in other cases where there may be special circumstances. Locally employed directors or superintendents may report more frequently, but mainly to their school boards. This evolution of working relationships among school officials, provincial and local, is a by-product of policies of decentralization of administrative authority and responsibility and is purposed to facilitate local planning and decision-making in the design and management of educational services at the community level. The role of the central authority is to define the broad pattern of provincial educational objectives, to furnish leadership and assistance in the achievement of those objectives and to provide the basic financial support by which local governments are enabled to create and administer educational services consistent with provincial objectives but conforming to local conditions, needs and aspirations.

153. Educational Broadcasting and Correspondence Education. Although local governments in education are gradually expanding their own capabilities for provision of specialized services, some services do not lend themselves as readily as others to local development. Educational radio and television, along with correspondence education, are typical examples and are illustrative of areas of activity in which provincial departments of education have laid the foundations of existing services. Educational radio and correspondence education, originally intended as services to students in isolated areas or otherwise unable to attend school, have been furnished as a direct service of departments of education since the 1920's. Educational television appeared in the Western Region 30 years later, as a joint venture of departments of education and the Canadian Broadcasting Corporation.

154. Although correspondence education still serves students who by reason of physical or other handicaps are unable to attend regular classes, its use for elementary students is very limited. This is attributable to the ready availability of school services. More extensively utilized by secondary students, correspondence services meet a need for specific courses required but not available in the schools they attend. Almost half of the current clients of provincial correspondence schools are adults seeking to up-grade their educational status.

155. Educational radio quickly found its way into the schools and has maintained a relatively high level of use as a teaching and learning resource. Utilization was greatly enhanced when the tape-recorder became available, affording teachers a large degree of flexibility in the use of programmed materials. While each province maintains its own programming facilities for school radio, the education departments of the Region collaborate in the production of programs of mutual interest and regularly exchange tape materials.

156. Educational television, vastly more expensive as a service, is heavily reliant on the cooperation of the Canadian Broadcasting Corporation for production purposes. Programming is, however, a cooperative activity in which provincial educators select and approve the subjects and content of production.

157. Educational film services, for many years a direct service of departments of education, are gradually being undertaken by school boards. This trend will continue, in part as a feature of the growth and development of the educational resource centre as a central feature of the school. The concept of the learning resource centre, a further evolution of the traditional school library, has emerged as a concomitant of the prevailing philosophy of the educational curriculum and learning experience. More than a conventional library it is the source from which students and teachers draw a wide variety of materials, print and non-print, films, tapes, recordings and such, for use in carrying out teaching and learning activities. The importance attaching to development of learning resource centres is reflected in the increasing priority given them in school plant planning and in budgetary allocations.

2. Tertiary and Post-Secondary Education

158. Higher education in Western Canada had its origins in the denominational colleges of a century ago and in the provincial universities of the early 1900's. Influenced by European and North American models, these institutions developed virtually exclusively as post-secondary institutions for purposes of educating the most able young people in relatively small numbers in the liberal arts and some professions such as law and medicine. The colleges which preceded the universities, and in some cases were their genesis, subsequently affiliated with their senior degree-granting institutions but generally retained their denominational character and their role in educating for religious vocations.

159. Limiting their role in the professional field to what were considered the higher professions, the early universities did not engage in the training of teachers, a matter of urgent necessity when the system of basic education was developing apace. As a consequence, provincial governments proceeded to establish public institutions, variously referred to as normal schools, model schools or teachers' colleges, with programs which were for the most part post-secondary. Reflecting the agricultural foundation of the economy, a few agricultural colleges, several of which continue in operation in Alberta, appeared at about the same time. In somewhat similar manner, with the passing of time and as the need for education and training in industrial and other occupational skills became apparent, various ad hoc arrangements and specialized institutions emerged, in the main under initiatives and administration of provincial ministries of education. With these developments, which proliferated in subsequent years distinctions between post-secondary and other post-school education have become blurred and relationships among various types of institutions more complex.

Types of Institutions

160. For present purposes educational institutions at the post-school level, that is, for education following exit from basic education, will be referred to as institutions at the university level and institutions at the non-university level.

161. Of the 13 universities in Western Canada, 3 in Manitoba, 2 in Saskatchewan, 4 in Alberta and 4 in British Columbia, one in each of the provinces has been in operation since 1908 (Manitoba in 1877). The remaining nine universities were chartered in the 1960's, during a period of rapid growth in university enrolments. In addition there are 22 mainly denominational colleges, 2 or more in each province, affiliated or federated with 5 of the larger universities, offering a variety of post-secondary courses carrying credits toward degrees. Contrary to the early tradition of private universities in Eastern Canada, Western universities have been state institutions from the outset, established by provincial statute and subsidized from public funds. Except in early years, particularly in Manitoba, private colleges have played a relatively small part in university education in the Region. Most of those which retain an identity in their affiliations with universities now benefit from public support, either indirectly under their affiliation agreements or by direct government subventions. Manitoba's unique situation in this respect is perpetuated in its present half-dozen private colleges which, in addition to being self-supporting and not formally affiliated with universities, have entered into arrangements by which some of their courses are approved for university transfer purposes.

162. Development of non-university institutions commencing with the establishment of teacher training schools in the 1890's and a few agricultural colleges in the early 1900's, preceded the early universities by a decade or more, and laid the foundations for a pattern of development in post-school education which persisted for half a century. Where universities were perceived as essentially academic, oriented to an 'educational' purpose or 'higher learning' in largely autonomous institutions, non-university institutions were purposed for 'training' in useful arts and skills required

for the practical purposes of the society of the day, to be furnished as direct services of public authorities. In the past 25 years this seeming dichotomy between 'education' and 'training' has tended to disappear and in this process, to bring all post-school institutions into closer relationships with each other.

163. Apart from institutions already mentioned, developments under public initiative in the non-university sector to 1950 were primarily of cooperative ventures between federal and provincial governments in a wide variety of ad hoc programs of training for adults in vocational skills and general up-grading of basic education, and of programs of financial support for adult night school programs administered by school boards, mainly in the larger urban communities. These initiatives also produced the beginnings of a new college movement, particularly in Alberta and British Columbia. Some of these colleges, though not formally affiliated with universities offered post-secondary courses which were recognized for transfer purposes by the universities. In the past 25 years, however, spurred by industrialization and technological changes in the economy and with financial incentives proffered by the federal government, provincial authorities have established a network of institutes of technology, technical and vocational schools, and institutes of applied arts and science. During the same period the notion of recurrent education, perceived in terms of a more general educational purpose, gained wide-spread public acceptance and government support. As a consequence, the community college has appeared in all four provinces as an alternative in the non-university sector and is at present expanding at a greater rate than any other single component of the educational system.

Institutes of Technology

164. In view of the fact that institutions of this type are also variously referred to as technical institutes, institutes of applied arts and science, technical-vocational schools or colleges, the phrase 'institute of technology' is here used to include these and to refer to educational facilities whose programs are for persons who are adults or who are no longer in the basic education program of the elementary and secondary schools and whose purposes are to seek education and training with a technical-vocational bias.

165. The lineage of the modern institute lies in some 50 years of provincial and federal government initiatives to up-grade technical and vocational skills necessary to advancement of the economy. Federal-provincial cooperation stemmed from the fact that while the relevance of technical competence of the labour force to economic development was a valid concern of the federal domain, the provision and delivery of education and training services was in the exclusive jurisdiction of provincial governments. The depression of the 1930's required intervention at both levels of government to mitigate the effects of unemployment by means of educational and training programs. Later the exigencies of World War II necessitated and resulted in emergency and rehabilitation training programs which contributed significantly to the general field of adult education and training. And finally the impact of post-war technological developments and industrialization was a powerful impetus to the formulation and implementation of plans for the institutes which commenced to appear in all four provinces in the 1950's and 1960's, and now number nine in the Region.

166. Programs. Differing in concept from its precursors, which were concerned only with skill training for employment, mainly at the trades level, the institute was essentially a response to the need for more advanced non-university education in technological fields such as resource development, engineering, industrial and business management. The majority of the institutes have, however, been planned and developed also to service training needs both in technologies and in trades.

167. The technology programs of the institutes are at the post-secondary level, and are of two or three year's duration. Typically the schedule of studies includes a blend of mathematics, science, technical or business English, together with courses and laboratory work oriented to the broad field of the technology concerned. Graduates are expected to have the necessary competencies to hold highly technical positions or to function efficiently at the management level in the field of their specialization.

168. By reason of their technological bias, programs of the institutes tend to respond to circumstances and needs in the economy, primarily within the province concerned but also in the context of regional and national developments. However, they have in recent years extended their programs to include as well the preparation of paraprofessionals for public service fields such as medical-dental, nursing, social welfare and recreation. The major post-secondary program areas common to the four provinces typically include the broad fields of applied arts, business and commercial architecture, electrical-electronics, food services, natural resource development, engineering (civil, chemical, mechanical), health sciences, welfare and recreation. Within these program fields a total of nearly 200 courses are offered in the Region with approximately 14,000 students enrolled (1972-73). Other programs of the institutes (except in British Columbia) involving attendance not exceeding one year and admission requirements less than secondary school graduation are variously referred to as vocational, occupational or trade training. Program categories at this level include the broad areas of commercial, agriculture, applied arts, home economics, industrial arts, mechanics, construction, electricity and the like, comprising over 100 separate courses for approximately 22,000 students (1972-73). In this connection, it should be noted that this has reference only to institutes and does not include the colleges and vocational schools in Alberta and British Columbia which provide similar programs to some 47,000 students.

169. Administration. The institutes, having been established by provincial governments, tend to have a close administrative relationship with provincial departments of education; in two provinces they are administered directly by special education departments which have been given responsibility for education beyond basic education, and in the others by appointed boards which are accountable to those departments.

170. Future Prospects. Institutions of this type are firmly established in their roles in the non-university sector of post-secondary education, even to the extent of having negotiated transfer arrangements with some of the universities. However, future prospects of development will be influenced by the more recent emergence of the college movement, more especially the community college. It is significant that the technical institutes of

Manitoba have been redesignated as community colleges, although still administered directly by the Department of Colleges and Universities. Because the institutes were originally conceived as provincial institutions, open to students throughout a province, very considerable attention was given in their planning to avoid needless duplication of programs. Hence, each institution has tended to develop its major programs in fields most suitable to its general location, but not in competition with sister institutions. For example one institution might orient its programs to engineering-industrial fields, while another might stress the health sciences and social service technologies. On the other hand, the college movement is predicated on educational purposes and determinants of community, and at most, regional characteristics and needs. As highly specialized institutions the institutes seem likely to continue to service provincial needs as such and to contribute specialized courses which may be necessary adjuncts to programs of the community colleges. Moreover they are the logical centres for development of technological training at more advanced levels than are presently required, but which are inevitable in an age of increasing scientific and technological knowledge and expertise.

171. In the light of the present preoccupation of government authorities to create a rationalized, coherent and comprehensive system of post-school education, including both the non-university and university sectors, the role of the institute will undoubtedly alter to the end that it contributes as a fully integrated component of the total system. Current tendencies would indicate a gradual shift from skill training at the trades and occupational levels and increasing concentration on post-secondary technological education. An exception to this may be in Manitoba where the institutes have become the basic elements of the community college system.

Community Colleges

172. In the process of evolving the college system as a feature of the non-university sector of post-school education in Western Canada, certain differences in approach by the individual provinces have resulted in a variety of nomenclature for identification of institutions and programs. For example terms such as college, vocational college, community college are used to identify specific institutions or types of institutions, depending on the province concerned. By reason of the fact that the term 'community college' is common to all four provinces and because the basic perception of the purpose and role of the college system as a whole is embodied in the concept of community college, that expression is used here to include all of the colleges irrespective of their individual identification.

173. Evolution of College Movement. Vocational training, as distinguished from education in technologies, has been perceived traditionally as training in skills for specific types of employment, occupations or trades. As noted earlier, the first institutional developments were for the training of teachers and agriculturists. The need for industrial skill training which emerged somewhat later was initially met by the establishment of apprenticeship programs commencing in the 1930's under the auspices of provincial departments of education and labour. At approximately the same time, a small number of schools generally known as technical high schools,

came into operation. Administered by school boards, these schools were built largely on the basis of federal and provincial capital grants. In addition to the vocational courses offered to secondary students, these facilities provided an impetus for expansion of evening classes for adults, an area of activity then limited to a few major urban communities. However these and a wide variety of ad hoc courses, such as those under provincial adult education programs and war emergency programs, produced a conglomerate of unrelated programs under several sponsoring authorities and with little or no coordination. By the late 1950's public authorities had begun to investigate ways and means for establishing a recognizable and coherent system of services for adults, and equally importantly, for the young on leaving the secondary schools. Out of this emerged the multi-purpose college movement of the 1960's.

174. Notwithstanding the various approaches to these investigations in individual provinces, the several commissions, task forces and special advisory committees assigned to the task, produced guidelines which had a large measure of commonality in the Region and which are reflected in subsequent legislation and policy development. Although institutions labelled as colleges had existed for nearly a century, the new college concept embodied several new principles. They were to be oriented to services on a regional basis within a province, to be administered by largely autonomous boards, to provide courses of general, academic, vocational, cultural and practical education and in some cases university transfer courses, and to furnish a basic coordinating function with respect to existing services and institutions. To ensure accessibility to services, the objective was to have every part of a province included in a regional college area.

175. By reason of the initial emphasis on coordination of existing programs, the view was widely held that the new colleges need not necessarily imply large capital expenditures for new buildings and equipment. In effect, early planning was predicated on the concept of the new college as a program of educational services rather than as a new institution in terms of physical plant. As the result of very extensive building programs of the past two decades in all components of the educational system in Western Canada, and in consideration of declining enrolments in elementary and secondary education, under-utilized facilities were believed to be sufficient for the needs of the colleges for several years, more especially in rural and sparsely settled areas. Moreover, the earlier colleges in some provinces had already developed facilities which represented a very considerable public capital investment. However, in the likely event of major increases in adult participation in college programs, additional or new facilities may be required in the foreseeable future, evidence of which has already appeared, for example, in British Columbia where college registrations increased five-fold in the five-year period 1967 to 1972. In that province and in Alberta, as a result, the trend is now to provide new and additional facilities for the expanding program requirements of the colleges. In British Columbia, a major construction program to furnish core campuses for each of the colleges at provincial expense is now in progress. Although comparable data are not available with respect to part-time and short-term enrolments of community colleges, Table 7 is indicative of the general trend for full-time registrations. Participation in short-term courses is estimated at three to five times the numbers for full-time enrolments.

TABLE 7

FULL-TIME ENROLMENT IN COMMUNITY COLLEGES [1]

SELECTED YEARS 1960 TO 1972

Years	Enrolment				
	British Columbia	Alberta	Saskatchewan	Manitoba	Western Region
1960-61	1,645	2,546	2,568 [2]	1,764	8,523
1965-66	2,500	4,624	1,756	2,055	10,935
1970-71	11,266	11,334	2,378	3,544	28,522
1971-72	12,823	12,627	2,436	3,808	31,694
1972-73	12,618	13,330	2,461	3,370	31,779

[1] Enrolments for 1960-61 and 1965-66 are "non-university level" enrolments, chiefly in non-college institutions.

[2] Includes teachers' college enrolment.

Source: Statistics Canada

176. Administration. The principles of decentralization and local autonomy, emphasized as a feature of development plans for the college system, have been in large part reflected in program aspects of college operation. In terms of general administration, at the present stage of development, practice varies. In three provinces the colleges operate under regional boards with authority delegated by the province; the same applies to the new community colleges. In Manitoba the community colleges are administered directly by the provincial department responsible for higher education. In all cases of delegated authority, the regional boards are empowered under and subject to provincial regulations administered by the department responsible for post-school education. This relationship is intended, on one hand, to encourage and enable the colleges to develop program objectives and characteristics appropriate to the Region served and on the other, to maintain a basic consistency with provincial objectives for education at this level.

177. Emerging Role of Colleges. Unlike the institutes of technology and earlier vocational schools, adult vocational centres and Regional Colleges (Alberta) whose objectives are essentially oriented to technologies and skill training for vocational purposes, the college system now developing

has a wider frame of reference. While vocational education is a major feature of its role, the new college may also be the centre for academic courses at the first or secondary year university level, for basic academic up-grading for adults at the secondary level, for special skill training, for cultural programs and for the pursuit of informal studies. Although a relative new-comer to the post-school non-university field, the college system is firmly established and its prospects for continued growth and development very promising.

178. While the evolution of the college system will have a direct influence on existing programs and delivery systems, the traditional systems including apprenticeship training, training-in-industry, correspondence education, are holding their own in terms of enrolments and programs. They may well continue to do so, but in a closer association with the college system.

Universities

179. To define the role of the university in terms of the preservation and transmission of knowledge through teaching and expansion of the frontiers of knowledge through research would be an over-simplification of the place and purposes of the university system which has emerged in Western Canada. The commitment to teaching and research is not lessened by the fact that universities have found it necessary to respond to the same societal expectations which have influenced developments in the whole of the educational enterprise in the past quarter century. The university is neither only "an autonomous community of scholars dedicated to the disinterested pursuit of truth and the advancement of knowledge", nor solely "an instrument of society by which knowledge is applied to meet society's needs". Interpretation of society's 'needs' ranges from the traditional academic viewpoint of learning for the sake of the intrinsic values of scholarship and for training to the higher professions to the opposite extreme of 'education for production', the training of personnel necessary to advancement of the economy.

180. Western Canadian universities attach very considerable importance to their roles as 'centres of excellence' in fields of study and research in which their unique capabilities may contribute in a special way to expanding the field of knowledge in areas of universal interest or need. One of the earliest examples in the specific area of studies in education is found in the graduate program in educational administration at the University of Alberta. Developed in the mid-1950's this program not only serves an important need in the Western Region, but having become widely recognized for its excellence, attracts students nationally and internationally.

181. The universities have responded to the need for accommodating large increases in enrolments, to expanded expectations of the public and private sectors for professional training, and not least, to the influences of public priorities in the financing of higher education. These responses have in effect, if not in definitive statements of purposes or objectives, brought the universities into a closer general relationship with the educational enterprise as a whole, and to a broader and more vital role in contributing to the overall purposes of education.

182. As noted earlier, university development in Western Canada occurred in two fairly distinct phases, first in the early 1900's when each province established its first provincial university, and second, in the 1950's and 1960's, a period of almost exponential increases in enrolment. The vast expansion of facilities and staff of the 1960's in at least 10 of the universities levelled off by the early 1970's when secondary school enrolments were approaching a plateau and when the alternatives of the institutes of technology had become attractive to many post-secondary age students. However, present indications are that university enrolments will continue to increase at a moderate rate and that additional facilities and staff will be required.

183. Program. Western universities typically offer programs of general and specialized advanced education requiring an academic emphasis, that is, in the liberal arts and sciences. The chief distinguishing feature of the older universities and those of more recent establishment lies in the major concentration of professional faculties or colleges in the former group, which in addition to their seniority are also the largest in enrolment. Chart II, which summarizes the broad field of academic programs of 11 Western universities, also shows some exceptions to this distinction in the professional fields, notably education, business education and physical education. Eight of the 11 have faculties of graduate studies. Although the number of disciplines in which graduate programs at the master's and doctorate levels are given varies widely with the size of the particular institution, there are few disciplines in which a graduate program is not available in the Region, including, in the larger universities, opportunities for post - doctoral studies.

184. Admission Requirements. The standard requirement for admission to a program leading to a degree is graduation from secondary school or the equivalent of senior matriculation, except in British Columbia where Grade XII, the final year of secondary school is equated to junior matriculation. In as much as admissions policies lie in the prerogatives of individual universities, there are some variations of details in requirements among them and even within the several faculties of a university. The general prerequisites include secondary school standing in English, mathematics, science, one or more subjects in the humanities and/or fine arts, for a total of five to seven subject fields. Some faculties may, in addition, require a second language, a second science or other subjects regarded as necessary background to their programs. The trend of recent years toward greater flexibility in programming for students in the secondary schools is reflected in increasing relaxation of specific subject requirements as bases for university admission. This is not a matter of relaxation of standards for admission, but rather a widening of the base upon which admissions are made. A student may however, if lacking in one or more specific subject fields regarded essential to his university program, be required to undertake additional university courses to compensate for such deficiency.

185. Western universities do not administer entrance examinations, and rely mainly on the assessment of the schools as indicators of the academic fitness of students. Students may be required to undergo tests of various types, psychological, general or specific knowledge, aptitude, personal development, as in-put to guidance and counselling. Some universities also accept as one

CHART II

ACADEMIC PROGRAMS IN THE REGION *

Academic Field *	University										
	Man.	Win.	Bra.	Sask.	Reg.	Alta.	Ca[illegible]	[illegible]eth.	U.B.C.	Vict.	S.F.U.
Agriculture	X			X		X			X		
Architecture	X						[illegible]		X		
Arts	X	X	X	X	X	X	X	[illegible]	X	X	X
Business Admin. - Comm.	X			X	X	X	X		X	X	X
Dental Hygiene	X					X			X		
Dentistry	X			X		X			X		
Education	X	X	X	X	X	X	X	X	X	X	X
Engineering	X			X	X	X	X		X		
Fine Arts	X		X	X	X	X	X	X	X	X	
Forestry						X			X		
Graduate Studies	X			X	X	X	X		X	X	X
Home Economics	X			X		X			X		
Law	X			X		X			X		
Library Science						X			X		
Medicine	X			X		X	X		X		
Nursing	X			X		X	X		X		
Pharmacy	X			X		X			X		
Physical Education	X			X	X	X	X	X	X		X
Public Administration										X	
Rehabilitation Medicine	X			X		X			X		
Science	X	X	X	X	X	X	X	X	X	X	X
Social Work	X				X		X		X		
Veterinary Medicine				X							

Notes: * These designations used by the universities vary somewhat in some fields, so some compromises have to be made in the listing, which may be for a faculty, a school, a department or a program.

Fine Arts includes Art, Drama and Music. The universities listed as offering programs in Fine Arts do not necessarily offer degree programs in all of these fields.

Simon Fraser University has a Faculty of Interdisciplinary Studies which offers programs in a variety of fields.

The University of Victoria will introduce programs in Law, Nursing, and Social Work in 1975.

criterion of academic fitness the test results of the General Education Development Testing Program. This is a series of five tests of general knowledge and language skills, designed and intended for adults who have not completed secondary school but whose subsequent training, work and life experience may have sufficiently up-graded their basic educational competencies to enable them to undertake more advanced studies. In this connection also may be mentioned the 'mature student' admission policies of the universities under which persons generally at or beyond the age of majority may submit to tests and interviews administered by admissions personnel as a basis for probationary admission to a university program.

186. Generally, students may seek university admission in any province, subject to the specific requirements of the individual universities and subject further to such limitations of numbers as they may impose with respect to non-resident students.

187. Admissions to graduate programs are necessarily more rigorous in terms of academic fitness, and are almost entirely dependent upon undergraduate scholastic record, assessment by professors at that level with respect to individual candidates and such direct appraisals as may be conducted by an admissions committee. Residence criteria are relatively unimportant in selection at this level.

188. Graduation Requirements. The standard requirement for a first undergraduate degree, for example, Bachelor of Arts or Science, comprises a three-year (four in British Columbia) program of 15 courses (20 in British Columbia), normally taken in five-course segments in [illegible]ing terms of study of seven to eight months in each year. In institutions organized on a semester basis, the number and length of courses are adapted to produce equivalent requirements on the part of students. The degree awarded on this basis is referred to as a 'pass' degree. If a student elects to augment his studies by a further year of courses, as would be the case in advancing to studies at the level of a master's degree, the 'honours' degree is awarded. The 'honours' year is presumed to involve greater concentration on a narrower field but in greater depth of study in a discipline in which a student may be contemplating graduate study. By definition, the term 'course' refers to a unit of subject content requiring study and completion over a period of seven to eight months, but may be sub-divided into subunits, the total of which must produce the equivalent in total credits referred to above.

189. Graduate Studies. Eight of the 11 Western universities have Faculties of Graduate Studies with an enrolment of over 10,000 in 1972-73. As shown in Table 8, the two largest universities in which over 51 percent of the graduate students were enrolled, 37 percent of that number were in doctoral programs. In the remaining graduate faculties, approximately one in five of the students were pursuing doctoral studies.

190. Although many students complete their master's degree at the university from which their first degree was received, an increasing number of these, together with doctoral students, tend to go to other universities, in part for exposure to experience in other institutions and in part to have access to the specific program desired. Apart from their sense of obligation to students resident in their province, universities look with favour on, and

TABLE 8

GRADUATE STUDENT ENROLMENT

1972-73

University	Total Number of Graduate Students	Percentage of Total in Loctoral Programs
University of British Columbia	2,764	37%
University of Alberta	2,720	37%
University of Manitoba	2,068	21%
University of Calgary	1,160	22%
University of Saskatchewan [1]	877	21%
University of Victoria	323	20%
Simon Fraser	789	20%
University of Regina [1]	296	12%

[1] In 1972-73 The University of Regina was part of The University of Saskatchewan. The figures presented are for each campus separately.

Source: A. G. McCalla, Study No. 7, University Education, p. 20.

encourage, maintenance of a body of graduate students which has a reasonable mix of out-of-province and out-of-country students along with its provincial clients. Notwithstanding the very high unit cost of graduate studies, universities and governments have recognized the values attributable to maximum freedom of choice and access to graduate studies, both for the students of a province and for those of other provinces and countries. The cost of subsidization tends to fall on the larger universities and their provincial governments, and is the subject of some concern and discussion, not on the question of mobility of students, but on ways and means for rationalizing the distribution of the burden of costs.

191. Most universities prescribe time limits within which graduate programs must be completed, particularly in disciplines in which new developments are taking place rapidly, as in the scientific fields. For doctoral programs, the time constraint is typically five or six years and for master's programs three to four years. With continuous or unbroken periods of study it is generally possible to complete a master's program in two years and a doctoral program in four or five years, following the first degree at the bachelor's level.

192. Research. Much of the research activity of the universities is conducted by both faculty and students and is financed by grants, scholarships and fellowships. A major portion of the research funds is derived from federal government agencies such as the National Research Council (science), the Medical Research Council (medical sciences) and the Canada Council (social sciences and humanities). The universities themselves and the provincial governments have likewise also made large investments in research by providing necessary buildings and research facilities as well as commitments of time of faculty members necessary to research activities.

193. Several of the larger universities have established a variety of research institutes or centres, typical of which are The Boreal Institute (Alberta), Institute of Northern Studies (Saskatchewan and Manitoba), Arctic and Alpine Research (British Columbia), Petroleum Recovery Research Institute (Calgary) and The Canadian Plains Research Centre (Regina). The nature of the research activities of these agencies reflects interests which in some cases are regional and others more specifically provincial, but which taken as a whole add to the fund of knowledge available to all. In more recent years several universities have joined forces in cooperative ventures in research, an example of which is the marine biological station on Vancouver Island, established and operated by five universities in British Columbia and Alberta.

194. Extension Programs. In addition to intra-mural programs, the universities have developed extension programs which reach into community settings through courses offered at locations some distance away and/or by correspondence. By reason of differences in definition among the universities, extension programs may also include courses offered on-campus but out of regular hours, and in some cases a distinction is made between credit and non-credit courses. However, irrespective of such differences and distinctions, most of the universities provide courses off-campus or 'out of regular hours' (evenings and weekends). Some of the courses are regular credit courses applicable to degrees, given by professors of the university or by qualified instructors in or near the community and under contract with the university. Some are courses classified as non-credit, designed for purposes of individuals whose interest in study is general, or who, having little or no university education, wish to up-grade their capabilities, or who are professionals desiring refresher courses. Correspondence courses, administered directly by extension departments of the universities, are exclusively academic and usually taken for credit purposes. The outreach of universities is further augmented by participation of university personnel in seminars, conferences and short courses for special interest groups and non-government as well as government organizations whose objectives include promotion of the educational interests and purposes of their membership.

195. University Rationalization. In the older traditions of university development, each institution emerged as an expression of what that institution perceived itself to be in the environment in which it grew and developed. Careful to maintain a high degree of autonomy in management, as well as in academic matters, Western universities have nevertheless been sensitive to the aspirations of the educational constituency served by them. Moreover, being reliant on public support for a major part of their financing,

they have responded in large measure to general educational objectives of public authorities. In this context, provincial governments have tended to reflect somewhat greater sensitivity to both social and manpower demands in their general policies pertaining to post-secondary education.

196. Until the 1950's, relationships among Western universities were very informal and generally not concerned with the developmental plans which might have implications for sister institutions. In the 1960's however, the growth of new universities in all four provinces, proliferation of new programs and spiralling financial requirements brought into sharp focus the need for coordination of developments to minimize duplication and to maximize educational benefits. These concerns were manifest in a measure of recognition of the need for rationalization of facilities and programs, more especially so among the governments which faced the difficult issues of educational and financial priorities.

197. Issues of rationalization emerged at two levels, among universities within a province and among the universities in the Region as a whole. On their part the universities commenced to develop mechanisms for communication within the regional community of universities, mainly for purposes of information, but without commitment with regard to individual plans. Governments, on the other hand, legislated machinery for coordination of university development within the area of their jurisdiction. This machinery typically took the form of grants commissions, semi-autonomous agencies, whose mandate was to allocate government funds for capital and operational purposes to the universities. The effect of the exercise of such powers was indirectly to influence the nature and extent, if not the substance, of programs and the rate of expansion in the several universities of a province. Interprovincial rationalization had necessarily to rely on voluntary cooperation among the universities and of provincial governments, for there is no regional authority empowered to legislate and administer policies.

198. Prior to the first attempt to systematize interprovincial collaboration which will be referred to later, the best example of this type of cooperation was the establishment of the Western College of Veterinary Medicine at the University of Saskatchewan. This development was motivated by the need of the agricultural economy in Western Canada for this type of professional education. Responding to initiatives of provincial and federal agricultural authorities, Western universities undertook the background studies which led to decisions on the establishment and location of the facilities for the program. The four provincial governments and the federal government approved the financial arrangements for capital purposes. Operational management and financing, assigned to the University of Saskatchewan, were also matters of mutual undertaking of the provinces, which in turn had access to this program for their veterinary students. An Advisory Council to the College, composed of representatives of the four provinces, serves to ensure attention to interprovincial interests in the purposes and educational output of this program.

199. University Enrolment. Enrolment and participation in university education in Western Canada remained relatively static until the close of World War II. The return of war veterans initiated a train of events which produced an unprecedented growth rate which lasted for 25 years. Full-time enrolment, as shown in Table 4, trebled in the peak period 1960 to 1970, rising from approximately 32,000 to 92,000. Table 9 shows also that

TABLE 9

FULL-TIME WINTER SESSION REGISTRATIONS OF UNIVERSITIES

YEARS 1964 TO 1973

University	Years									
	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74
British Columbia	15,148	15,897	16,513	17,477	18,845	19,658	20,161	18,994	17,989	18,370
Simon Fraser [1]	--	--	--	--	5,248	5,089	4,753	4,571	4,612	5,013
Victoria	2,460	2,934	3,391	3,847	4,646	5,240	5,119	4,800	4,373	4,601
Notre Dame	457	511	578	559	514	574	639	510	450	351
Alberta	9,334	10,233	11,464	12,992	15,293	17,342	18,337	18,243	17,757	18,524
Calgary	2,622	3,264	4,074	4,935	6,770	7,962	9,237	9,173	8,780	9,278
Lethbridge	--	--	--	638	1,034	1,261	1,409	1,218	1,076	1,086
Saskatchewan	7,663	8,255	8,784	9,267	9,431	9,999	9,981	9,665	9,282	9,306
Regina [1]	1,737	2,241	2,595	3,285	3,794	4,345	4,199	3,838	3,535	3,505
Manitoba	8,984	10,834	12,193	10,405	11,692	12,830	13,225	13,590	13,564	13,613
Winnipeg	1,392	1,443	1,661	2,047	2,317	2,408	2,392	2,350	2,307	2,377
Brandon	--	--	--	832	1,014	1,218	1,150	1,220	1,037	1,012
REGIONAL TOTAL	49,797	55,612	61,253	66,284	80,598	87,926	90,602	88,172	84,762	87,036

[1] Figures for Regina and Simon Fraser are for the first semester only and are therefore not strictly comparable to those for the other universities.

Source: A. G. McCalla, Study No. 7, University Education, p. 10.

following the peak year of 1970-71, full-time winter session registrations declined 6 percent in the next two years, attributable in the main to declining numbers graduating from the secondary schools. Table 6 shows a somewhat parallel pattern of participation rates among the 18 to 24 year age group which rose from 7½ percent in 1960 to almost 15 percent in 1970 and then declined to about 13 percent in the next two years. This decline in university participation was, however, largely but not entirely at that time offset by participation in other post-secondary education, particularly in institutes of technology.

200. Some surveys of the destination of students leaving school show significant evidence of a trend toward direct entry into employment, not an unusual phenomenon in a period of unusual economic activity and prosperity. Moreover there was some evidence of uncertainty in the attitudes of students with respect to the relevance of university education. The relatively mild student unrest of the 1960's, the recession of 1969-70, followed by a strong revival of the economy combined to create a set of circumstances which raised doubts in the minds of students as to their decisions for the future. Moreover, the secondary education system had equipped a goodly number with an educational background which contributed to ease of direct entry into the labour force. It should be noted that participation rates referred to here have reference only to the age group 18 to 24 years. Although comprehensive data are not available it is well known that full-time enrolment in universities includes students both above and below these limits. It is estimated that at least 15 percent of full-time enrolment are less than 18 years of age and 2 or 3 percent are over 30 years of age. Part-time enrolment, though not a new phenomenon, has recently shown a sharp increase, indicating the return of employed adults to the pursuit of higher education. Between 1962 and 1971, the number of registrations rose from 7,600 to 28,500 in the Region. Very recent indications are that part-time enrolments may in a few years equal full-time enrolments.

201. Current indicators of enrolment trends and participation rates in the university age group suggest a prospect of modest growth. The existing university system has the capabilities required to provide programs to all students who are qualified and desire admission, subject to limitations on enrolments in some professional fields and in graduate studies. Moreover, the student assistance programs, combinations of loans, scholarships and bursaries, established by both the federal and provincial governments, quite apart from the scholarships, bursaries and fellowships of the universities themselves, are presently regarded as reasonably sufficient to enable any qualified student irrespective of his location and private resources to pursue his education at a university. The critical factor in future participation would seem to lie in decisions of students themselves and in the influences which come to bear on those decisions, some of which relate to family circumstances and background, some to the state of the economy at a given point in time and some to special inducements or incentives which may be offered to increase enrolments to meet personnel training needs in the public and private sectors.

202. University Governance. Systems of university governance are embedded in the provincial legislation which created the universities. Although legislation in the four provinces varies somewhat, mainly in matters of

detail, the basic pattern is common to all and provides for the general structure and organization for internal management and relationships between the universities and provincial governments.

203. Generally speaking, legislation provides for a board of governors, with powers to establish its own administrative and executive organization to manage the business affairs of the university, and for an academic body usually referred to as a senate (General Faculty Council in Alberta) whose function is to oversee and give direction to academic policies of the institution. Within this basic framework, a complicated network of committees and councils serves the two major bodies chiefly in an advisory capacity in matters of planning, consultation and decision-making.

204. Boards of governors of universities, ordinarily subject to appointment by governments, tend to be representative of a cross-section of the provincial community. Their membership typically includes the president and one or more senior officials of the university, representation from the faculty, students, and alumni, and persons elected by the Senate. None are elected at large in the manner of members of school boards. The administrative apparatus is structured by the Board of Governors which also makes all appointments of administrative and academic staff. While the Board of Governors is empowered to legislate and administer in areas of over-all university policies, general management, personnel and finance, the academic affairs of a university are in the ambit of the Senate (in Alberta, the General Faculties Council). The Senate of a university, often a very large body, usually has a large faculty representation along with representation by election from groups such as the alumni, designated professional organizations, teacher and trustee associations and the student body.

205. Relationships with governments, for many years confined to consultations through the ministry of education in matters of budgetary requirements and provincial grants, have in recent years been the subject of considerable consultation and legislation. Universities and provincial governments alike have recognized the imperatives of more systematic strategies for consultation and decision-making consistent with their respective objectives. The universities, aware of their dependence on government for 80 percent or more of their budgets, are concerned with development in conformity with their objectives with minimum cost to their traditional autonomy. Likewise provincial governments, accountable to the public for educational priorities, are motivated to establish working relationships which will harmonize processes of planning and decision-making.

206. The first stage of development of new university-government relationships therefore appeared in the form of grant commissions, to which reference has already been made. The commissions were seen as intermediaries between government and universities, on the one hand to interpret provincial objectives in the context of over-all development of the university system and on the other to coordinate the development of the universities in so far as possible in conformity with their objectives. The basic instrument of control or influence at the disposal of the commissions was the power to allocate funds, more especially in respect to new programs and services. At the same time, terms of reference of grants commissions typically reaffirm the autonomy of universities with respect to academic policies and standards,

admission and graduation regulations, and appointments of staff. In recent years all four provinces have had grants commissions, but Alberta has recently transferred functions of its former university and colleges commissions to the Department of Advanced Education. In British Columbia, a Universities Council has been established with extensive responsibilities in financial and other matters.

207. The second phase of the evolution of university-government relations is the establishment of separate ministries responsible for higher education in three of the four provinces. Alberta's Department of Advanced Education has its counterparts in the Saskatchewan Department of Continuing Education and in Manitoba's Department of Colleges and Universities Affairs. British Columbia has retained the single ministry for all education, with a special division for post-school education. While the central purpose of the new education departments is to coordinate planning and development of all facets of post-school education, one of the concomitant effects is to bring the universities into more direct contact with a government ministry, and indirectly, with other post-secondary institutions.

208. Future Prospects. To speak of future prospects of the university system is to speak of its role as an increasingly integrated component of the over-all system of education at the post-school level, a role in which governments and the universities themselves have, as a high priority, continued expansion of services to the public. In this connection, it is significant that the developmental features of planning and coordination in higher education in Western Canada since World War II show a gradual but marked change of focus, from an institutional orientation, through a sub-system approach, to a total system focus. This has been, and is, an evolutionary process closely related to changing educational demand and societal expectations. Its outward manifestations are clearly apparent in the emergence of the grants commissions and specialized government departments for post-school education.

209. Trends toward liberalization of admissions policies, increasing participation of faculty and students in matters of internal policies and administration, and expansion of outreach activities at the community service level are well established and likely to gain further momentum.

210. The universities will continue to do what they can do best, that is, to function as centres of higher learning and research, and to enhance this status by cultivating their unique capabilities which result in recognition as centres of excellence in certain fields of study and research. With respect to research, an area of very considerable federal financial support, provincial authorities are increasingly concerned over the burden of overhead costs borne by them, and over recognition of financial priorities in funding of research activities. Policies and processes of rationalization within each province and in the Region are expected to contribute toward this end, and at the same time facilitate further expansion of new or more sophisticated programs accessible to students in the Region.

211. Involvement of the universities, through the education departments with which they are identified, in the planning processes for post-secondary education as a whole should minimize competition among various types of

institutions and reduce the pressure on universities to engage in activities for which other institutions may be better suited. The emerging objective is for the university to function not only as a unique and specialized institution, but also as a cooperating partner within the family of institutions concerned with education at the post-school level. The further evolution of a cooperative approach to planning and decision-making, despite the apprehension of some university academics concerning public accountability and financial controls in relation to academic freedom, seems certain, and with it the prospect of an even greater future for the universities in their contributions to the advancement of society.

CHAPTER III

RESOURCES AND SUPPORT FOR EDUCATION

A. Basic Requirements of the Educational Enterprise

1. Overview

212. Until the 1940's, a consideration of educational resources in Western Canada would have turned mainly on the simple requirements of a large number of very small and widely scattered elementary and secondary schools, of a few technical high schools in cities, of a few colleges and one university in each of the four provinces. For example, the essential requirements of the elementary schools, predominantly of the one-classroom variety, included a simple inexpensive building, a few teaching aids such as chalk-boards, globes, bead frames and some print materials (typically books of general knowledge and sets of literary works). The teacher, in charge of all the grades enrolled, taught from prescribed courses of study and was at once the principal teacher and sole instructor, librarian, counsellor, nurse, athletic coach and often the school caretaker. The secondary schools, some also of the one-teacher variety, were only slightly better equipped, having perhaps a small science laboratory and a few more library books. Allowing for notable exceptions in urban communities and in larger institutions, resource requirements were limited to provision of basic classroom needs, modest equipment, teaching personnel and building maintenance.

213. Since 1940, changes in patterns of economic growth and development, population shift from rural to urban, and growing demands for improved educational services combined to alter the direction of educational developments. Paralleling these changes were the reorganization of school districts into larger administrative units and consolidation of the smaller schools. These and other influences, not the least of which was the determination of the public to up-grade and expand educational services and to make them universally accessible, account for the character of the educational enterprise of the 1970's and for a much wider range of resource requirements, both human and material.

2. Educational Personnel

214. Although the teaching force comprises by far the largest group in the sector of human resources in the educational system, the processes of delivery of services to students now involve several other personnel classifications ranging from directors, supervisors and consultants to teaching assistants to school bus drivers and building maintenance staff.

The Teaching Staff

215. The composition and characteristics of the teaching force are the product of several factors, primarily related to trends in enrolment, certification requirements, tenure, and teaching assignment.

216. Size of the teaching force. In 1973-74 approximately 69,000 teachers were employed in the elementary and secondary schools of Western Canada, serving an enrolment in excess of 1.4 million students. Between the mid-1950's and early 1970's the average annual growth rate of the numbers of teachers was 7 percent against an average growth rate of enrolment of about 4.6 percent. As will be seen from Table 10, the number of teachers employed increased consistently in the period between 1955 and 1973, but at a higher rate between 1955 and 1970 than in the subsequent period when enrolments commenced a gradual decline from the peak year 1971-72. The more rapid and larger increase in the size of the teaching force is attributable to a general tendency in that period to reduce the over-all student-staff ratio, from approximately 26 to 22. Apart from pressure by teachers' professional organizations for continuing reduction of the ratio, other important factors which contributed to increases in the teaching force were the introduction of new courses and programs and a continuing effort by school authorities to improve the quality of educational opportunities for all young people.

TABLE 10

FULL-TIME TEACHERS [1] IN PUBLIC ELEMENTARY AND SECONDARY SCHOOLS

WESTERN REGION

1955 TO 1973

Year	Total	Elementary [2] and Secondary Schools			Other
		Regular Public	Federal	Private	
1955-56	33,264	30,634	700	1,310	620
1960-61	43,111	39,728	859	1,824	700
1965-66	54,680	51,009	848	1,926	897
1970-71	68,172	64,444	725	1,834	1,169
1971-72	68,841	65,080	728	1,816	1,218
1972-73	68,465	64,546	826	1,843	1,250
1973-74	69,573	65,[illegible]74	875	1,815	1,139

1 "Teachers" includes all full-time personnel who must hold a valid provincial teaching certificate, e.g. principals, supervisors, teacher-librarians, counsellors.

2 Kindergarten teachers are included as elementary teachers in all schools except the private schools which operate exclusively at the kindergarten or nursery-school level.

Source: Statistics Canada

217. At the post-secondary level the increase in number of teachers was even more spectacular. In the university sector alone Table 11 shows that the number of teachers more than trebled between 1960 and 1970, from 2,100 to 7,100, reflecting comparable enrolment increases from 30,000 to 92,000.

TABLE 11

TOTAL FULL-TIME TEACHERS IN UNIVERSITIES AND COLLEGES

WESTERN REGION

SELECTED YEARS 1960 TO 1970

Years	Total
1960-61	2,090
1961-62	2,300
1962-63	2,525
1963-64	2,820
1964-65	3,200
1965-66	3,800
1966-67	4,350
1967-68	5,050
1968-69	5,670
1969-70	6,490
1970-71	7,106

Source: Statistics Canada, Education in Canada, 1973.

218. Qualification of Teachers. Prior to 1945, the education of teachers was for the most part a function of provincially administered normal schools and teachers' colleges, typically offering a one-year post-secondary program of professional training. Faculties of education in the universities trained smaller numbers, mainly those intending to teach in secondary schools or who for other reasons wished to secure higher certificates of qualification or degrees. Between 1945 and 1964 the normal schools and teachers' colleges were phased out and all teacher education was integrated with the provincial universities. The agreements between ministries of education and the universities which gave effect to integration included provision for establishment of joint boards of teacher training and certification with

representation from various organizations such as teacher and trustee associations as well as from education departments and the universities. These boards enable education ministries and other interested groups to maintain a continuing interest and involvement in policies concerning the preparation of teachers. This transfer of responsibility was purposed to encourage and facilitate improvement in the qualifications of the teaching force by extending the period of training and raising the requirements for certification.

219. Two routes to certification are available to students in all four provinces: a four-year professional degree program culminating in the Bachelor of Education degree, or a liberal arts degree (or degrees in agriculture, engineering, commerce and the like) followed by a professional program of one or more year's duration to qualify for a teaching certificate (one year) or Bachelor's degree in Education (two years).

220. Table 12 shows that between 1960 and 1970 the percentage of teachers holding degree qualifications increased substantially in all four provinces, on average almost doubling in that period. This Table also reveals that notwithstanding the predominance of degree-holding teachers in the secondary schools, the rate of increase of such teachers in elementary schools has been more rapid (an average of 22.6 percentage points) than in the secondary schools (an average of 14 percentage points). By 1971 half of the teachers employed in the Region held university degrees.

TABLE 12

PERCENTAGE OF TEACHERS WITH UNIVERSITY DEGREES
IN ELEMENTARY AND SECONDARY SCHOOLS
IN 1960-61 AND 1970-71

Province	1960-61			1970-71		
	Elementary	Secondary	Total	Elementary	Secondary	Total
British Columbia	17.0	69.9	37.0	38.4	81.3	56.9
Alberta	10.7	61.6	27.7	45.5	80.5	58.3
Saskatchewan	4.0	57.8	16.7	22.7	74.1	39.5
Manitoba	8.7	64.7	25.6	24.9	74.3	41.3

Source: Statistics Canada, Survey of Education in the Western Provinces, 1971.

221. Table 13 shows the percentage distribution of degree holding teachers in the Western Region as a whole for 1970-71. A further indication of the improvement of the qualifications of teachers may be inferred from the fact that in 1969 the number of degrees awarded to teachers was 3,349 compared to 811 in 1961. Also, it will be apparent from Table 14 that in 1970-71, about 80 percent of elementary teachers and more than 90 percent of secondary teachers had three or more years of training.

TABLE 13

PERCENTAGE DISTRIBUTION OF TEACHERS HOLDING DEGREE QUALIFICATIONS

WESTERN REGION

1970-71

	Male	Female	Total
Elementary			
Master's degree and higher	5.2	0.9	2.1
Bachelor's degree	56.4	24.4	33.1
No degree	38.4	74.7	64.8
Secondary			
Master's degree and higher	11.0	6.6	9.5
Bachelor's degree	72.1	64.0	69.4
No degree	16.9	29.4	21.1

Source: Statistics Canada, Education in Canada, 1973.

222. At the post-secondary level, qualifications to teach are usually predicated on academic achievement as represented by graduate and post-graduate degrees held in a field of instruction and do not ordinarily require evidence of professional training as a teacher. Between 1960 and 1970 the percentage of full-time teachers of all ranks holding doctorate degrees in universities and colleges rose from 46.2 percent to 53.7 percent. Of the remaining 46.3 percent (in 1970) it is estimated that approximately 31 percent held master's degrees.

TABLE 14

DISTRIBUTION OF TEACHERS WITH THREE OR MORE YEARS OF POST-SECONDARY EDUCATION AND TRAINING 1966-67 AND 1970-71 (Percentages)

Province	1966-67				1970-71			
	Elementary		Secondary		Elementary		Secondary	
	Male	Female	Male	Female	Male	Female	Male	Female
British Columbia	80.5	58.9	95.5	88.6	89.5	67.0	95.6	91.5
Alberta	85.3	52.1	96.7	85.6	96.7	88.0	99.4	95.1
Saskatchewan	76.9	65.3	97.1	90.0	96.6	87.8	99.2	96.7
Manitoba	35.7	17.7	88.0	75.6	77.0	42.1	94.3	86.3

Source: Statistics Canada

223. Certification of Teachers. Licensing of teachers to practise their professio.. in schools concerned with basic education is the prerogative of the minister of education. Likewise it is in the statutory powers of the minister to suspend or cancel a teacher's certificate for cause. In post-school education, there are no legal requirements pertaining to certification although some institutions include the requirement for specified positions that an instructor holds a valid teaching certificate issued by a minister of education. This practice, not typical of universities, is more common in the institutes of technology and in some of the colleges. Instructors in vocational subjects and technical courses at all levels are normally required to hold either trade, journeyman or professional qualification in their field of instruc·ion.

224. Every teacher engaged in the basic education sector is required by law to hold a valid certificate of qualification. Policies and regulations pertaining to training and certification are customarily subject to review by advisory committees composed of representatives of education departments, provincial school trustees' associations, provincial teachers' associations and the universities. Advisory to the minister, these committees may initiate recommendations or may respond to requests of the minister for proposals of changes in the regulations. Although the educational qualifications pertaining to certification are governed by provincial regulations, certificates are issued on the basis of the recommendations of the universities with respect to teachers whom they have trained. Teachers trained

in other provinces may receive certificates of qualification if their qualifications conform to those regulations. Certification policies in all four provinces emphasize general as opposed to special certification. Placement of teachers in specialized teaching positions tends to be governed more by the nature of their total preparation than by special certification, with one major exception in the field of vocational education, where certificates carrying a vocational endorsement are issued on the basis of completion of special programs of training in that field. In contrast to the wide assortment of certificates issued as recently as 10 to 15 years ago, two basic types of certificates are presently awarded, one on the basis of two or three years training, the other on the basis of completion of the Bachelor's degree in Education (or its equivalent).

225. Experience, Tenure and Mobility. The median years of experience of teachers declined in the period 1960 to 1969, attributable in the main to the larger numbers of young and newly trained teachers who entered the teaching profession in that period. In those years average experience fell from about 8.8 years to approximately 7.2 years, but with some indications in 1970 of a reversal of the downward trend. It is characteristic for secondary school teachers to be somewhat more experienced than elementary teachers, on the average about one-half a year for the Region as a whole.

226. Although legislation in all four provinces provides teachers with a large measure of security of tenure, there is a strong tendency to mobility in the teaching profession. For example, average tenure in schools within the provinces is estimated at between three and four years. Of the teachers employed in the Region in 1959, 19 percent had taught in other provinces or countries. In 1969 this figure had risen to more than 27 percent, due in part to special recruitment programs in the United Kingdom and the United States during a period of critical shortage of teachers between 1955 and 1965. Transferability of credentials from one province to another is usually relatively easy, especially in periods of shortage of teachers and there is, as of 1974, complete portability of teacher pensions in all four provinces.

227. Assignment of Teaching Duties. Selection and placement of teachers are functions of school boards and their administrative staff, including the principals of schools. Among the factors taken into account in placement, apart from expectations of an individual teacher, are evaluation of a teacher's background of education, training and experience, consideration of various physical and psychological factors pertaining to the students involved, and appraisal of the requirements of the program in terms of the teacher's role in it. The precise role of a teacher is largely governed by the age or grade level of the classes, the organizational structure of the school and its program and by its approach to methodology. For example, in elementary schools the teacher is more than likely to be attached to a particular group of students for most of its curricular program, frequently with specialized assistance in music, art or physical education, and to teach at that level for several years. At the intermediate and secondary levels, the tendency is toward increasing specialization in teaching and to contact of a teacher with larger numbers of students. Subject specialization, typical of secondary education, is limited in the lower grades to

the minimum essential to a satisfactory level of instruction in special subjects. In open-area elementary schools, particularly where continuous progress plans are used, two or more teachers may share program and teaching assignments pertaining to a larger group of students than the number normally associated with a one-grade one-teacher class and classroom.

228. While definitive data concerning the workload of teachers are not available, various studies during the past decade indicate an average work week of 40 to 50 hours. It is estimated that about 40 percent of that time is devoted to actual instruction, 30 percent to preparation and testing activities, 20 percent to administrative, supervisory, clerical and extra - curricular functions and 10 percent to miscellaneous activity, including non-teaching periods in school time. Unassigned periods are more typical of the secondary schools than of other schools.

229. Pupil-Teacher Ratio. The tendency to lower ratios of students to staff in the basic education sector appeared as a consistent pattern in the late 1950's. Between 1960 and 1970, the ratio fell from 25.5 to 22 and in 1974 is estimated at approximately 20 for the Region as a whole. This trend is attributable in part to representations from the teaching profession that teachers should have more time for attending to individual needs of pupils. Although educational authorities recognize the merit of this objective, there is yet little objective evidence of what constitutes an optimum ratio. Moreover, the basic notion of a ratio has become somewhat obscured by the gradual introduction of various types of teaching assistants whose functions are seen to relieve a teacher of duties of a less professional nature, freeing the teacher for better utilization of professional capacities. The financial implications of continuing reductions in ratio are of some concern to educational authorities. As a consequence, education ministries, school boards and teachers are devoting increasing attention to analyses of various approaches to deployment and application of staff resources and capabilities in the instructional program.

230. Teacher Supply. Historically in Western Canada the demand for teachers has tended to exceed the supply. The only period of a significant over - supply occurred during the depression years of the 1930's when many former teachers endeavored to return to the profession. On the other hand, the post-World War II period to 1970 was marked by very critical shortages of teachers due mainly to rising school population. Emergency training programs and special recruitment campaigns at home and abroad were necessary to narrow the gap between supply and demand. By 1970 a fairly balanced demand-supply situation had been achieved as a result of availability of increasing numbers of secondary school graduates and various incentive programs of student assistance. Improved salaries have also served as an inducement to enter the profession. Policies which have been implemented in the past decade to require increasingly higher qualifications for certification of teachers do not appear to have influenced materially the supply situation.

231. Although in terms of numbers there is at present a reasonable balance between over-all supply and demand, the emergence of new programs has resulted in shortages in specialized fields such as kindergarten education, education of the handicapped, education of adults, the fine arts, and languages other than English. Moreover, some difficulties are experienced

in attracting teachers to positions in remote areas and smaller communities. The universities have developed, or are developing, training programs to accommodate the accelerating demands for fully qualified teachers in these fields, as well as in the area of personnel for guidance and counselling services. While some needs will continue to be met from out-of-province sources, present indications are that the provinces will be able to meet basic requirements from their universities.

232. Professional Development. The teaching profession, like other professional groups, has been subject to the impact of dramatic expansion of knowledge and technology and the increasing complexity of societal expectations of education. New demands on education, new clients, new programs and changing perceptions of the role of the professional teacher have combined to make professional development a compelling and continuing feature of a career in teaching.

233. Although the concept of in-service education of teachers is by no means new in Western Canada, it was for many years perceived as a function of education departments and school board officials to initiate and direct programs purposed to enhance the professional capabilities of teachers. Teachers' conventions, conferences, institutes and seminars, usually planned by or in consultation with the teacher groups involved, have for many years served as the customary vehicles for participation in in-service activities. In more recent years, teachers' professional associations have assumed increasingly important leadership roles at the provincial and local levels, particularly in cultivating a professional commitment and sense of individual responsibility in the membership toward professional development. The nature of this commitment is aptly described in a policy statement of one of them in noting that "teachers accept individual responsibility for professional development in order that they may keep abreast of new knowledge, new curricula, new technologies, and the use of services by technicians and non-certificated instructional personnel". The teachers of the same association expressed their expectation of their provincial body by asking that it "ensure that opportunities for professional development are available to teachers and that it promote and offer development programs for teachers through such means as specialist councils".

234. Teachers' associations in all four provinces are organized into smaller localized units as well as in subject and service-centred councils at provincial and regional levels. They also sponsor and schedule a wide variety of regular and ad hoc conferences, workshops, seminars and short courses.

235. At the local school system level, school board officials and consultants, usually in cooperation with teachers' organizations, are responsible for continuing in-service activities relevant to the teachers within a system. Staff meetings, workshops and institutes are organized and conducted cooperatively, usually in school hours, but occasionally on evenings and weekends. Many school boards provide 'released time' for teachers as well as expenses incurred in attendance by teachers at professional development meetings. Other inducements to participation include provision for sabbatical leave, educational travel, tuition fees, and expense allowances

for teachers while engaged in committee work and special projects. In this connection, universities schedule on and off-campus evening courses, summer courses for credit and non-credit purposes for the convenience of teachers. Moreover university personnel are available to teacher groups in a consultative capacity in professional development programs.

236. The evolution of continuing and relatively structured professional development programs at the local school system level and through teachers' professional organizations has significantly altered the role of education departments from a major emphasis on direct services to one of collaboration and cooperation with other agencies and to provision of consultant services at provincial and regional levels. Curriculum and professional development branches of departments involve many teachers in a wide variety of activities pertaining to program development and implementation. Also the faculties of education of the universities are increasingly active participants in in-service projects.

237. Economic Status of Teachers. Salaries of teachers in all four provinces are paid in conformity with salary agreements or contracts negotiated between the school boards and their teacher employees. An exception to this is in Saskatchewan where salary schedules are negotiated at the provincial level by the Saskatchewan Teacher's Federation and a bargaining committee composed of representatives of the Saskatchewan School Trustees' Association and the provincial government. Salary scales are typically based on level of training and years of experience. Collective bargaining agreements contain as well a variety of other benefits such as group life insurance, paid sick leave, disability salary continuance, educational leave, compassionate and maternity leave, special allowances, to name a few. Superannuation plans in Western Canada are basically administered by provincial governments and therefore not subject to collective bargaining. In Saskatchewan, however, the teachers' pension plan is a negotiable item under its Teacher's Collective Bargaining Act, 1973.

238. In the 15-year period 1955 to 1970 the median salaries of teachers in all four provinces increased on the average for the Western Region from $3,150 to $7,915 and to approximately $11,000 in 1973. Excluding various allowances for principals, supervisors, consultants and other specialized personnel, current salary grids provide a range from $7,500 to about $19,000, depending on years of training and previous experience. Median salaries for all ranks in universities and colleges rose from $8,610 in 1960 to $14,389 in 1970.

Support Staff

239. Paraprofessionals. The employment of paraprofessionals originated in part with the shortage of qualified teachers in the 1950's and 1960's and with attempts to alleviate that problem by employment of persons who were partially trained either in the regular courses for teachers or in emergency programs of short courses. Rapidly rising costs and growing sensitivity to the efficient utilization of the professional capacities of teachers added further impetus to consideration of ways and means for relieving teachers of functions and duties which could be performed as well by other personnel at a paraprofessional level. As a result a variety of

assistants to teachers have appeared under such designations as teacher aides, supervisor's aides, library and laboratory assistants, markers, clerks, to name a few. Duties of such personnel variously include hall and playground supervision, clerical and secretarial duties, assisting with audio-visual and library equipment, and routine semi-instructional duties under direction and supervision of teachers. The latter range from routine tutoring of individual students and small groups to checking student work, from setting up and assisting in laboratories to assisting with demonstrations, and from supervision of extra-curricular activities to coaching in specialist areas such as archery, ballet, second languages, to name a few.

240. In as much as utilization of paraprofessionals is still more or less experimental, no distinct pattern of training, assignment of duties or classification of personnel has yet emerged. The large majority of those presently employed, having little or no formal preparation specific to their duties, have been trained 'on the job' by the professional staff under whose direction they work in the school. Data presently available indicates that paraprofessionals are employed in one-quarter to one-third of the schools of the Region and that their numbers increased by 60 percent between 1972 and 1973. Ordinarily they are secondary school graduates and may have some additional post-secondary or clerical education, and have been selected on the basis of personal attributes suited to working in the school setting.

241. In more recent years the use of paraprofessionals tends to be associated with differentiated patterns of staffing which are gradually emerging in some of the schools and with various other efforts to organize the instructional program in a manner to utilize to maximum advantage the professional capabilities of teaching and support staff in collaborative roles. The evolution of the concept of an educational paraprofessional, initially innovative and experimental and without formal legal sanction, has now developed to the point at which two of the provinces have specific legislation empowering school boards to employ teacher aides or school aides; the other two have a more general provision with respect to employment of persons other than professional teachers. Functions of such personnel, particularly those which relate directly to the instructional program, are generally subject to direction and supervision of teachers or other professional staff.

242. School System Staff. The staffs of all schools have a head teacher, commonly referred to as the school principal, who in addition to his administrative duties, is regarded as a professional leader in his school. The principal may, depending on the size of the school, have assistant principals, heads of departments, directors and coordinators of programs. Moreover, he and his teaching staff may have access to a variety of non-administrative personnel from the school board office, for example, psychologists, counsellors, special and remedial teachers, clinicians, librarians, media specialists. These are available to individual teachers or groups of teachers in supportive roles, either as advisors and consultants or in providing direct assistance involving the students themselves.

243. Government Departmental Personnel. Provincial departments of education provide support services to teachers through their field staff of supervisors and consultants. Some of these are situated at departmental headquarters and others at local or regional centres. Although their functions include

responsibility for implementation of government policies and supervision of program development, these officials are expected to provide very substantially for consultant services needed or desired by the staffs of the schools. They are heavily relied upon by the rural and small urban school systems for leadership and direct assistance in the implementation of new programs and major changes in educational services. In this context they work in collaboration with school board personnel whose supportive roles are parallel at the school level, but whose numbers vary considerably in relation to the size of the system.

Administrators

244. Administrative organization at the local school system level has two major focal points, one in the school board office and the other in each of the schools in the system. The chief executive officer of a school board, variously referred to as director of education, superintendent of schools, superintendent of education or some variation of these, is an employee and official of the school board in the majority of school systems in Western Canada. In that capacity he is responsible for giving effect to educational policies of the school board in particular and for leadership with respect to provincial policies in general in the planning processes at the system level. At the same time he is the professional head of the system. In his administrative and professional roles, he may have various deputies and assistants, some performing line functions and others staff functions.

245. In the individual school, the position of the principal parallels that of the director at the system level. He is in theory and practice a line officer accountable to the director or his deputy or assistants, and responsible for the over-all management of his school. His staff may include vice-principals, assistants and department heads, supervisors and consultants, some of whom have administrative duties, but whose major duties are to serve in staff capacities to him and to the teachers. By reason of the wide range in size of schools in Western Canada and because comprehensive data are not available, a definitive description of the composition of school staffs is not possible. However, an analysis of deployment of Saskatchewan's administrative and supervisory and other professional staff in the school year 1973-74 provides a reference point. In that year, 79.8 percent of the professional staff were classroom teachers. Of the remaining 20.2 percent, .6 percent were directors and superintendents, 7.9 percent principals, 3.9 percent vice-principals, 1.3 percent librarians, .7 percent counsellors, .3 percent supervisory assistants and 5.6 percent department heads, consultants and specialist teachers. Of the principals and vice-principals over 90 percent had some teaching duties. In general terms, the ratio of full-time and part-time teaching personnel to non-teaching personnel was in the order of ten to one.

Ancillary Staff

246. One of the significant features of the school system of the 1970's is the increasing number of non-teaching personnel who in one way or another contribute to the delivery system of educational services and who in doing

so become a part of the educational environment and experience of students. Those with whom the great majority of students are in direct contact range from school bus drivers and school maintenance staff to nurses, doctors, dentists, social workers and psychologists. Some of these are employed by school boards, others by municipal authorities and provincial governments, but function under agreed upon arrangements within the over-all administration of the schools.

247. Although each class of such personnel is primarily intended to provide a specific and specialized service to students, or to a school, both they and the school authorities recognize that their activities have, or may have, positive educational implications. For example, the work of bus drivers and school caretakers may relate to social attitudes and behavior, medical and dental practitioners to health education and psychologists to mental health. A growing appreciation of the potential values of cooperation among teaching and non-teaching personnel is reflected in increasing consultation concerning educational programs of the school and in joint planning and collaboration in related matters of mutual interest and responsibility.

Trends in Utilization of Personnel

248. Changing concepts of teaching and learning and the increasing impact of educational technology have already produced a modified frame of reference with respect to teaching functions in relation to the learning experiences of students. Discovery and inquiry approaches, individual and independent study, cooperative or work-study programs are changing the focus from teaching to learning, from the teacher as the main source of learning to the teacher as the organizer and facilitator of learning.

249. In this context the role of the teacher is seen as one of a higher order of professionalism predicated on more and better pre-service training and on career-long professional development activity. As the central figure in planning instructional programs for students, the teacher's expertise seems likely to go well beyond that of an instructor to include skills in organizing human and material resources which contribute most effectively to learning experience. These human resources will undoubtedly consist of increasing numbers of paraprofessionals and teaching assistants who may function directly with students in some aspects of instruction. The concept of differentiated staffing seems likely to be implemented on a wider scale when its potential is better understood by teachers and when traditional notions of relationships of teacher to teacher and teacher to student give place to the broader view of a teacher as an integral part of a program in which there may be several operative and cooperating participants.

250. Already in evidence is a trend toward collaboration among education departments, teacher organizations and universities aimed at improving coordination of professional development programs. Although teacher training programs will be increasingly influenced by the need to prepare teachers with a variety of skills and knowledge to equip them for specialized types of educational programs, the system of certification based on general as opposed to special certificates will be continued. The teacher is seen primarily as a professional person in the general sense, and then as a

secondary consideration as a teacher with special skills and interests. This is consistent with the perception of basic education as having a general education purpose. Finally, future prospects are that, by reason of growing sensitivity to disparities among school systems, particularly in rural areas, vigorous efforts will be continued to provide optimum access to the full range of educational personnel irrespective of the size or location of a school.

3. Educational Technology

251. If educationists have traditionally viewed technology as essentially a major force and change agent in society outside the school, they have in the past decade become increasingly alert to the possibilities of adapting it to educational operations. The development of technology for educational use may be described in terms of three phases. The initial phase was characterized by utilization of "raw" technology without adaptation to specific educational needs, a period when equipment and programs designed primarily for other than educational purposes, were used to supplement teaching and learning activities. In the second phase, the major emphases were on adaptations of equipment and on preparation of materials based on educational needs and objectives. The unifying theme was one of devices, hardware or equipment and the infusion of software, all adapted to accommodate instructional purposes. This is essentially the present state of the art and the third phase can be seen only in terms of a tentative trend toward greater manipulation of the learning environment. In that context, educational technology would become a "systematic way of designing, carrying out, and evaluating the total process of learning and teaching in terms of objectives, based on research in human learning and communication, and enjoying a combination of human and non-human resources to bring about more effective instruction". [17]

252. Audio-Visual Services. Although the development of school broadcast, film and school library services has taken place in more or less separate branches of departments of education, not necessarily concurrently, the present tendency is to integrate these services and, to regard them as components of the broader concept of a 'learning resources' operation.

253. School broadcasts, referred to in Chapter II, initially radio and later television, are available to all schools in Western Canada through the facilities of the Canadian Broadcasting Corporation. Radio broadcast programs comprise those for transmission nationally, others for use in the Western Region and still others for each province. In all cases, program development is a joint function of education departments and the C.B.C. The broadcasts include a wide range of school subjects, with a special emphasis on music and art. In addition to participation in program planning, education departments prepare listening guides, lesson 'helps' and supplementary materials for teachers and students, and also conduct a regular evaluation procedure to ascertain the response of teachers and students to the broadcasts.

254. School telecasts, which appeared more than 25 years later than radio in the mid-1950's, developed in the same pattern as school radio, but were not in general use until the 1960's because of limited availability of

television sets suitably designed for school use. Again, as with radio programming, a great deal of attention has necessarily been devoted to relating content to educational purposes and to experimentation with ways and means of meeting the high cost of television production. One of the major problems has been to schedule broadcasts to link up with curricular programs at suitable times. The audio tape and dubbing service developed for radio is now being joined by the video tape recorder to enable the schools to use these materials when needed rather than when available 'on air'.

255. Education departments continue to maintain film libraries from which schools may borrow materials as required and also furnish professional assistance and materials in film utilization. Filmstrips and slides, formerly also available from central sources, tend now to be included in provisions at the local school system level as a feature of school resource centre development.

256. At the present stage of development, the very large majority of the schools are equipped with, or have ready access to, radios, television sets and a variety of film projectors. Other hardware in relatively common use in schools includes other types of projectors (overhead, opaque and 8 mm.), copying and duplicating machines, audio tape recorders and playback equipment, - and to a lesser extent, cameras, language laboratories, programmed learning devices, microfilm and microfiche, closed circuit television and computers or computer terminals. Use of the computer as an aid to instruction is very limited except in specific courses related to its own practical applications. Its major applications in schools relate to assembling, analyzing and storing educational data, preparation of school and student time-tables and to general administration. In this connection, reference is made to inclusion in school building plans for facilities to accommodate application of technology to educational programming.

257. School Library Services. Most provincial education departments employ supervisors of school libraries whose functions are to provide leadership to local school authorities in the development and use of school libraries and to define standards with respect to library facilities, management of services and selection of materials. Supervisors furnish direct consultant services to school boards, directors of education, school principals, librarians and teachers in matters of planning and utilization of school libraries in the instructional program. They are also concerned with promotion of training programs for school librarians and of continuing in-service activities for librarians and teachers.

258. Depending upon the size and location of schools and the recency of their construction, the pattern of organization of school libraries ranges from the self-contained classroom library to the school library supplemented by a central library located elsewhere in the system. A very recent development, the learning resource centre referred to elsewhere, perceives the school library as an integral component of a variety of learning resources, print and non-print, films, slides, tapes, and the like. Not yet a widespread practice, this concept is gaining favour among educators and administrators and is reflected in the planning of buildings, facilities and staffing of new schools. The priority attached to library services,

more especially in the past decade, is apparent from a survey in 1972 which indicated that the number of professional librarians in Western Canada increased 12-fold in the period 1964 to 1972. The number of books per student more than doubled in the same period from 5 to a range of 10 to 15 in 1972. Moreover, non-print materials in the form of films, filmstrips, transparencies, sound recordings, graphic productions, and programmed learning components, sound and video tapes were reported in substantial numbers for the first time.

259. Textbooks. Although the traditional single textbook per subject prescription of education departments has given place to selection from lists recommended by provincial departments, each province operates a central agency or bureau from which text, reference and general interest books may be purchased by school boards or students at less than retail prices. Three of the four provinces have a free textbook service to students and the fourth provides for a textbook rental plan. These services are administered at the school system level.

260. Trends and Future Prospects of Educational Technology. The impact of technology outside the school in the educational development of students has been the subject of much research. Evidence of the quantitative and qualitative aspects of the so-called out-of-school influence of the media, newspapers, magazines, books, radio and television, especially the latter which is estimated to consume almost as much time as actual school attendance, has made it imperative that curriculum planners and teachers take account of this type of learning experience in formulating the design and purposes of in-school learning. Given the current emphasis on processes of inquiry and on analysis, evaluation and utilization of knowledge and ideas, out-of-school learning, however informal, becomes an important part of what students bring to their school experience. Educators and other educational authorities, impressed by the impact of television, see this medium as one with a very great potential as an instrument upon which to capitalize in strengthening the impact of the educational system at all levels - in the formal structures of institutional services and in the informal non-traditional approaches visualized in the field of recurrent education. Recent legislation and establishment of provincial educational communications authorities, referred to in more detail in Chapter IV, reflect the intent of provincial authorities to expand activities in that area of educational technology.

261. Apart from the increasing attention of curriculum planners and teachers to the outside experiences of students via the media, planning at the school or class level will include some new dimensions in the expertise of teachers. The teacher is seen increasingly in the role of a specialist in identification and definition of goals and objectives, in selecting appropriate instructional strategies, in implementation and evaluation of programs, and in this role to exploit to maximum advantage the benefits of various forms of educational technology.

262. Many adults are looking to educational technology to afford them new and better opportunities for continuing education. The prospect of expanding educational television services, including regional programs, is likely to

be a part of the response to this expectation, in part as a direct service and in part as a possible feature of extension programs of post-secondary institutions.

263. The trend toward decentralization of some of the existing audio - visual services seems likely to continue. However in areas such as educational broadcasting, substantially increased involvement of provincial authorities is indicated, in part to provide leadership and support aimed at greater and more effectual application of this medium, especially television, to educational programming, and in part, to assure universal accessibility to educational broadcast services. It is recognized that further major expansion and development of this technology involves complex technical and administrative problems pertaining to acquisition of programs by production and/or purchase, distribution and transmission, copyright and residual rights - not to mention financial requirements - all of which lend themselves to a provincial basis for initiative and support. Among approaches in the provinces in response to these considerations is the recent emergence of specialized provincial agencies with responsibility for development of the broad field of educational communications. Specific examples of these are the Alberta Education Communications Corporation (ACCESS) and the Saskatchewan Educational Communications Corporation (SASKMFDIA), both referred to in more detail in Chapter IV.

4. The School Plant - Buildings, Equipment and Facilities

264. It is almost axiomatic that a school building mirrors what its planners perceive as the nature and purposes of education at the time of its building. In Western Canada it is possible to see schools which were built 50 or more years ago, a few still in use, and by comparison with a recently constructed school to sense the history of changing objectives, curriculum, teaching methods and the role of the school as an instrument of society in evolution.

265. During the period of rapid expansion of elementary and secondary enrolments in the 1950's and 1960's, capital expenditures represented upward of 17 percent of total annual budgets of school boards. Despite the levelling off and slight decline in enrolments in 1970 and 1971, capital commitments to buildings and equipment decreased only about 5 percent, to approximately 12.2 in 1970-71, accountable mainly to continuing replacement or major rehabilitation of older buildings and to new buildings in growth centres.

266. In Western Canada the planning and building of schools involves both levels of government. The responsibilities of provincial education departments is two-fold, to set out in regulations minimum standards with respect to location, quality of construction, allocation of space, suitability of accommodations in terms of utilization, safety, comfort and convenience of staff and students, and second to approve final plans and arrangements for financing capital cost. Within these general provisions, school boards are responsible for initial planning and design based upon the educational purposes for which a school is needed, taking into consideration the student groups to be served, the programs to be offered, and the instructional

procedures to be used. In as much as departmental regulations do not prescribe details in matters of design, the usual practice is for school boards to define and set out the educational specifications and refer these to architects for preparation of one or more alternate preliminary design plans. The procedures which then follow normally include consultation involving the school board and its staff, architects and engineers, and school building officials of the department of education. In this stage the objective of the school board and education department is to evaluate basic plans and building alternatives in terms of the educational purposes to be served and to arrive at agreement on a final plan and on financing. This type of bi-level planning lends itself to a considerable variety in the design of buildings although in the final analysis, they meet the basic criteria prescribed by the provincial departments.

267. Apart from their regulatory functions, education departments provide advice and information to school boards with respect to interpretation of provincial educational objectives and programs, research in the field of school design and construction, innovative practices, and new developments and experimentation elsewhere. Policies of education departments and school boards in the past decade or more reflect the increasing emphases which have been placed on program needs, on special services and resources, on factors which enhance the learning environment and on maximum flexibility in the utilization of space and equipment resources.

268. At the post-secondary level the planning and construction of new facilities are functions of boards of governors in the case of universities and many of the colleges, and of education departments and their planning groups in the case of institutions in their jurisdiction. An indication of the magnitude of the capital investment in the post-school field is seen in the $733,000,000 expenditure for buildings in universities alone in the Western Region in the period 1964 to 1973. While the basic planning of new facilities is a function of institutional authorities, the financial arrangements are subject to approval of grants commissions or education departments, as the case may be in individual provinces.

269. Space Design and Utilization. Changing concepts of program development and instructional techniques as well as the introduction of many new courses, particularly at the secondary school level, have resulted in construction of buildings very different from the conventional classroom-oriented buildings typical in Western Canada until the 1950's. Commencing at that time to add new types of facilities such as auditoria, gymnasia, additional laboratories, library accommodation and industrial arts shops, school authorities gradually adopted the basic idea of buildings with a minimum of permanently constructed inner walls. The 'open-area' concept appeared first in elementary schools, and then in the intermediate level schools. This type of design is purposed to afford maximum flexibility in application of space to accommodate a variety of scheduling of use, team teaching, various patterns of student grouping and multi-media approaches to instruction. However, because the 'open-area' principle of design is still regarded as experimental, school planners and education departments strongly encourage that new schools, whether basically traditional in type or of the 'open' type be so designed that they can be readily modified to accommodate further changes in educational strategies and programs.

270. The practice of providing temporary facilities of a portable type has been encouraged in both rural and urban areas where there are major population shifts. Use of such facilities is intended to accommodate unforeseen or temporary overcrowding and to minimize uneconomical construction of small permanent additions, as well as to give some flexibility in scheduling planning during a period of uncertain enrolments.

271. The use of school facilities for other community purposes, by no means a new concept in Western Canada, is emerging as a significant feature of new patterns of community services and organizational development. The newer schools in particular, lend themselves to a wide variety of activities - as centres for adult education, recreational programs, library services, certain health oriented programs and the like, many of which are or can be conducted in out-of-school hours. This type of development has led to some experimentation in two provinces with joint occupancy projects where school boards share facilities with such community groups as public libraries, community colleges, recreation organizations, health and welfare units, day care centres, and churches.

272. Although there are some variations among the provinces with respect to planning of space distribution, the several formulae in use tend to produce the equivalent of 65 to 75 square feet per student at the elementary level, 95 square feet at the intermediate level and 100 to 115 square feet in secondary schools. Additional space is allowed for vocational purposes. In terms of students per 'classroom' the conventional assumption is that the allocation for elementary schools contemplates a student loading of 25 to 35, and for secondary schools 20 to 30. Classrooms as such range from 750 to 1,000 square feet and laboratories from 1,000 to 1,500 square feet. Space allocations in large schools also include, in addition to those already mentioned, accommodations for food services, resource centres, small and large areas for independent study, listening, viewing and media production.

273. Provincial regulations require adequate provision of suitable playground space, usually relating the amount of space to the enrolment of a school. However, in part as the result of high cost of land at suitable locations and in part the desire to increase the variety of school recreational activities, school authorities and various civic and community agencies have entered into agreements for joint use of sports fields, ice skating rinks and swimming pools.

274. Building and facilities of post-secondary institutions are planned and built to conform as in basic education to program requirements and educational purposes at that level. Differences in planning as compared with basic education relate more to the anticipated 'life' of a structure and to the level of sophistication of its facilities.

275. Trends and Prospects. The growing complexity and expansion of educational services and of the planning processes involved with delivery systems related to those services, as well as escalating costs of buildings and equipping educational facilities, have tended to increase the intervention of governments both in financing and decision-making with respect to provision of the physical plant of educational institutions. At the level of basic education, provincial governments share with local governments in

capital investment at levels ranging from 50 percent to almost 100 percent; at the post-school level, governments underwrite virtually the entire cost of buildings and equipment. Although local governments in education attach some importance to local fiscal responsibility in relation to decision-making at that level, provincial authorities are equally concerned that the quality of educational services is not impaired by local disparities in ability to meet the costs involved. The trend toward increasing involvement of provincial governments in support of capital, as well as operational, requirements of the educational enterprise, is seen as a means, on one hand, of ensuring an optimum level of service to people irrespective of local conditions, and on the other, of giving expression to provincial objectives and priorities in the development of the educational system.

276. Research in the development and application of new knowledge with respect to building design, space and service engineering, materials and equipment will increase in intensity as a feature of over-all planning services in education departments. In the same connection, present concerns over the size and location of schools and other educational institutions will have a priority, more especially in the face of a current trend to limit the size of schools and the enrolments they are to serve.

277. Relationships between provincial and local authorities in the planning of buildings and facilities tend increasingly, as in the program aspects of educational administration, to reflect enlargement of local government involvement with decisions pertinent to program and delivery of services along with increasing responsibility of provincial governments with respect to financial requirements. In terms of working relationships, this broadening of the scope of mutual concerns with program and financial planning in which both levels of government are involved has been accompanied by the gradual evolution of new accommodations for consultation and cooperation in planning and decision-making processes with respect to school building. Continuing refinement of these processes is expected to enhance the benefits of over-all planning and to contribute to increasingly meaningful involvement of community interests in the development of educational services.

278. The trend to greater utilization of school facilities for community educational purposes beyond conventional school day purposes is clearly a prospect for increasing exploitation. More especially, attention will be focused on surplus space resulting from population movement both in sparsely settled areas and in urban communities in their city core areas. This type of accommodation, available in day and evening hours, lends itself particularly well to use for adult programs.

5. School Transportation

Role in Relation to Educational Services

279. Educational policies directed toward the goal of equality of opportunity have inevitably been conditioned by problems of distance in Western Canada where almost half of the population lives in widely scattered and sparsely settled rural areas, small villages and towns. Recognizing that

progress toward that goal depends not only upon development of programs but also upon the means of accessibility to those programs, educational authorities have devoted a great deal of attention and resources to school transportation. The developmental aspects of school transportation were facilitated by reorganization of school districts into large units and by consolidation of schools, both features of policies since the early 1940's.

Administration

280. Apart from differences in details of policies among the provinces, transportation of students is a function of school boards. Services are confined mainly to non-urban students and in particular to those who must travel from the home community to another community to attend school. Transportation services under school board auspices are less common in urban school districts, but are likely to increase gradually in the future.

281. Provincial policies with respect to school transportation relate to regulatory functions such as standards required with respect to specifications, inspection, and maintenance of vehicles, safety features and practices, along with training, qualifications and supervision of school bus drivers. Such regulations are applicable whether school boards own and operate their own fleets of buses or contract for services. The several types of formulae used by provincial departments for allocation of financial support to school boards tend to recognize a provincial responsibility for a very large part (up to 90 percent) of the cost of transportation.

282. Notwithstanding climatic conditions, particularly those of the winter season in the Western Region, roads for school buses have been improved to the extent that except in unusual circumstances bus services are rarely interrupted by weather conditions. This has become possible through the collaboration and cooperation of local municipal governments and provincial government departments responsible for building, surfacing and maintaining the road systems of the provinces.

6. Financing Educational Services

283. The formal education system of Western Canada and the policies which have been the foundation of its evolution, described earlier in this document, are reflections both of its goals and of its priority in terms of social development. The system is seen as the means by which individuals may acquire the skills and knowledge necessary to becoming effective and productive members of modern society. The investment in basic education is seen in terms of cultivation of universal literacy, of attitudes requisite to life in a democracy, of social and cultural values and of general preparation for further education and training. The investment in post-school education in its turn is seen in terms of higher specialized skills, of creativity in advancing the quality of life in all its aspects, social, economic and political, and of effectiveness of individual participation in shaping the growth and development of society.

284. Expressed in financial terms, the priority accorded to investment in the educational enterprise is reflected in the fact that approximately 30 percent of provincial public expenditures are allocated to education. It may be useful to note also that between 1955 and 1973, expenditures on basic education increased more than 7-fold and in post-secondary education 24-fold. Annual growth rates in the period of major expansion between 1955 and 1970 were 12 percent and 22 percent respectively at those two levels.

285. Economic Factors in Education. The expansion of educational services and growth of expenditures are related to a period of fairly sustained economic development and population growth in the last three decades. The economy of Western Canada is primarily extractive in nature and depends substantially on exports of agricultural products, petroleum, coal, metals, wood products, furs and fish. Although secondary industry is growing, it accounts for less than 20 percent of the value of Canadian exports (in 1971). In terms of employment, less than 15 percent of the labour force is employed in extractive industries, 19 percent in manufacturing and 59 percent in service-oriented fields.

286. Personal income, as a measure of capacity to pay for public goods and services quadrupled between 1951 and 1971 (from $4.9 billion to $19.4 billion), the average annual per capita increase being slightly over 5 percent in the Western Region.

Financing of Basic Education

287. The pattern of increasing expenditures for basic education, set out in Table 15, show that total expenditures rose from $221 million to $1,616 million between 1955 and 1973. In relation to expenditures on all education, basic education accounted for 66.7 percent in 1973 compared with 87 percent in 1955, indicating the growing priority of post-school education in that period. While the annual increase in expenditures was about 12 percent, the annual enrolment increase was less than 4 percent, indicating the trend to higher costs of educational services. When enrolment increases levelled off and commenced a gradual decline after 1970 (approximately .6 percent annually between 1970 and 1973), the annual increase in expenditures declined from 12 percent to 10 percent. Of the total expenditures in 1971 for basic education, 85 percent was accounted for in schools under control of school boards; the remaining 15 percent was in other types of services (7 percent in correspondence and special schools, 4 percent in Indian schools, 2 percent in private schools and ½ percent in special schools for the handicapped).

288. Expenditures per student, as shown in Table 16, increased from $256 in 1955 to $1,082 in 1973. These increases are attributable to the incremental costs of new and expanded programs and services and to general escalation of costs of goods and services, the latter estimated at approximately 5 percent annually in the period 1955 to 1970, and 6.8 percent between 1970 and 1973. In terms of distribution of costs at the school board level, approximately 70 percent of expenditures are attributed to teachers' salaries, 28 percent to other operating costs including transportation, and 12 percent to capital and debt charges.

TABLE 15

EXPENDITURES ON ELEMENTARY AND SECONDARY EDUCATION [1]

SELECTED YEARS 1955 TO 1973

(Millions of Dollars)

Years	British Columbia	Alberta	Sask.	Manitoba	Western Region	Percentage of Total Expenditures on all Education
1955	76.7	67.8	44.0	32.8	221.3	87.0
1960	134.8	122.8	79.7	63.9	401.1	80.4
1965	230.7	194.8	116.3	109.5	651.3	72.3
1970	423.6	389.0	197.7	198.6	1,209.0	64.6
1971	571.5	404.6	195.8	219.6	1,391.6	66.1
1972	611.9	439.6	208.9	238.8	1,499.2	66.0
1973	659.5	474.5	225.4	256.2	1,615.6	66.7

[1] Includes regular provincial public schools, other provincial schools (handicapped, correspondence, and reform), federal schools, private schools, and provincial departmental administration.

Source: Statistics Canada, Survey of Education Finance, 1954-56, Education in Canada, 1973, and Special Releases.

289. Sources of Revenue for Basic Education. Budgetary requirements are derived from three main sources, provincial government grants, property taxes levied at the local government level, and federal funds received in connection with various support programs in which federal departments of government are involved. Provincial grants are paid from the consolidated funds of provincial governments under various formulae designed to ensure that local school authorities have sufficient resources to provide a basic foundation program of educational services. Property taxes collected at the local level are based on a relatively uniform rate of tax calculated on the taxable assessment of a school district. Because the taxable assessment in school districts varies widely, the amount of tax collected does not bear any necessary relationship to the cost of education in a district. This is taken into account in the formuale for calculating provincial grants, so that the incidence of property taxation is to a large extent equalized. Federal funds which accrue to basic education include those allocated to native education, to payments to school boards under agreements to provide services

TABLE 16

TOTAL EXPENDITURE PER FULL-TIME STUDENT
ELEMENTARY AND SECONDARY EDUCATION
SELECTED YEARS 1955 TO 1973
(Dollars Per Student)

Years	British Columbia	Alberta	Saskatchewan	Manitoba	Western Region
1955	295	280	233	191	256
1960	388	403	364	310	372
1965	498	515	473	452	490
1970	752	880	785	755	795
1971	1,022	903	786	845	919
1972	1,072	988	870	940	993
1973	1,151	1,076	976	1,033	1,082

Source: Statistics Canada, Survey of Education Finance, 1954-56, Education in Canada, 1973, and Special Releases.

to Registered Indians (a federal responsibility) and the armed forces and under agreements to provide courses for manpower training. Also, because Grade XII is recognized for support under federal-provincial fiscal transfer arrangements, a portion of the costs of services at that grade level is recoverable to a province from the federal government. In addition the schools or provincial governments may receive ad hoc grants or allowances for specific programs such as those relating to bilingual education and youth travel.

290. Table 17 which shows the percentage of expenditures for selected years in terms of sources of funds indicates a trend toward increasing provincial support and a corresponding reduction from property taxation (referred to under "Municipal Government"). Since the mid-1940's, prior to which the property tax was the main source of revenue for schools, governments have assumed increasing financial responsibility under policies designed to promote general up-grading and accessibility of educational services and to reduce and equalize the impact of property taxation. It will be noted that in 1973 provincial and federal resources provided over 58 percent of budgetary requirements pertaining to basic education while property taxes produced 37.8 percent. 'Other Sources', mainly student

TABLE 17

TOTAL EXPENDITURES FOR ELEMENTARY AND SECONDARY EDUCATION
BY SOURCES OF REVENUE
SELECTED YEARS 1955 TO 1973
WESTERN REGION
(Percentages)

Years	Provincial Government	Federal Government	Municipal Government	Other Sources
1955	46.9	4.6	43.8	4.7
1960	44.9	5.3	45.7	4.1
1965	43.2	7.7	43.8	5.3
1970	50.1	4.3	41.6	4.0
1973	51.4	6.7	37.8	4.1

Source: Statistics Canada

fees, proceeds from sale of assets, investment income and small miscellaneous items continue to furnish a small portion of school board funds. It should be noted that the student fees referred to includes non-resident fees paid by school boards to other school boards on behalf of students who for various reasons must attend school in other than the home district.

291. Budget Planning and Fiscal Responsibility. Notwithstanding the increasing intervention of governments in provision of resources for education, the responsibility for preparation and administration of school budgets lies by law with school boards. School board planning in this respect relates to an annual spending program based primarily on its educational program for the year concerned, and in so far as possible, in the context of longer range program plans and forecasts. The budget document becomes in essence a description of the plans of a school board in terms of educational program, enrolments, expenditures projected for the execution of the program, and estimates of revenue from all sources. In as much as revenue from sources other than the property tax is ordinarily determined by formula, the major item for decision with regard to revenue is the rate to be applied to property assessment. This decision is influenced by several considerations, in part relating to program priorities, in part to sensitivity to the views of property tax-payers and in part to over-all policies of governments.

292. In recent years provincial governments and school boards have found it increasingly important and necessary to view educational spending in the broad terms of the state of the provincial economy and its capacity to support the educational system. Moreover as the largest single consumer of public funds, the educational enterprise tends at both levels of government to be increasingly subject to public scrutiny. In the effort to arrive at accommodation of provincial and local priorities and spending plans, provincial governments and school boards engage in various types of consultation. In some provinces such consultation involves school boards and financial officers of education departments, either in informal discussion of budget plans or in a variety of forms of budget review. In others, the provincial departments issue guidelines concerning over-all increases in educational spending, including in two provinces, provision for local referenda in certain circumstances. All provinces provide local school boards with information and advice concerning provincial objectives and priorities relevant to educational development and spending. Decision-making processes in terms of educational budgets tend therefore to be influenced on one hand by local and provincial educational objectives and priorities, and on the other by fiscal factors based on the social and economic policies of governments, on the educational judgments of school boards and on public opinion. The balance of provincial and local responsibility in relation to autonomy of school boards is a matter of widespread study and discussion in a time of increasing concern with decentralization of planning and decision-making and with ways and means for enhancement of meaningful public participation in those processes.

293. Trends and Prospects. Although the trend toward stabilization and possibly a gradual decline in enrolment in the elementary-secondary sector seems likely to prevail for the foreseeable future, other influences will tend to cause expenditures to continue to increase. Inflation of costs of goods and services will probably be the greatest single factor. Implementation and consolidation of newer programs, particularly in the areas of early childhood education, education of the handicapped and native education, will make substantial demands on financial resources. Moreover, population movement, rural to urban and urban to suburban, will necessitate continuing capital expenditures by reason of the fact that a considerable number of existing schools are no longer suitably located in relation to potential users. Also there will be a continuing need for renovation and rehabilitation of older schools. It is expected that while gross expenditures will continue to increase, the claim of basic education on disposable personal income will increase at a slower rate than the pattern shown in Table 18 for the period 1955 to 1971, when the percentage for the Western Region increased from 3.66 to 7.02. The decline to 6.75 percent in 1972 can be attributed chiefly to a pause in quantitative expansion and to continued growth of personal income.

Financing of Post-School Education

294. For purposes of the decription which follows post-school education includes the post-secondary system of universities, colleges and related institutions such as community colleges and institutes of technology, together with institutions concerned with vocational training programs. As noted in Chapter II, post-secondery enrolment increased five-fold between

TABLE 18

TOTAL EXPENDITURE ON ELEMENTARY AND SECONDARY EDUCATION
IN RELATION TO PERSONAL INCOME
SELECTED YEARS 1955 TO 1972
(Percentages)

Years	British Columbia	Alberta	Saskatchewan	Manitoba	Western Region
1955	3.36	4.21	4.10	3.05	3.66
1960	4.33	5.47	5.81	4.27	4.88
1965	5.28	6.09	6.34	5.77	5.76
1970	5.74	7.48	9.18	6.92	6.87
1971	6.90	6.96	7.65	6.91	7.02
1972	6.56	6.70	7.56	6.71	6.75

Source: Statistics Canada

1955 and 1973. Of the 1973 enrolment 70 percent was in universities, and 30 percent in non-university institutions. Enrolments in all post-school education in relation to total enrolment in the educational system as a whole increased from 2.7 percent in 1955 to 7.6 percent in 1973.

295. Table 19 shows expenditure for the provinces and Region from 1955 to 1973 in universities, non-university institutions and for vocational training in various institutions at the post-school level.

296. Analysis of Expenditure Trends. Table 20 shows that expenditures for all post-school education increased in gross dollar terms from $33 million in 1955 to $808 million in 1973. In that period expenditures for universities increased from $26 million to $556.8 million, for non-university institutions from $2.9 million to $101.6 million and for vocational education from $4.3 million to $149.8 million. Although expenditures in all three sectors show increases throughout these years, it will be noted that both the non-university and vocational education components increased at greater rates than the universities. The average annual growth rate of expenditures for universities between 1955 and 1970 was 21.2 percent, for non-university purposes 25.3 percent and for vocational education 24.2 percent.

TABLE 19

EXPENDITURES ON POST-SECONDARY EDUCATION

SELECTED YEARS 1955 TO 1973

(Millions of Dollars)

a. University [1]

Years	British Columbia	Alberta	Saskatchewan	Manitoba	Western Region
1955	9.8	6.1	5.6	4.5	26.0
1960	26.2	27.3	10.2	13.1	76.8
1965	67.8	61.7	32.7	27.5	189.7
1970	148.4	176.7	62.3	78.1	465.5
1971	165.5	189.2	66.3	82.8	503.8
1972	174.0	200.8	66.2	87.6	528.5
1973	181.7	215.0	67.7	92.2	556.5

1 Includes current operating expenditures and plant expenditure from current funds of universities and colleges, research in universities, scholarships and other miscellaneous costs.

b. Non-University [2]

Years	British Columbia	Alberta	Saskatchewan	Manitoba	Western Region
1955	0.5	1.4	0.4	0.6	2.9
1960	1.8	2.6	2.5	2.1	9.0
1965	5.5	8.8	2.5	4.0	20.8
1970	30.5	34.4	11.5	9.5	86.0
1971	34.8	41.7	9.0	9.6	95.1
1972	36.3	40.7	10.7	9.3	97.0
1973	39.4	43.1	10.5	8.5	101.6

2 Includes community colleges and related institutions such as technical institutes and agricultural schools, teachers' colleges outside universities, and hospital and regional schools of nursing.

c. Vocational [3]

Years	British Columbia	Alberta	Saskatchewan	Manitoba	Western Region
1955	0.7	1.9	0.7	1.0	4.3
1960	3.5	4.6	2.6	1.6	12.2
1965	9.2	20.0	4.0	6.2	39.3
1970	42.1	26.2	18.6	23.6	110.6
1971	44.5	27.5	19.8	24.8	116.6
1972	56.0	34.6	24.2	31.5	146.3
1973	57.4	35.4	24.8	32.3	149.8

[3] Includes occupational training courses in public institutions and private business colleges.

Source: Statistics Canada, Survey of Education Finance, 1954-56, Education in Canada, 1973, and Special Releases.

TABLE 20

SUMMARY OF EXPENDITURES ON POST-SECONDARY EDUCATION

WESTERN REGION

SELECTED YEARS 1955 TO 1973

(Millions of Dollars)

Years	University Education	Non-University Education	Vocational Training	Total
1955	26.0	2.9	4.3	33.0
1960	76.8	9.0	12.2	98.0
1965	189.7	20.8	39.3	250.0
1970	465.5	86.0	110.6	662.0
1973	556.6	101.6	149.8	808.0

Source: Statistics Canada - Adapted

297. From 1970 to 1973, a period marked a its beginning by economic recession and some uncertainty among students concerning further education, post-secondary enrolments commenced a temporary decline which is reflected in a reduction in annual growth rate of expenditures to 6.2 percent for universities and 5.7 percent for non-university institutions. Vocational education, on the other hand, showed a growth rate of 10.7 percent, indicating a heightened interest in occupational training.

298. The pattern of increasing expenditure is also indicated in data pertaining to per student costs of post-secondary education set out in Table 21. The cost per full-time student per year in 1955 was $1,200 and $5,370 in 1973. Annual growth rates in percentages for each of the five - year periods from 1950 to 1970 were 12, 7.2 and 8.7, and for the period 1970 to 1973, the corresponding percentage was 5.9, a further reflection of a period of temporary deceleration in growth rate of expenditures.

TABLE 21

TOTAL EXPENDITURE PER FULL-TIME STUDENT

POST-SECONDARY EDUCATION

SELECTED YEARS 1955 TO 1973

(Dollars Per Student)

Years	British Columbia	Alberta	Saskatchewan	Manitoba	Western Region
1955	1,290	1,290	1,250	930	1,200
1960	1,910	3,050	1,540	1,900	2,110
1965	2,865	3,635	2,815	2,405	2,980
1970	4,100	5,150	4,340	4,315	4,525
1971	4,815	5,580	4,380	4,360	4,935
1972	5,230	5,890	4,865	4,750	5,325
1973	5,365	5,760	4,900	4,890	5,370

Source: Statistics Canada -- Adapted

299. In summary, the 1960's were years of major expansion in post-school education, a period in which the universities expanded rapidly and when other types of post-secondary institutions and vocational education became major features of the educational system at this level, offering a wide range of educational alternatives both to graduates of the secondary schools and to growing numbers of adults. It was also the period when post-school education accounted for approximately one-third of the total of all expenditures on education in the Western Region.

300. Sources of Revenue. The financial requirements of post-secondary institutions are derived from four main sources, provincial governments, the federal government, fees and miscellaneous gifts, donations and ancillary operations. Revenue from those sources are set out in Table 22 in terms of percentage distributions for the period 1955 to 1973. The federal contributions include capital grants, student assistance, expenditures for defence colleges and payments with respect to a number of special programs, for example, nursing education. Prior to 1967 operational grants were also made. Commencing in that year post-secondary education was included as an integral component of federal-provincial fiscal transfer arrangements. Under the arrangement specific to education, the financial resources transferred to the provinces were based (a) on transfer to the provinces of a number of 'tax points' pertaining to personal and corporation income tax and (b) on post-secondary education adjustment payments to the provinces. For purposes of calculation of transfers applicable to the Western provinces, 50 percent of the annual operating expenditures by a province for post - secondary education (exclusive of debt service, equipment purchases and sponsored research) are recognized in the formula.

TABLE 22

TOTAL EXPENDITURES ON POST-SECONDARY EDUCATION
BY SOURCES OF FUNDS AND PERCENTAGE DISTRIBUTION
WESTERN REGION
SELECTED YEARS 1955 TO 1973

Years	Provincial Government	Federal Government	Municipal Government	Fees	Other Sources
1955	43.0	16.0	0.0	26.0	15.0
1960	54.1	22.5	0.0	14.2	9.2
1965	51.7	17.4	0.1	13.5	17.3
1970	71.1	11.5	0.6	10.4	6.4
1973	66.5	14.4	0.6	9.5	9.0

Source: Statistics Canada, Survey of Education Finance, 1954-56, Education in Canada, 1973, and Special Releases.

301. Substitution of the fiscal transfers arrangements for the former operational grants in 1967 is reflected in the decline in direct federal participation from 17.4 percent in 1965 to 11.5 percent and 14.4 percent in 1970 and 1973 respectively, and in the corresponding increases in provincial percentages from 51.7 percent in 1965 to 71.1 and 66.5 in 1970 and 1973. The provincial percentage for 1973, about 4.5 percent lower than in 1970, is attributable to some uncertainties concerning enrolments and availability of additional revenues. Moreover, this period was marked by some public reservations concerning internal priorities in the post-secondary sector where non-university institutions and new program developments were adding important new dimensions to post-school education.

302. Tuition fees, traditionally a significant source of revenue, upward of 25 percent of institutional budgets until about 1950, have declined steadily to 9.5 percent in 1973. Fee schedules have undergone periodic upward revisions, mostly by modest amounts far short of the rate of escalating costs. Apart from mild protests of students, it is a generally and widely accepted view that students at this level of education should make at least a nominal contribution to the cost of their education, the benefits of which tend to accrue more to them as individuals than to the broad base of the population who support the main burden of costs.

303. Financial Planning and Budget Administration. Preparation of the annual budgets of universities and colleges is a function of their boards of governors. Although the basic orientation of financial planning is usually in the context of longer range developmental plans of institutions, the annual budget is necessarily affected by shorter run considerations such as enrolment trends, the state of the economy and public policies with respect to over-all allocations to education. In the earlier tradition of Western Canada when universities were few and small, virtually alone in the field of post-secondary education, and when their requirements for public support were relatively small, these institutions exercised almost complete autonomy in their financial as well as academic affairs. However, the post-war expansion of universities and the emergence of other post-secondary institutions, with the attendant acceleration of claims on public funds, inevitably resulted in the need for more formal relationships and structures involving the institutions and the main providers of funds, the provincial governments.

304. Although the financial implications of post-secondary expansion provided the initial focus of attention, provincial governments became increasingly concerned with issues of rationalization and coordination of financial planning with respect to universities and colleges as a whole in a province. Such concerns were the genesis of a variety of mechanisms such as universities and colleges grants commissions, special review committees and in more recent years, special departments of government, referred to in more detail in Chapters II and IV. These agencies administer the funds appropriated by governments and approve institutional allocations. Although the details of practice varies from province to province, government appropriations are based generally on formulae which take into account weighted enrolments in relation to program, year of program and the faculty concerned.

305. Other post-secondary institutions such as the institutes of technology and some of the community colleges which are administered more directly by education departments receive their financial support on the basis of budgets approved by government.

306. Funding for research and graduate studies in the universities is bound up with a complex set of fiscal relationships in which those institutions are involved with the provincial and federal governments, various federal and provincial departments and agencies and with non - government organizations such as foundations and private corporations. All of these provide financial support applicable to direct costs of research in the universities. Although current data are not immediately available, the Peitchinis Report (1971) [18] indicates that provincial funds account on the average for 11 to 12 percent of the direct costs of university research and that the remainder is derived chiefly from various federal departments and granting agencies. However because funds provided for direct costs do not take account of indirect costs associated with research (time and salaries of participating professors, use of university - owned accommodation, facilities and equipment, along with miscellaneous other requirements) such overhead costs are necessarily met from the research budgets of the universities which are funded from provincial sources. Canadian studies of the relationship of indirect to direct costs tend to indicate a ratio of one to three, or 35 percent as estimated in the MacDonald Report [19] in 1969. In effect the contributions from provincial resources to the total of direct and indirect costs (excluding non-government contracts) are estimated to be on average in the order of 40 percent, subject however to recovery to a province of a portion of relevant university expenditures recognized in the formula pertaining post-secondary education under the federal-provincial Fiscal Arrangements Act, 1967. Not infrequently universities also find it necessary to continue to fund from their own budgets research activity initiated under a grant which has been terminated on completion of the original project.

307. Recognizing the importance of university research both levels of government and the universities are engaged in extensive study and consultation in an effort to improve accommodations for rationalization of support related to desired levels of research activity and for inter-agency coordination with respect to priorities and allocation of support.

308. Trends and Prospects. University enrolments, following the slight downward trend of the early 1970's, appear to be resuming an upward tendency. Renewed interest of students in professional education at the university level tends to parallel a growing demand for business executives, government administrators, research scientists, applied scientists, educators and the like. Growth patterns of enrolment will be gradual for full-time students, but very probably at an accelerating rate for part-time students. Financial requirements for universities will therefore continue to increase to accommodate moderately increasing enrolments and continuing inflationary tendencies in program costs, probably in the order of 15 to 20 percent a year.

309. In as much as the non-university sector - the colleges, community colleges, institutes of technology and vocational schools - is expanding at a very great rate, expenditures for this component of post-school education

will increase at a rapid rate to accommodate growing interest and participation of adults in various forms of recurrent education - up-grading, training and re-training, personal development and general interest pursuits.

310. The extent to which future escalation of educational costs can be borne by the provinces depends primarily upon their individual capacities to increase the productivity of their economies, and to a very considerable extent upon future federal-provincial fiscal arrangements. In as much as federal intervention in support of education lends itself better to the post-school level and since the provinces have the ultimate responsibility and authority with respect to priorities at all levels of the educational system, the prospect for future development seems likely to be influenced in a relatively important way to the type of federal-provincial accommodation which can be reached with respect to post-school education.

Financing of Student Assistance

311. Before 1960 student assistance in Western Canada was limited to scholarships for students of superior academic qualifications, some bursaries for needy students of high academic standing and to one or two very modest student loan plans. Traditionally the students who went to university were those who could afford to do so or who had access to adequate private support. This elitist approach broke down in the early 1960's when students came into post-secondary education in large numbers, many unable to finance attendance privately.

312. In 1964 the federal government implemented its Canada Student Loan Act under which the government guaranteed loans to undergraduate and graduate students whose scholastic record was satisfactory and who could establish proof of need under the regulations.

313. Almost concurrently provincial governments, recognizing the social and economic values of wider participation in higher education, commenced to develop loan plans, scholarships and bursary programs to supplement the federal plan.

314. The principle of universal free public education at the elementary - secondary level, long a feature of educational policy in Western Canada, has not generally been seen to apply equally to post-school education. Although governments and government agencies have increasingly subsidized institutions beyond the secondary schools, at present in the order of 80 to 85 percent of their operating budgets, it is still held that an adult student should be prepared to accept a measure of financial responsibility for his education, if not substantially for tuition, at least for other necessary costs. However it has also been recognized that achievement of the objective of higher rates of adult participation would require measures to mitigate the effect of disparities in the ability of young people and adults to meet these costs.

315. The present system of public student assistance, basically consisting of scholarships, bursaries and loans is as a matter of policy designed to

ensure that no student will be prevented from pursuing a desired program or course for the sole reason of lack of funds. Allowing for differences of detail in the specific programs of each province, the combination of scholarships, bursaries and loans is therefore structured to recognize and take account of scholastic ability and performance, ability to pay and ability to repay (as in the case of loans). Loan plans, both federal and provincial, form a major component of resources available to students. These reflect in part the philosophy that as the primary beneficiary of further education the student should assume a duty to contribute toward those benefits, and in part the belief that freedom of choice in pursuing personal education objectives dictates that the individual assumes some responsibility for exercise of that freedom.

316. Although space does not permit a detailed description of student assistance programs, it may be useful to note that for purposes of post - secondary education a student can qualify for assistance composed of bursaries, grants and loans in amounts ranging from $2,250 to $4,600 per year of study. Part-time students may receive assistance under provincial programs in amounts ranging from $250 to $1,500 per year. Others engaged in skill-training courses at the vocational level may, under federal manpower training programs, qualify for full maintenance, including tuition, living allowances and travel.

317. The financial commitments of the two levels of government in Western Canada under these programs for 1966-67 and 1970-71, set out in Table 23, almost doubled in that four year period. Federal expenditures rose from $22 million to $38.1 million and provincial spending from $5.6 million to $15.9 million. It should be noted that the provincial programs of student assistance place a major emphasis on bursaries and other non-repayable grants. Moreover the provincial bursary-loan arrangement is integrated in a way to provide more bursary assistance than loan where student need is great and the reverse where the burden of repayment of a loan would be less onerous. Although students are not encouraged to mortgage their futures by unnecessary loans, federal and provincial loan plans are subject to annual adjustments to ensure that the total resources upon which a student may draw are sufficient to enable almost any eligible student to enter upon and continue studies at the post-secondary level.

318. In addition to the Canada Student Loan Plan some federal funds distributed for research by The National Research Council, The Medical Research Council and The Canada Council, are allocated to graduate research assistants and in the form of grants and scholarships to graduate students in pursuit of studies leading to higher degrees.

319. Although scholarships provided by individual and corporate donors continue to grow in number, they constitute, in relative terms, a diminishing proportion of the support available to students.

320. Present trends in the area of student assistance indicate that rising costs of educational attendance as well as growth of participation in higher education will result in steadily increasing requirements from public funds. The pattern of assistance based on a combination of loans, bursaries and scholarships seems likely to continue, probably with a tendency toward

TABLE 23

FINANCIAL AWARDS TO POST-SECONDARY STUDENTS
BY FEDERAL AND PROVINCIAL GOVERNMENTS
WESTERN REGION
SELECTED YEARS 1966-67 AND 1970-71
(Millions of Dollars)

Years	Provincial Government	Federal Government	Total
1966-67	5.6	22.0	27.6
1970-71	15.9	38.1	54.0

Source: Statistics Canada, Education in Canada, 1973.

moderately greater emphasis on non-repayable grants and bursaries. Notwithstanding some student opinion to the contrary, policies predicated on loans as a major feature of student assistance programs are consistent with Western Canadian attitudes concerning individual responsibility and equity and are therefore likely to continue to be reflected in public policies. It may be significant to note that experience with repayment of loans has been excellent. Philosophical considerations with respect to student assistance in the foreseeable future will focus primarily on the issue of a balance between loans and non-repayable grants which will enable students to participate without incurring an undue burden of future repayments.

Future Prospects in Educational Finance

321. Future developments in financing of educational services will very probably be influenced to a large extent by several tendencies which are now apparent in the general approach to educational planning in the context of the economy of Western Canada. For a perspective in this connection, some important trends may be noted:

- expenditures on education at all levels, including vocational education, increased at an average rate of 14.2 percent annually from 1955 to 1970 and at 9.0 percent annually from 1970 to 1973 (Table 24);

TABLE 24

EXPENDITURES ON ALL EDUCATION AND VOCATIONAL TRAINING

SELECTED YEARS AND PERIODS, 1955 TO 1973

Millions of Dollars and Annual Rates of Increase (Percentage)

Years	British Columbia		Alberta		Saskatchewan		Manitoba		Western Region	
1955	88		77		51		39		255	
1960	166	(13.6)	157	(15.3)	95	(13.4)	81	(15.7)	499	(14.4)
1965	313	(13.5)	285	(12.6)	156	(10.3)	147	(12.8)	901	(12.5)
1970	645	(15.4)	626	(17.0)	290	(13.3)	310	(16.0)	1,871	(15.6)
1971	816		663		291		337		2,107	
1972	878		716		310		367		2,271	
1973	938	(13.3)	768	(7.0)	329	(4.2)	389	(7.9)	2,424	(9.0)

Source: Statistics Canada - Adapted

- expenditures per full-time student for the full range of educational services increased on the average at an annual rate of 9.6 percent between 1955 and 1970, and at the same rate between 1970 and 1973 (Table 25);
- provincial contributions to education increased from 46.4 percent in 1955 to 53.8 percent in 1973, and federal contributions from 6.3 percent to 12.9 percent; in the same period local contributions (property taxes) fell from 38.1 percent to 25.3 percent (Table 26);
- per capita expenditures on all education in the Western Region rose from $61 in 1955 to $411 in 1973; in terms of expenditure per member of the labour force, the corresponding figures were $176 and $975 (Table 27);
- expenditures on all educatior expanded from the equivalent of 4.4 percent of personal income of Western Canada in 1955 to 10.5 percent in 1972 (Table 28);
- almost four-fifths of revenue in support of the educational enterprise of Western Canada is derived from provincial and local sources (government grants and property taxation); the remaining one-fifth, primarily in the post-secondary field, is contributed from federal government resources;
- expenditures on education have maintained a fairly consistent position at about 30 percent of the total for all public services.

TABLE 25

AVERAGE ANNUAL PERCENTAGE INCREASE
IN EXPENDITURE PER FULL-TIME STUDENT ON ALL EDUCATION
SELECTED YEARS 1955 TO 1973

Years	British Columbia	Alberta	Saskatchewan	Manitoba	Western Region
1955-60	7.1	9.9	9.9	11.5	9.3
1960-65	6.9	7.5	7.6	8.9	7.6
1965-70	10.6	12.5	12.3	13.7	12.1
1955-70	8.3	10.0	9.9	11.3	9.6
1970-73	12.9	6.8	7.2	9.9	9.6

Source: Statistics Canada - Adapted

TABLE 26

TOTAL EXPENDITURES ON ALL EDUCATION [1]
BY SOURCES OF FUNDS
WESTERN REGION
SELECTED YEARS 1955 TO 1973
(Percentages)

Years	Provincial Government	Federal Government	Municipal Government
1955	46.4	6.3	38.1
1960	46.5	9.1	36.8
1965	45.3	11.6	31.7
1970	54.7	10.5	27.1
1973	53.8	12.9	25.3

[1] Includes vocational training.

Source: Statistics Canada - Adapted

TABLE 27

TOTAL EXPENDITURES ON ALL EDUCATION [1]

DOLLARS PER CAPITA AND PER MEMBER OF LABOUR FORCE

SELECTED YEARS 1955 TO 1973

a. Dollars Per Capita

Years	British Columbia	Alberta	Saskatchewan	Manitoba	Western Region
1955	65	71	58	46	61
1960	104	122	104	89	106
1965	174	197	164	153	175
1970	303	393	308	315	331
1973	405	456	362	390	411

b. Dollars Per Member of Labour Force

Years	British Columbia	Alberta	Saskatchewan	Manitoba	Western Region
1955 [2]	183	--	--	--	176
1960	294	335	301	244	297
1965	470	520	477	416	476
1970	734	964	829	815	829
1973	936	1,069	918	954	975

[1] Includes vocational training.

[2] No estimates available for prairie provinces separately.

Source: Statistics Canada - Adapted

TABLE 28

TOTAL EXPENDITURES ON ALL EDUCATION [1]

PERCENTAGES OF PERSONAL INCOME

SELECTED YEARS 1955 TO 1972

Years	British Columbia	Alberta	Saskatchewan	Manitoba	Western Region
1955	3.9	5.2	4.8	3.6	4.4
1960	5.4	7.4	7.0	5.4	6.2
1965	7.3	9.7	8.7	7.8	8.3
1970	8.9	12.6	13.7	10.8	10.9
1971	10.0	12.0	11.6	10.6	10.9
1972	9.6	11.5	11.4	10.3	10.5

[1] Includes vocational training.

Source: Statistics Canada - Adapted

322. Given the basic pattern of current developments of educational services and enrolment trends described elsewhere in this document, it is likely that over-all expenditures for education will continue to increase at an annual growth rate in the range of 15 to 20 percent. Some decline in enrolment in basic education will be offset in terms of expenditures for newer programs and program expansions now being implemented. The major increases are expected in post-school education where participation in a growing variety of programs is expanding at an accelerating rate, more especially in the area of part-time education.

323. The magnitude of educational spending and its impact on the economy as a user of public funds will tend to heighten public concerns over the efficiency of educational institutions, both in terms of educational output and of their role in giving effect to desired educational purposes. This will be reflected in continuing and expanding efforts by provincial authorities and educationists at all levels of the educational system to devise increasingly effectual strategies and mechanisms for cooperation and coordination in the processes of planning, evaluation and decision - making.

CHAPTER IV

EMERGING DEVELOPMENTS AND FUTURE PROSPECTS

A. Shaping the Future of Education in Western Canada

324. To speak of future developments in Western Canadian education is first to recall deeply rooted convictions of Western Canadians concerning education as an instrument for improvement of the quality of life of people, individually and collectively. Central to this theme is the role of the individual in society and assertions of his sanctity and ultimate worth as a participant in and beneficiary of the society of his life-time. It is also to reflect on other considerations which underly present policies and planning, chief among which may be cited the importance of recognition of a rapidly changing society, of altered patterns of work and leisure, of autonomy and interdependence of individuals and of the role of the individual as a change-agent in society. In a more recent sense, it is also to take account of commitment in principle to the proposition that education is the right of every individual, irrespective of circumstance, condition or age.

1. Current Priorities - An Overview

325. It is often held that at any given point in time the state of education mirrors the state of society at that point, that the educational system is a reflection of society's aspirations and expectations for present and future generations and of its faith in education as an instrument for accomplishing those ends. In the Western Canadian setting public education, less than 100 years old, has evolved through a period in which its society has moved from the simple but vital preoccupations of pioneer life to an environment of modern social, political and economic structures in an increasingly industrial and urbanized society. It has moved from the days when its schools were close to the people, when its central purpose was to ensure literacy in a population of diverse origins, to a time when societal objectives and structures are both complex and subject to continuous change. Notwithstanding these complexities which have tended to blur the direct and more intimate relationship of the people and their schools, the Western Canadian tradition of public involvement in educational affairs remains strong. In part this is attributable to the deeply embedded principle of strong local government in education, more especially in basic education, the administration of which is delegated to elected school boards in all four provinces.

326. On the current scene planning and decision-making, whether at the levels of the school, the school board or the province, are conditioned by the manner and extent of inter-communication between the planners and their constituents. School boards represent and reflect the educational aspirations of parents and the local school community; provincial legislatures represent the wider constituency of the people of the province and therefore the more broadly based purposes of education of a province, seen in the context of the whole range of social, economic and political objectives.

In addition to the operational processes of representative government, other forces and influences assert themselves at all levels of planning, the parents and their local organizations at the community level, and organizations of parents, teachers, school trustees, and of groups representing industry, labour, business, professions and the like at the provincial level.

327. Along with continuing public concerns over rising costs of education and productivity of the on-going educational enterprise, there is on the Western Canadian scene an even greater concern that the educational system is and will be, in fact built upon purposes and programs which will prepare present and future generations not only for the kind of world in which their lives will be lived but also to function effectually in helping to shape that world. It follows that many of the current issues and developments in Western education relate to examination and reformulation of educational objectives, to meaningful participation in planning and decision-making processes, to refinement and improvement of existing educational services and to program expansion directed toward maximum opportunity for every individual to share in the benefits of education according to his capacities and needs.

Toward Redefinition of Purposes of Education

328. For purposes of long-term planning and to provide for public involvement in the early stages of policy-making, royal commissions have for many years played an important role as a means for public examination of educational issues, and for analyses of possible alternatives for action. In more recent years, ministries of education have augmented their resources for consultation by the use of the less formal mechanisms of task forces, advisory committees and special committees of inquiry. Although the ultimate responsibility for decision-making at the provincial level lies with a minister of education and his cabinet colleagues, information and advice from these sources have an important role in that process. Reports and studies are usually made public and therefore become a basis for wider public discussion and comment. Portents of future trends and developments frequently lie in these reports, if not necessarily in their precise recommendations, at least in the results of subsequent evaluation and judgments of the ultimate decision-maker.

329. Analysis of influential studies and reports prepared by or for provincial authorities in the past three or four years point to three major desiderata which provide the basic thrust of educational purposes and therefore the aims and objectives of educational planning in the foreseeable future. Manitoba's Guidelines for the Seventies [20], a government document, summarizes these intentions in these terms:

> Education policy for the seventies will be directed toward the achievement of three basic objectives: equality of educational opportunity, responsiveness to community needs, and broadening educational programs.

330. So stated, these objectives encompass a variety of concerns which are expressed by educators, policy-makers and laymen alike in all of the provinces.

331. Equality of educational opportunity as an objective has long been a focus of educational planning which has produced a system of educational services accessible to the large majority of the population. What is new is a wider version of the interpretation of equality. For example, British Columbia's 1974 White Paper [21] presents the credo:

> We believe that a major responsibility of the school system is to provide a measure of success for every student ... The opportunity for suitable education should be provided to all children.

The Worth Report (Alberta) elaborates this theme by noting that a learner may be disadvantaged for many reasons, socio-economic status, geography, sex, age, race, as well as conditions pertaining to physical, mental and emotional health, and goes on to press the "duty of society to provide educational services for every individual child according to his needs, abilities and disabilities". On the question of equity Manitoba's Guidelines for the Seventies declares the intent of the government "to accelerate the movement towards an education system that provides all citizens, whatever their economic or social background, with equal access to the resources offered by the educational system ...". [22]

332. Educational purposes and determinants of the future will undoubtedly be moulded significantly by current thought as regards relationships of the school or educational system to the community. The Worth Report (Alberta) puts the matter in perspective by observing that:

> If a community is to be a community, and not just a random collection of people and things, then it needs both the feel and substance of community living. It needs a community life support system. [23]

The Report goes on to visualize educational facilities designed and available for continuous use by all members of the community, not merely in terms of ease of access to a building, but as a "totality of scope and execution that imbues the physical environment with a dynamic spirit and force".

333. Submissions to Saskatchewan's 1973 series of regional conferences under the theme "Issues and Choices" [24] very frequently emphasized the school-community relationship. The Conferences underlined the view that "the school is not seen to exist in isolation, but rather that it is one of a number of community and societal institutions".

334. The importance attached to community involvement is likewise stressed in a reference paper of the Manitoba Department of Education [25] which refers to a "modern identification of the schools' community", inferring the need for the community to be involved in the educational process and for two-way communication between the schools and the community. The new emphasis on school-community relationships is described as follows:

> The conception is of a school system as a set of opportunities, rather than a set of buildings, as an integral part of the life of the community ... 26

335. The same report reflects a common thrust in the Western Region with regard to decentralization in its observation that "if we are to re-introduce meaningful participation as well as allow a creative planning role for the Department, we must ensure that functions are decentralized to the level at which local self-interest and identification can realize their full expression". 27

336. While these indicators of purpose-orientation are in the main logical extensions of current objectives, policies and practices, they imply both an increasing emphasis on evaluation of current programs and services and a re-examination of a number of commonly held assumptions with respect to program development. Quite apart from the general concern with standards and quality of educational output, all subject to various forms of continuing appraisal, it is becoming increasingly common practice to subject new program proposals to rigorous evaluation in experimental or pilot project situations prior to general implementation. The fact that various studies of public assessment of education indicate basic general satisfaction with the schools does not lessen the importance attached by educational authorities to developmental processes which are carefully designed, well controlled and evaluated.

337. In the realm of educational assumptions, one of the more interesting examples of an emerging tendency to re-examine the basis for common practice is seen in current discussion of secondary education programs. The central question stems from the proliferation of optional courses which has taken place in recent years as an approach to widening the base of learning experience at this level. The emerging concern relates to the validity of this approach, and by inference to the possibilities of alternative strategies which may be more efficient in terms of educational productivity and deployment of resources.

338. The term 'option jungle' which has gained some currency among educators and laymen is symptomatic of growing doubt that merely to add to the lists of dozens of courses available offers a real guarantee that individual differences of students will be met or that basic program objectives will be accomplished. As a consequence there is a growing tendency, yet mainly at the secondary level, to contemplate programs in terms of core subjects plus sufficient options to produce for the individual student a coherently patterned program of learning activities. Moreover, the emphasis is on adaptation of the content to the level of the student's ability and interest.

339. In this context, Saskatchewan's report on Issues and Choices [28] sees basic education as "a basic core of provincially standardized subjects which all students need and should be required to take". The notion of core is not regarded as alien to the broader pattern of program, for all provinces refer to supplementing or including in the total regimen selections from technical, vocational or other subjects, some new to basic education,

such as consumer education and environmental education. Alberta's Goals of Basic Education[29] exemplifies a growing recognition of school living as a feature of learning experience:

> Recognition is given to the fact that those who spend a significant portion of their day in the school society are members of the larger society as well. For the school this means recognizing the pupil as a member of society who is not only being prepared for life outside of and after school but who is also living life while at school.

340. Another type of broadening emphasis is exemplified in a recent statement of Alberta's Minister of Education[30] "regarding treatment in school programs of such matters as Canadian content, family life education, sex-stereotyping ...". With reference to principle "it is an objective of the Alberta educational system to develop students' capacities to think clearly, reason logically, examine all issues and reach sound judgments". In elaboration of policy guidelines based on this principle, Alberta's position is that students should have experiences in selecting and organizing information, sufficient for drawing intelligent conclusions on a wide range of issues relevant to the society in which they live and will live. With respect to controversial issues, it is emphasized that information available should represent alternative points of view, should reflect the maturity, capabilities and educational needs of the students and the stated objectives of the educational system for the level of education concerned.

341. In somewhat the same way, other provinces cite the importance of recognition of the role of individuals as an 'effective' person in society, aptly defined in British Columbia's White Paper as typically "those who take social responsibility, (and) participate fully in the decisions that affect their lives ...". This emphasis on autonomy of the individual carries with it obvious inferences for broadening curriculum and learning styles and for processes of decision-making at the school-community level. The same regard for the rights of the individual student has led to re-examination of policies pertaining to school record keeping, one result of which has been the emergence of student record systems which extend to the student rights to confidentiality in keeping with commonly accepted standards in society.

Other Indicators of Priorities for the Future

342. Several references have already been made to the current preoccupation of governments to promote studies and consultation, the central purpose of which is to produce a foundation or model for future planning on the basis of maximum public understanding, participation and support. If these have focused primarily on the general direction and on a new perception of educational purposes, they also give point to various other studies and inquiries of more specific references, and to legislative activity of recent years.

343. Among subjects of particular study and investigation since 1970, the following themes predominate in the Western Region - Early Childhood

Education, Native Education, Secondary and Post-Secondary Education, Education of the Handicapped, Recurrent Education, Teacher Training, Curriculum Expansion (Environmental Education, Consumer Education, Driver Training), Governance and Financing of Post-School Education, and Educational Technology. Related to these, and in part as a result of these activities, recent legislation has been promulgated t ,ive effect to new developments in such areas as Education of the Handicapped, Kindergarten Education, University Governance, Educational Communications systems, Certification of Teachers and Educational Finance.

344. Although space does not permit elaboration of all of these indicators of current trends in giving shape to education of the future, four major areas will be discussed in the following section of this Chapter.

2. Areas of Major Development

Early Childhood Education - Kindergarten

345. Early childhood education, as noted earlier in this Report, is a late-comer on the educational scene of Western Canada and at this time has the kindergarten for its principal focus of attention. Initial legislation, which remained largely unchanged and unenforced for many years, prescribed in very general terms in matters of program, teaching services, facilities and administration. Recent legislation, mainly in the late 1960's and 1970's in all four provinces, makes clear the intent to embrace kindergarten education as an integral feature of the public sector, to provide funds on the same basis as for other educational services and to give more specific direction to the kind and quality of services available to children at this age level. It should however be noted that attendance in kindergarten is still not compulsory and that school boards are not required by law to provide kindergarten education, except in British Columbia. Given present policies of financial support and strong public opinion in favour of kindergarten education, implementation of such services and full participation in them is proceeding apace, hindered only by a temporary shortage of qualified teachers and facilities. The commitment of the provincial authorities to integration of kindergarten into public education, together with the pressures of rising costs, seems likely to result in a decline of private kindergarten, except in Alberta where they are subsidized at the same level as those in the public sector.

346. Integration with Elementary Education. Kindergarten facilities provided by school boards are typically located in elementary schools where certain common services and conveniences are shared. Despite local differences in facilities available and in approach to implementation, there is some evidence of classroom integration and, to some extent, of program integration. While pre-primary or pre-elementary education is generally considered as a unique experience in which children function within their own age group, such features of kindergarten education as in-class interest centres, more comprehensive approach to the language arts, use of parent volunteers and extensive use of parent-teacher conferences have appeared increasingly in primary education. A recent Study[31] of the potential of integrating kindergarten and pre-kindergarten programs in Saskatchewan is

supportive of the application of kindergarten philosophy to primary grades on the grounds that "a broader range of individual needs can be met; children are more actively involved in the process of learning; and the opportunity to manipulate, experience and discover through activity centres facilitates future learning". The same Study, noting that merely to put two or more grades in one classroom does not guarantee integration, asserts that true integration occurs when "... the program is designed to provide for all pupils to learn together and through one another, using activities which are valuable to children, no matter the age". While education ministries furnish the local education authorities, including the teachers, with outlines and suggestions with respect to integrated programs, they do not enforce content and technique requirements. What is finally delivered rests with the teachers and school boards.

347. Finance. Because kindergarten education is still in formative stages of development and implementation, educational authorities at both the provincial and local levels continue to give a high priority to problems, plans and policies pertinent to this component of basic education.

348. Not least among the problems is that of financing kindergarten education. In as much as provincial foundation grant programs for basic education in Western Canada are typically based on enrolment and estimates of costs of services at each level, kindergarten has been indexed as approximately comparable to elementary education for purposes of grant calculation. However the grant payments received by school boards are unconditional in the sense that the local authority is not accountable to the provincial government for internal allocations of funds, whether the source of funds is provincial or from local taxation. Internal priorities may therefore vary among school boards and allocations to kindergarten education may be relatively large or small, depending on their decisions with respect to the importance attached to that level of education. While both the provincial and local authorities subscribe to the principle of local autonomy in financial planning, the practice of that autonomy is a major determinant of the extent to which provincial objectives with respect to kindergarten are attained. There are no indications of the need or desirability of applying special incentive grants as inducements to more rapid implementation.

349. Time-Tabling. Scheduling of kindergarten classes, conventionally based on half-time attendance, takes two major forms, half-day classes every day and full-day classes on alternate days. The former tends to prevail in urban communities and the latter in rural areas where transportation of children is a necessary adjunct to delivery of services. Provincial regulations are not prescriptive in this regard, and local school boards are encouraged to experiment with variations of both of these modes in an effort to determine the system best suited to local conditions and with maximum efficiency in terms of costs, particularly where transportation is involved. Transportation of kindergarten children as a current issue turns on three major concerns, the high cost of adding noon-hour bus service, the distance to classes, and the educational implications of full-day as opposed to half-day attendance. Results of experimentation in the past two years is inconclusive, but there would appear to be some consensus that in rural areas alternate full-day attendance is preferable and practicable.

350. Specifications with respect to facilities for kindergarten vary from province to province, mainly in the details of pertinent regulations. Space requirements range from 25 to 40 square feet per student, depending on the number of children to be included in an instructional unit. Typically kindergarten space includes a wet area, a carpeted area and at least three activity areas, together with equipment and storage space. Normal school standards are expected with reference to heating, lighting, safety and washroom accommodations. Likewise outside play space suitable to this age level is required.

351. Teachers. Expansion of kindergarten education has necessarily been governed to some extent by the availability of qualified teachers, a need which is gradually being met by the teacher-training institutions. Many teachers presently employed were initially educated to elementary school teaching and recruited from the ranks of primary school staffs after taking special courses in kindergarten education. Among sponsors of these courses were the universities, departments of education and teachers' associations. Moreover specialization in early childhood education in the regular teacher-training programs is now available in all four provinces.

352. The growth of kindergarten education has precipitated a new interest in the use of teacher aides, a type of supportive service heretofore somewhat sporadically and experimentally applied mainly in elementary schools during the past decade. Volunteers, usually parents, senior citizens, university students and occasionally interested secondary education students, are gradually emerging as a further human resource in-put to kindergarten education, more especially in urban areas, a trend encouraged by the educational authorities.

353. Canadian experience with children's programming by radio and television, together with current provincial developments in educational technology, suggest a strong likelihood that future experimentation with delivery of kindergarten services will include programming of this type, with the homes becoming directly involved in the educational experience of the children.

354. Supervision. Education departments have traditionally provided supervisory and consultant services to major program areas of the school system. These services were designed in part to promote provincial objectives, to maintain standards and to assist local authorities with program implementation. Reflecting the current trend to local supervision, the provincial authorities do not generally employ specific personnel to supervise kindergarten education, and rely on the school boards to provide the services needed at that level. It should be noted however that the need for provincial liaison is recognized. Alberta, for example, employs consultants or coordinators in early childhood education at the provincial and regional levels. In Saskatchewan, the department of education will employ consultants with kindergarten responsibilities in four of the six regional offices of the department in 1974 as well as a provincial consultant.

355. Curriculum. The trend toward locally developed curriculum is nowhere more evident than in the field of early childhood education. Although provincial curriculum outlines have been in existence since the mid-1950's,

their influence on kindergarten education was probably marginal. This may be attributed to the earlier status of kindergarten education in which its relatively low priority gave it nominal recognition in terms of financial support, supervision, pre-service and in-service education for teachers. The situation under present policies and initiatives is reflected in Alberta's policy bulletin, Operational Plans for Early Childhood Services, which proposes that "local communities with the assistance of consultative services from local departments of government and local professional groups should become involved in setting up their own programs ...".

356. This emphasis on local involvement does not preclude a positive role for educational authorities in the design of program plans. For example, in Saskatchewan the Minister of Education established a Departmental Kindergarten Program Development Committee composed of classroom teachers, university professors, school superintendents, a kindergarten supervisor and departmental program consultants, which has prepared a curriculum guide and a kindergarten teachers' resource book. At the same time, an increasing emphasis on pre-service and continuing in-service education of teachers, clearly reflects a policy of reliance on the professional capabilities of teachers rather than on provincial prescription.

357. The place of kindergarten education as a full-fledged component of basic education is no longer in question. The commitment of educationists, parents, administrators and of education ministries is firm. What remains is to consolidate and refine programs and to complete the expansion necessary to universal access to these services. These ends imply the effort necessary to produce an adequate supply of highly qualified teachers, consultants and supervisors, to establish effective mechanisms for community involvement, and to minimize disparities in services, more especially in rural areas. Other major tasks of the moment relate to the design features of kindergarten facilities and accommodations and to improvement of transportation services to ensure universal accessibility.

Education of the Handicapped

358. In the early tradition of education when learning experience in the school, the curriculum and organization of instruction, were directed toward the large mass of the so-called 'average' of students, those children who could not respond reasonably well often completed their education outside the school, learning whatever their homes could contribute by way of useful skills, habits and personal attributes. These were the 'slow-learners' for whom the teachers, by reason of limitations of their teaching situation or of understanding and professional capabilities, could provide only minimal individual or special attention. Those whose learning disabilities were more aggravated might not attend school more than a year or two, and a few might never enroll in school. However the gradual evolution of a concern for and understanding of individual differences in children produced a variety of attempts to overcome learning difficulties or to modify programs sufficiently to warrant continued attendance at school. It was these efforts which resulted in Special Education Programs, Opportunity Classes, Remedial Classes, and specialized institutions such as those for the blind, deaf and severely retarded.

359. In more recent times children and youth who for whatever reasons deviate significantly or sufficiently from the norm as to be unable to profit from the basic program of the schools are regarded as children with special needs attributable to some form of handicapping, physical, mental, emotional or social.

360. Because the term 'handicapped' is one in common usage across the Region to identify a broad range of kinds and degrees of exceptionality among students, it is used here in an all-inclusive sense in this aspect of educational services.

361. Allowing for some differences in specifics of local terminology, conditions which give rise to handicapping in one form or another are generally categorized in Western Canada to include those of:

- sensory origin
  - auditory (deaf and hard of hearing)
  - visual (blind and partially sighted)
- mental deviations
  - retarded (educable, trainable, custodial)
- communication disorders
  - basic psychological processes in understanding or in using spoken or written language
  - speech (defective)
- neurological, orthopedic, physical impairment
  - injury, crippling, weakness
- behavioral disorders
  - emotionally disturbed
  - delinquent

362. Data concerning the incidence of handicapping and exceptionality, the subject of numerous studies, are somewhat inconclusive, but are generally assumed for working purposes to be in the order of 10 percent of the school age population.

363. All four provinces have by legislation provided for the education of the blind and deaf. Each has a provincial residential school for the deaf and British Columbia has the only school for the blind in the Western Region. The three provinces without schools for the blind provide services under agreements with the provinces which have such institutions, including British Columbia, Ontario and Quebec. Tuition, travel and accommodation are fully subsidized by the province of which a student is a resident.

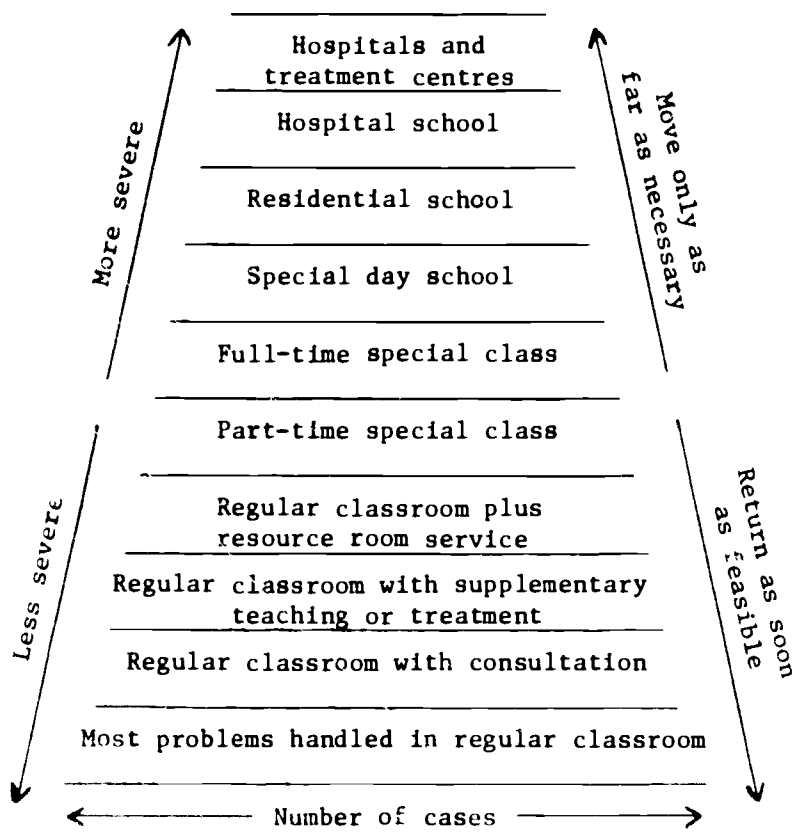
364. Each province also maintains provincial institutions for the severely retarded. In recent years provincial authorities have encouraged local school authorities with financial support to provide, either within their own school system or by inter-jurisdictional cooperation, for services to all but those children suffering severe handicapping or requiring custodial care, including the hard of hearing and partially sighted. Present

legislation in Saskatchewan makes it mandatory for school boards to provide services for most handicapped children. In Manitoba the mandatory feature is limited to the educable and trainable retarded, and in the other two provinces, the legislation is permissive and enabling, with financial incentives built in to encourage boards to provide services.

365. Services to the Handicapped. Legislation pertaining to delivery systems of services to the handicapped is typically non-prescriptive. Developments within and among the provinces tend therefore to reflect local conditions and circumstances such as the numbers of students with special needs, the level of local concern for such students, the professional capabilities of school personnel, and availability of specialized consultants and auxiliary services in the health and welfare fields. Notwithstanding the consequent variety of approaches to provision of services, the general pattern which has tended to emerge is of a hierarchy of services illustrated in Chart III. Not intended to be descriptive of any one province in all respects, this representation summarizes the general approach in all of them, with differences mainly in matters of nomenclature, emphasis and comprehensiveness of program services.

CHART III

HIERARCHY OF SERVICES FOR SPECIAL EDUCATION PROGRAMS



366. The traditional view that provincial authorities should be responsible for services to the severely handicapped, for example, blind, deaf and severely retarded or emotionally disturbed, and that other deviations in children fall somewhere between the school and the home, has undergone very considerable change in the past two decades. Moreover, the merits of residential institutions as treatment centres has been sharply challenged on educational grounds. As a consequence, there has been a strong development of services for all but the most severely handicapped in local or community settings within and as an integral feature of the local public school system.

367. The initial response of local school systems focused on the mildly handicapped, the slow learner, the educable retarded, and resulted in the provision of 'special classes' in what are often called opportunity rooms, remedial rooms and the like. A more recent tendency is to eliminate the relative isolation of such classes by retaining the children in the regular classes of a school and by providing special teaching services. Illustrative of this tendency is the experience in Manitoba where in the past three years the number of 'special class' teachers has fallen by 25 percent and the number of resource teachers (specialized teachers not attached to regular classes) has increased by 600 percent.

368. For the moderately handicapped, the trainable retarded, most services were initially developed by semi-private special interest associations, usually with financial support from provincial governments and often from school boards, in special day schools. Following the trend toward public responsibility for these children, these schools are being absorbed in the regular school system with services provided directly by school boards. As a result the provincial residential training schools for the trainable and custodial retarded are experiencing decline in enrolments and disappearance of long waiting lists, especially of children classified as trainable retarded.

369. The same trend is apparent with respect to children with moderate disabilities of hearing and sight. Current practice is to keep these children in their regular school classes with the assistance of resource teachers and specially designed learning materials and aids.

370. Services to the severely handicapped by provincial governments tend historically to have been assigned to departments of education for the blind and deaf, and to departments of health or welfare for retardates, occasionally with joint or interdepartmental advisory committees to coordinate departmental planning. However some of the larger urban school systems have initiated local services for the deaf and blind, some with emphasis on pre-school training to prepare these children for enrolment in the regular schools.

371. The growing concern for services to emotionally disturbed children has in recent years widened to include those classified as delinquent. Provincial institutions of the past for older child delinquents, commonly known as reform schools, were primarily custodial and education was incidental to correction programs. These have to a large extent been succeeded by a different type of institution frequently residential but

devoted much less to custodial care than to diagnostic and remedial treatment and to maximization of educational services. Although sponsored and administered by semi-private special interest groups or associations, these institutions receive very substantial financial support from provincial governments. These special schools have an in-house educational program and staff, but a number of them are experimenting with part-time or full-time attendance in the regular schools as a means of enhancing prospects for earlier and more complete rehabilitation. The institutions themselves endeavor to provide for the diagnostic, psychological, health and welfare needs with the cooperation of government and local agencies. Child delinquency, at least in its aggravated forms, has not traditionally been regarded as a problem primarily in the ambit of public education. But having emerged as a major concern in the mental health field and consequently with major implications for services to the emotionally disturbed, increasing involvement of the educational system would appear to be in prospect.

372. Given the complex nature of programming and staffing for special services to the handicapped, not to mention the high cost factors, there are major disparities between urban and rural communities. In sparsely populated communities in which the local school authorities are unable to provide but minimal services within their schools, it is common practice for those authorities either to 'purchase' services from a neighboring jurisdiction or to enter into agreements with other school systems to conduct joint programs of services. Provincial governments encourage such collaboration by offering financial incentives to approved programs. In addition, provincial authorities are increasing emphasis on coordination of the roles of departments of education, health and welfare (and in some instances recreation and justice) in an effort to combine all available resources toward the common objective of providing adequate diagnostic and remedial services to those in need, irrespective of geographical location. Toward this end, Alberta is experimenting with a plan to develop regional diagnostic and remedial centres throughout the province, staffed to provide an outreach service to all communities where need exists. Saskatchewan has established a special agency to coordinate specialized services of the departments of government concerned with education, health and social services, also with an emphasis on regional services to rural areas. Likewise Manitoba and British Columbia are engaged in developmental plans for regional services as nearly as possible comparable to those available in the larger urban communities.

373. The regional approach has been adopted in all four provinces to maximize utilization of specialized services already in existence in regional divisions of the departments concerned. For example, health and welfare departments have specialized staff and consultants in such fields as speech, psychological, psychiatric and social welfare services, though not yet in the number to provide a full range of remediation as well as diagnostic services. A shortage of qualified personnel has tended to necessitate a regional emphasis on diagnostic services and dependence on whatever remedial services teachers and other professional personnel already in the schools may be able to afford. Full implementation of programs now in train therefore depend to a large extent on the capacity of educational institutions to prepare specialized persons in the numbers required. In the meantime regional personnel are experimenting with various methods for

delivery of services, for example, the itinerant model. One such, for illustration, is the Saskatchewan Hearing Aid Plan, under which a regional office unit of a health region moves about an area to carry out hearing screening and hearing-aid fitting, as well as testing and repair of hearing aids.

374. Referring to services with respect to specific types of handicaps, an increasing number of schools are equipped with, or otherwise have access to, braille and large-print materials, tape recorders, looped classrooms with sound amplification, for use in the community-based programs related to sensory handicaps. Services to the retarded at the community level except for the severely retarded are located in a variety of settings, developmental day care, kindergarten, day school, day classes, vocational and work-training.

375. Historically, diagnostic and therapeutic services to children with speech disorders have been a function of health and medical agencies. The current trend toward coordination of special services seems likely to result in strengthening liaison and cooperation between health and educational authorities at both the regional and community levels, more especially in programs of remediation. Children handicapped by neurological, orthopedic or general health impairment, and not infrequently by two or more such conditions, are normally provided for in special residential or day institutions, including rehabilitation centres and hospitals with teachers assigned to them or in some schools where special areas have been designed to serve these needs.

376. Educational Objectives. In principle the objectives of education for the handicapped are viewed as the same as those for normal children. It follows therefore that the curriculum and program content, the educational regimen for children with special needs, differs less in basic types of content than in the approach to teaching and learning. Within the limits imposed by handicapping conditions, curriculum content includes learning experience in the basic skills subjects, cultivation of specific talents or aptitudes and personal attributes, manual and vocational skills. There tends as well to be a considerable emphasis on social and emotional habilitation and on occupational preparation purposed to inculcate a positive and constructive sense of personal worth and of a satisfying role in life. Although provincial departments of education provide guidelines to programs and courses of study, particularly for the retarded, these are not prescriptive and are intended only to provide basic guidance to educational institutions in designing specific programs for the particular children they serve. Ultimate decisions on program lie with the local education authorities, the school staffs and consultants, with such assistance as may be available from other specialized health and welfare agencies in the province, region or community.

377. Enrolments. By reason of the complex nature of services to handicapped children, together with the variety of approaches to these services and to identification of clients in the several provinces, comparable data are not readily available to indicate the extent to which these children are being served. Observations concerning participation must therefore be very general. For example, data for 1972-73 indicates that 40,000 children, or

3.3 percent of the total elementary-secondary enrolment of 1,435,000 in the publicly administered schools of the Region, were enrolled in special classes or were receiving special services in those schools. These data, however, exclude children enrolled in provincial schools for the blind and deaf and in schools administered by local private associations for the mentally retarded. Moreover many school jurisdictions do not, as a matter of policy, make distinctions among children on the basis of special program services.

378. To speak of the current status of education of the handicapped is to recall that this aspect of educational development has only in recent years emerged as a priority in educational planning, that legislation in the Region is, with one or two exceptions, enabling rather than mandatory, and that its development is necessarily intricately involved with other specialized services and agencies. School systems and departments of education have evolved procedures for providing direct services in some aspects of the program and for purchase of services in others, for example, diagnostic and remedial, therapy, transportation and residential fees. Moreover, they have access to services of other government departments in the fields of speech therapy, social work, psychology and psychiatry.

379. Prospects. A review of current policy statements and recent legislation clearly indicates a firm commitment to gradual implementation of a comprehensive program of educational services for children with special needs attributable to personal handicapping. The commitment is in part embedded in recent or contemplated legislation in two provinces by which the provision of services is or will be mandatory and in part, in all four provinces, in financial incentives to local school boards and approved semi-private agencies. In conjunction with the basic priority of extension of a comprehensive program of services to children irrespective of geographical circumstance, provincial authorities have addressed themselves to the equally important objective of coordinating and rationalizing the special capabilities of all government and community agencies in the common effort to serve these children. Allied to this is the trend toward focusing developments wherever possible on community-based programs, supported and promoted by government departments through grant programs and consultant services.

380. These priorities have a wide base of public support, not only among the parents of handicapped children but also within associations and societies devoted to this special interest together with teacher and school trustees associations. In addition to the studies, reports and representations of provincial groups, the four Western Provinces are presently engaged in an interprovincial task force mandated to study and recommend procedures for gathering, evaluating and storing materials concerning the visually handicapped and for computerized access thereto on a regional basis. This effort at interprovincial cooperation and rationalization may be expected to serve as a model for joint participation in other aspects of development in this field, for example in research and in rationalization of services of a highly specialized type required for children of multi-handicaps or other low incidence or aggravated forms of handicap. Among the possibilities which have a real potential is a regional school for the blind with facilities and program designed to serve both the totally blind and those with additional

handicaps such as deafness, retardation or other physical or mental conditions. Although all four provinces have residential schools for the deaf, it is conceivable that one or two of these could be developed jointly as highly specialized centres for children with additional handicaps other than blindness.

381. Quite apart from the very high cost considerations with respect to special services, the growing recognition of the importance of research and program development in the area of preventive services might well give point to interprovincial participation in studies and future planning. Given the fact that each province is already engaged in efforts to establish registries of children with special needs, the combined expertise and experience which has been accumulated individually in a very complex field would appear to be a logical extension of joint activity of mutual value.

Recurrent Education

382. For present purposes recurrent education is defined as participation by individuals in educational programs following exit from formal schooling and intended as a continuing activity at various stages of life and career. Its purposes are perceived in terms of motivations related to personal growth and development, to adaptation to vocational and avocational needs, to career enhancement and to cultivation of personal interests and skills pertaining to participation in democratic processes of modern society.

383. In the Western Canada context 'exit from formal schooling' is not intended to imply all education following completion of basic education, for it is increasingly common for adults, often after a considerable period of time, to resume formal education on a full-time basis in universities and non-university institutions in programs leading to degrees and diplomas. While the motivations which result in persons resuming their formal education in this manner may be quite similar to those already referred to, the present intent is to focus on the relatively new phenomenon of adults who from time to time rejoin the educational process, part-time or full-time for relatively short periods, over their life-span.

384. In local usage, this phenomenon commonly includes references to continuing education, further education, adult education, adult night school and variations of these themes. Moreover, it is not in any way exclusive in terms of institutions, for the programs of recurrent education may be found in the offerings of school boards, of colleges and universities, of institutes of technology, of the community colleges, and additionally, in informal learning experience outside the formal educational system. The growing importance attaching to the role of informal education is for example, referred to in the report of the Task Force on Post-Secondary Education in Manitoba [32] in its allusion to "post-secondary education at an informal level" and further is in harmony with the urging of the Faure Report [33] that "all kinds of institutions, whether designed for teaching or not, and many forms of social and economic activity must be used for educational purposes".

385. The description which follows therefore has for its scope education which is pursued by adults, usually for relatively short terms, after periods of time in other pursuits, in educational institutions or in educational experience outside the formal educational system. This education may be work-oriented or general, and may occur at several stages of life and career.

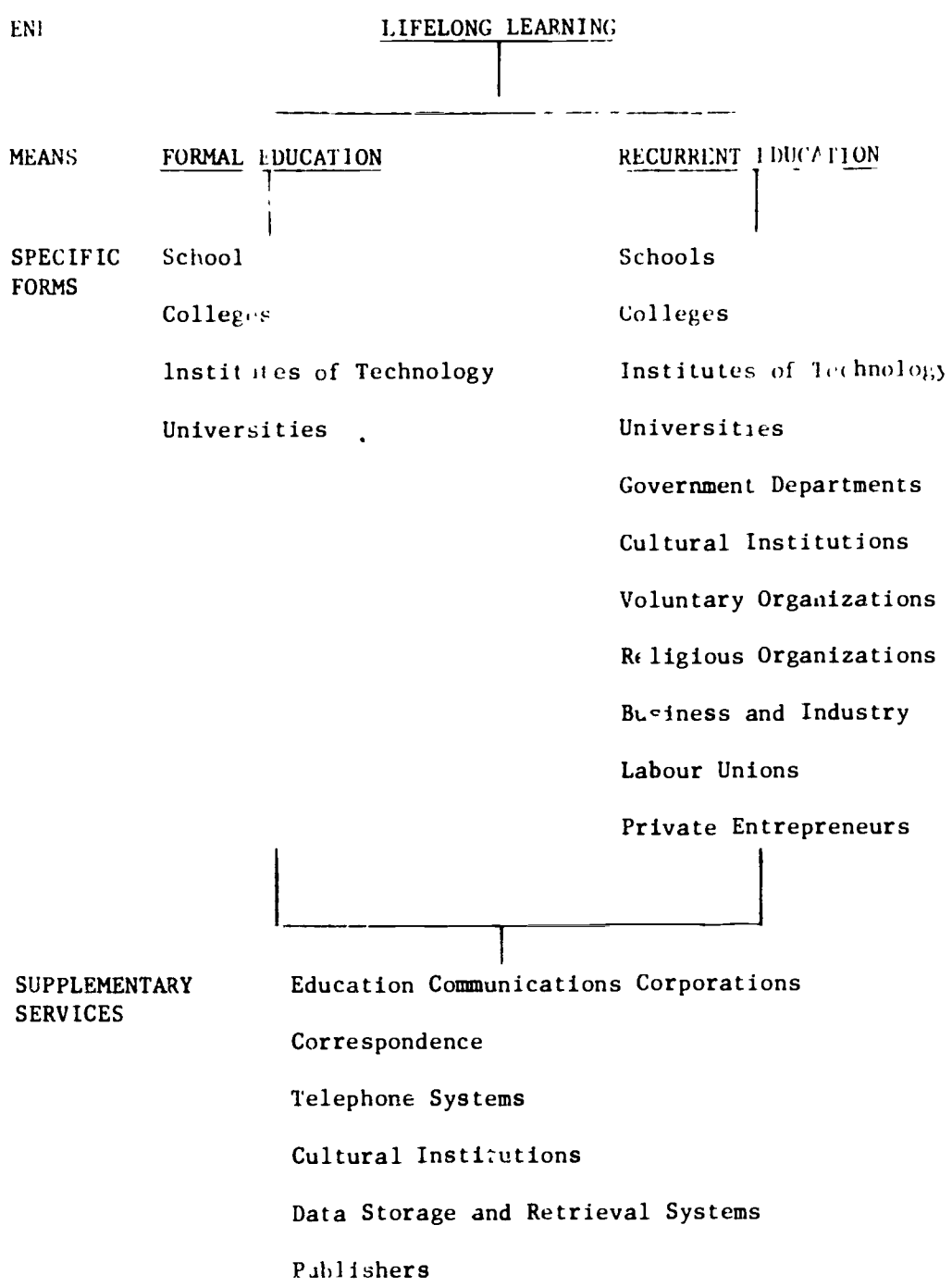
386. Notwithstanding the lack of common terminology and consistent nomenclature, there is a general acceptance in Western Canada of the concept of life-long learning, according to which it is recognized that people in modern society have a need, a desire, and a capacity to continue to acquire new knowledge, skills and attitudes throughout their lives. In all four provinces, recent government appointed task forces, commissions and special committees have each in their own way given expression to what the Worth Report in Alberta puts as a proposition that "educational planning must take life-long learning as a basic assumption". [34] Learning in this sense is not construed as merely an accumulation of experience gained in unstructured situations in life. Enhancement of the capacities of an individual to cope with life, to live usefully and satisfyingly, rests, not so much on incidental experience as such, as on opportunities for organized study and reflection which leads to new insights, perceptions and behaviors in relation to those experiences. Education provides the setting and process by which such learning is achieved, providing of course that it relates meaningfully to the purposes and motives of the learning adult.

387. Chart IV summarizes in a general way the present institutional orientation of the processes of life-long learning in Western Canada in terms of ends, means and forms with respect to formal education and recurrent education. School systems, colleges, institutes and universities are involved with the processes of both formal and recurrent education, albeit with two sets of clients and two basic purposes. Beyond these institutions recurrent education looks to additional agencies, normally at the periphery of formal education, for extension and elaboration of its processes. The Chart also reveals supplementary services which relate both to formal and recurrent education. Cultural institutions in this context refer to public libraries, museums and art galleries, which in addition to serving as resource centres to other educational agencies and individuals, are increasingly active in initiating their own programs.

388. Although the school system is included among institutions concerned in life-long and recurrent education, the discussion which follows with regard to the latter will focus primarily on 'post-school' education, that is, educational participation which occurs at times after completion of basic elementary-secondary education.

389. Objectives. Reports of commissions, task forces and special committees in all four provinces tend to define the goal thrust of public policies in education "to make every individual truly a person and a full citizen of our society". [35] General goals of education, equally pertinent to recurrent education, include an emphasis on the nurturing of growth toward self-hood and individual freedom and toward development of personal values and social conscience. In this vein, Saskatchewan's Report of the Minister's Advisory Committee on Community Colleges stresses that individuals must be able to

CHART IV


ENI
LIFELONG LEARNING
MEANS
FORMAL EDUCATION
RECURRENT EDUCATION
SPECIFIC FORMS
School
Colleges
Institutes of Technology
Universities
Schools
Colleges
Institutes of Technology
Universities
Government Departments
Cultural Institutions
Voluntary Organizations
Religious Organizations
Business and Industry
Labour Unions
Private Entrepreneurs
SUPPLEMENTARY SERVICES
Education Communications Corporations
Correspondence
Telephone Systems
Cultural Institutions
Data Storage and Retrieval Systems
Publishers

recognize new learning requirements and assume greater responsibility for setting and pursuing their own goals, bearing in mind that the individual is himself also a part of a larger society in which he is a participant. Manitoba's Task Force wrote that "we must consider the rights of individual Manitoba citizens as well as the needs of society". 36 There is a basic assumption that social good derives from maximum development of each individual's capacities.

390. As providers of certain forms of education to adults, government departments other than departments of education also have objectives which may be summarized in terms of development and maintenance of work skills, of education of the public in matters pertaining to economic productivity, consumer knowledge and the like, and of promotion of improvement of living conditions in matters of health, community development, welfare, culture and recreation. Likewise other groups such as business and industrial associations, labour unions, religious and other voluntary organizations, promote educational activities which tend to be functional to their own goals, but often with a common element which might be described as education in human relations.

391. In the ultimate sense of participation in recurrent education the decisions of individuals are inevitably influenced by the extent to which they are able to reconcile personal goals and organizational or social goals. The latter emerge in stated or implicit objectives of the providers of services and in the manner in which those services are made available. For example, the historical tendency in Western Canada as elsewhere to identify recurrent education with vocationally-oriented education is mainly attributable to relatively generous financial support of governments to programs purposed to up-grade vocational and technical competencies of the labour force. Notwithstanding the persistence of this tendency, there are distinct indications of policy approaches by provincial governments to broaden the concept of recurrent education and to widen the base of programs of financial support. For example, in its Draft Guidelines and Procedures on Further Education Policy 37, the Department of Advanced Education in Alberta refers to grants for non-credit, non-vocational programs. Likewise, proposals and policies for community colleges in Saskatchewan, and Task Force proposals in Manitoba and British Columbia highlight the need to support broad programs based on individual and community needs. Moreover, even in vocationally-oriented courses, all four provinces have in recent years experimented with 'life-skill' training as a feature of those courses. Life-skills in this context refer to cultivation of personal attributes which enhance human relations both in a work situation and in the more general sense of interpersonal relationships. In statistical terms, comparable data over a period of years are not available, but Tables 29 and 30 afford an indication of the situation in 1971-72 with reference to participation in non-credit vocational and general interest programs.

392. Data for British Columbia are set out separately from the Alberta, Saskatchewan and Manitoba group in order to reflect significant differences in participation patterns of that province as compared with the three prairie provinces. It will be noted that although registrations in non-credit courses reflect a clear bias in favour of general interest courses, vocational courses still attract approximately one in three of the

TABLE 29

REGISTRATIONS IN NON-CREDIT COURSES
VOCATIONAL AND GENERAL INTEREST
BY NUMBERS ENROLLED AND PERCENTAGES
1971-72

	Prairie Provinces		British Columbia		Western Region	
	Number	%	Number	%	Number	%
Vocational	44,472	41.2	57,974	30.1	102,446	34.1
General Interest	63,463	58.8	134,331	69.9	197,794	65.9
	107,935	100.0	192,305	100.0	300,240	100.0

Source: Statistics Canada-Service Bulletin, Adapted

TABLE 30

PERCENTAGE GROUPINGS IN SPECIFIC FIELDS
VOCATIONAL AND GENERAL INTEREST COURSES

	Prairie Provinces	British Columbia
Vocational		
Business Management	42.6	29.3
Agriculture	11.6	2.0
Health Sciences	4.1	12.7
Fine and Applied Arts	2.8	0.1
Other Trades/Technical	21.7	44.2
General Interest		
Fine Arts and Crafts	23.9	22.5
Home Arts	17.7	13.7
Modern Languages and Lit.	4.4	0.5
Public Affairs	4.8	6.9
Personal Development and Leadership	5.8	7.3
Recreational Skills	13.6	16.4

Source: Statistics Canada-Service Bulletin, Adapted

registrants. To the latter could be added another 50,000 (87 percent male) engaged in vocational courses as trainees in industry. Percentage groupings in Table 30 reflect a variety of influences within the provinces such as the nature of the economy, ethnic origins of the population and other demographic features. For example, in the prairie provinces with their relatively greater diversity of ethnic and cultural characteristics, interest in culturally-oriented courses is greater than in British Columbia. On the other hand the relatively greater urbanization and industrialization of British Columbia is revealed in the apparent attraction of vocational courses in the trades and technical fields.

393. In the total perspective of participation in recurrent education, it should be noted that these data reflect only registrations in programs which are reported and do not include persons who may have registered in a course at any of a number of institutions without any intention of pursuing it for credit purposes; nor do they include those who participate in informal education activities. At the present stage of development, it is not possible to assess the extent to which current services reflect a response to objectives of individuals as such, for in general the individual is limited to the options which may have been in the main determined by the providers of the services available. It is on this point that policy-makers are devoting increasing attention in the hope of arriving at an acceptable balance of individual and societal goals.

394. Institutional Services. To view recurrent education in the Western Region in the broad sweep of participation in current programs is to locate the providers of those programs and to identify their clients. Table 31 sets out this information for 1971-72 in terms of institutional programs and enrolments.

395. In the Western Region as a whole universities and colleges have tended to dominate as providers of services in both credit and non-credit programs. However, it will be noted that institutional roles vary greatly among the individual provinces. This is attributable to the historical evolution of these services, the most notable feature of which is that the commonalities apparent in other components of the educational system do not occur as a pattern in recurrent education.

396. Although services in the public sector in all four provinces emanate from the basic school systems, universities, various types of colleges, correspondence schools, and vocational centres, the degree of involvement of each is in many cases very different and tends to reflect the approach of each province to this aspect of education. For example, the prominence of program services in the basic school system in British Columbia reflects the long history and emphasis on adult education programs by major school boards in that province. In Manitoba and Saskatchewan on the other hand, the universities have tended to play the major role, as have the colleges and universities in Alberta, although all have a tradition of school board programs. It should be noted however that the recent emergence of the college movement, particularly of the community colleges, in all four provinces, is already producing a shift of focus from school board and university programs to college programs. This is not to imply that the traditional providers are likely to vacate entirely their roles in recurrent

TABLE 31

STUDENTS IN CONTINUING EDUCATION COURSES IN INSTITUTIONS

1971-72

	British Columbia	Alberta	Saskatchewan	Manitoba	Western Region
Part-time Credits					
School Boards/Depts. of Education	8,666	2,915	1,972	2,145	15,698
Provincial Correspondence Schools	6,943	6,347	2,737	1,282	17,309
Colleges	29,045	12,225	4,652	3,545	49,467
Universities	11,028	15,204	11,720	16,448	54,400
Sub-Total	55,682	36,691	21,081	23,420	136,874
Formal Non-Credit					
School Boards/Depts. of Education	94,974	16,467	5,891	8,119	125,451
Provincial Correspondence Schools	2,922	577	224	--	3,723
Colleges	10,289	11,498	1,186	4,990	27,963
Universities	24,450	16,999	7,293	4,813	53,555
Sub-Total	132,635	45,541	14,594	17,922	210,692
TOTALS	188,317	82,232	35,675	41,342	347,566

Source: Statistics Canada - Service Bulletin, Vol. 3, No. 4, May, 1974.

education, but rather that there will be a significant realignment of roles, very probably with the colleges emerging as the leading providers of services. For example, enrolment projections in Alberta suggest the probability that between 1970 and 1980, enrolment in 'further education' will increase over-all by 130 percent. It is anticipated that school - based enrolments will increase by 60 percent, and those college-based by 150 percent.

397. While future enrolment projections are both rare and highly tentative, it is significant to note that the Alberta Department of Advanced Education [38] has stated its objective for the five-year period 1973-1978 to increase participation in recurrent education to one in four of the adult population, almost tripling current enrolments. From the point of view of future planning, the experience of the several commissions, task forces and special committees clearly demonstrates public acceptance of the need for and acceptability of priorities in respect to recurrent education. In this connection, it should be noted that these inquiries, irrespective of individual format, received hundreds of briefs and submissions, met with thousands of people at public meetings or hearings throughout their respective provinces and encouraged continuing public discussions of the issues involved. The net effect was a strong public endorsement of the concepts of recurrent education and of the college movement as a major vehicle for delivery of services.

398. Given the generally high degree of acceptability of the purposes and principles of recurrent education among the educational authorities, employers and employees, and in the public at large, future prospects will very probably be affected by the manner in which programs become accessible to prospective participants. In Western Canada, educational leave arrangements are not the subject of legislation and where provisions are made they are normally the result of collective bargaining between employers and their employees. Although apparently not a major issue in collective bargaining, there is some evidence of heightening interest among employers and employees. For example, in a review of 1973 collective bargaining agreements in British Columbia, 8.6 percent contained provisions relating to leave for educational purposes. In Saskatchewan about 21 percent referred to some form of educational leave (4 percent included paid leave), and in Alberta provision for educational assistance rose from 7 percent of contracts in 1967 to 16 percent in 1971.

399. Informal Education. Although quantitative evidence pertaining to informal programs of recurrent education is extremely limited, the existence of a vast array of workshops, seminars and discussion groups, rural education and development associations, church groups, family life agencies, to cite a few, are obvious and well known. Their concerns range widely from interests, issues and problems relating to family and community life, personal growth, inter-personal and human relations, social values and the like. For example, a church centre for continuing education in British Columbia which conducts programs keyed to personal growth and social values experienced attendance increases from 5,700 in 1972 to 7,600 in 1974.

400. Accessibility to formal institutions and programs is necessarily a determining factor in achieving of the objectives of recurrent education. The very practical concerns of prospective participants relate to conditions governing admissions and convenience of time and place as well as to

availability of institutional facilities. Admission requirements of institutions, referred to in Chapter II, are generally applicable to persons engaging in credit courses, but subject to a considerable degree of flexibility where adults are concerned. Few if any constraints are applied with respect to admissions to non-credit courses.

401. In elaboration of the foregoing in terms of program patterns and participation, it is significant to note some measure of commonality and uniqueness among the provinces. For example, out of a total enrolment of 40,250 registered at the University of British Columbia in 1972-73 in non-degree courses, 13,700 were in continuing professional education programs (9,950 in the Centre for Continuing Education and 3,750 in Health Sciences Continuing Education), and a further 9,100 in various business education programs of the Faculty of Commerce and Business Administration. In that province all institutions have for many years offered credit and non-credit courses in the evenings, a practice which continues to grow, for example, at the University of Victoria from 36 courses in 1972-73 to 69 courses in 1973-74, with enrolments of 877 and 1,853 respectively. In addition to the regular academic terms, the operation of spring and summer sessions provides virtually year-round access to courses. The nine community colleges, soon to be ten, provide a province-wide service, but oriented to regional needs with respect to the selection of courses each has adopted. A somewhat unique feature of these colleges is their emphasis on university transfer courses which is not generally typical of the other provinces. Between 1967 and 1973 enrolments in the colleges rose from less than 4,000 to 21,000. Although the Correspondence Schools' courses available in Western Canada are essentially academic, those in British Columbia include for adults also instruction in such subjects as basic elements of astronomy, painting, air navigation and library management. Specific materials and aids such as tapes, tape recorders and players, radio and television broadcasts are available to students while engaged in the courses.

402. In Alberta, services to adults in the public sector are centred in its four universities, six community colleges, three regional colleges, two institutes of technology, five vocational centres, the Banff School of Fine Arts and School of Management, the provincial correspondence school and in several of the large secondary schools. Alberta's somewhat unique vocational centres have three main functions, academic up-grading, vocational training for direct entry into employment, and training or retraining of disabled persons. Admissions to the centres are based on individual placement testing designed to take account of the educational status of the student and the program(s) which may best suit his needs.

403. Many of the institution-based courses are available on a year-round basis, in day classes, evening classes, on and off campus. One of the features unique to Alberta is its new Athabasca University, a modified version of the Open University of Great Britain. Having no campus of the conventional variety its intent is to serve adult students, including part-time students, throughout the province by a combination of correspondence, television, audio-cassettes, telephone tutors and group meetings. Its present programs, social science, humanities and ecology, are available for credit and general interest purposes.

404. Alberta's correspondence school, a service of the Department of Education, offers academic courses to and including the secondary education level, and as in British Columbia, adult courses in business management, library work, astronomy, to mention a few. Some of these courses are supported by a radio broadcast service, and by an itinerant teacher. Correspondence education of the universities is provided through their extension departments. One of the institutes of technology and the three regional colleges also offer correspondence courses in technical and vocational subjects.

405. In Saskatchewan program services to adults have been based largely in its two universities, three provincial technical institutes, three vocational centres, the provincial correspondence school and in the major secondary and composite schools. This province has traditionally tended to a greater emphasis on informal education in matters of concern to a predominantly agricultural province through agencies such as agricultural societies, home-makers societies, credit unions, and more recently in the development of the Cooperative College of Canada.

406. As in the other provinces, the universities offer evening credit and non-credit courses, some off campus and through their extension departments and by correspondence. The provincial correspondence school offers adult academic and some vocational courses to the secondary level.

407. This province is currently in the process of developing a province - wide system of some 15 community colleges, five of which are now operational. Although the basic purposes of its community colleges are generally similar to those of other provinces, to provide educational services to adults in a community setting, the Saskatchewan model has several unique features. One of these is the field staff through which the Department of Continuing Education maintains a continuing administrative relationship with the governing boards of the colleges. Field representatives of the Department work with the people of the various communities in a college region in an effort to assist them to recognize the social and economic potentials of the community, to relate these to their personal educational needs and aspirations, and to interpret and express these to their college boards. The boards in turn are expected to respond to community expectations as fully as budgetary and administrative capabilities permit.

408. College boards do not contemplate building or acquiring extensive physical facilities, and instead, will procure accommodation through lease arrangements in existing schools and other suitable locations in the communities concerned. Likewise they do not maintain large permanent instructional staffs. Their employees are mainly administrators and support staff whose functions enable the colleges to conduct what might be described as an extensive educational brokerage operation. To illustrate, arrangements are made with the extension services of the universities and technical institutes to conduct credit and non-credit courses in communities, staffed either by permanent staff members of those institutions or by local residents accredited by the institutions. Awards of university degree credits, diplomas and certificates, as the case may be, remain functions of the institutions concerned. It is anticipated that multi-media learning 'packages' will become increasingly important features in this type of

service. In like manner college boards arrange a wide variety of less formal academic, vocational and social demand classes and activities, very frequently by negotiation with school boards, other government departments and voluntary agencies. The educational capabilities of agencies such as the Saskatchewan Provincial and Regional Library systems and of the Saskatchewan Educational Communications Corporation are expected to be increasingly important contributors to the continuing evolution of a comprehensive delivery model for recurrent education in this province. Experience to date with implementation of Saskatchewan's community college system indicates that one of its chief strengths lies in its flexibility and adaptability, features which are seen to be of increasing importance in the context of growing sophistication of public demand and of the delivery systems through which program services are provided.

409. Manitoba's three universities, three community colleges, adult centres and some 30 school systems provide the institutional base for academic, vocational and practical arts programs for the further education of adults. The universities and community colleges, in addition to their higher-level credit programs, offer various courses in vocational and general interest fields, under admission requirements very similar to the other provinces. Among special features of the community colleges are their special mature students program for disadvantaged persons, and their outreach or satellite programs in smaller communities. Manitoba's Inter - University North Program is an innovation by which the three universities cooperate in the development of adult programs in the sparsely settled Northern part of the province. In the current year seven local centres have been established to serve an initial enrolment of 300 students in 17 university-level courses and several non-credit courses. Other innovations designed to accommodate adults are exemplified by the "University at Noon" and "University at Two" programs in Winnipeg. The first is purposed to provide credit courses at several downtown locations for employed persons, and the second for housewives in convenient afternoon hours.

410. Correspondence education is available from the Correspondence Branch of the Department of Education in academic subjects and for technical - vocational subjects by arrangements with the provinces of Alberta and British Columbia. Manitoba's correspondence work is supplemented by staff visits and telephone assistance. One staff member is stationed in the Northern part of the province to assist students in that area.

411. If the evolution of services to adults in Western Canada has in earlier stages tended to be largely ad hoc and uncoordinated, the current situation is characterized by a trend not only toward greater accessibility of institutions but also toward a more systematic approach to over-all planning and structuring of delivery systems. There is a clear trend in British Columbia, Saskatchewan and Manitoba to apply the instrumentality of the community college or some form of regional advisory organization for purposes of coordination of existing programs, of ensuring more universal accessibility of institutional services, of expansion of services in keeping with individual and community aspirations and needs and of provision of new programs where necessary. One feature of this tendency is reflected in a noticeable shift of programs from school boards, correspondence schools and some of the other colleges to the community colleges.

Because the community colleges have a regional orientation, the processes of planning, coordination and development tend to come into focus at a regional level. In Alberta, similar ends are seen to be achieved by promoting growth and development of programs of existing institutions under general coordination of the Department of Advanced Education, through a funding program and community-based advisory councils.

412. Notwithstanding some differences in approach and in details of mechanisms for planning and development, the four provinces tend clearly to view the whole of the post-school system as a unit with linkages among individual sets of institutions. The relatively informal linkages which have already very gradually evolved among the universities, institutes of technology, colleges, vocational centres and specialized provincial government institutions and agencies will, under current policies, take on an increasingly definitive structure, and in doing so, minimize traditional tendencies of institutional isolation. The concept of a network of formal institutions is not only a logical extension of existing trends but is also seen in current developments in the fields of library services and educational communications systems as these relate to education in all four provinces.

413. The foregoing description of developments in the field of recurrent education, relating in the main to formal institutions, would be incomplete without some reference to other practices and policies which are appearing on the wider horizon of educational services. One such feature is the emergence of the concept of the 'community school', characterized in the Worth Report as a response to "an obligation towards total neighbourhood needs which can best be discharged through widespread school-community-other agency interaction and reciprocal use of resources". [39] Of about 40 schools in British Columbia with some features of this approach, four have been recognized formally as community schools with specially appointed community - school coordinators. In Alberta there are three experimental schools similarly designated by the two education departments, each with a community-school coordinator. A somewhat similar development is found in Manitoba involving community participation in the operation of schools in the 31 communities in its Northern Frontier School Division.

414. In what must yet be regarded as more or less experimental situations, the community school takes on characteristics of extensive community involvement, participation in instructional programs by persons whose professional skills are needed but who are not trained as teachers, and use of school facilities for services related to education, health care, counselling and the like, functions not usually associated with the conventional perception of a school. In short, the school is seen as the focal point, its facilities at the centre of a cluster of community service agencies, where many of the functions of community services and activities meet. The basic idea has deep roots in the tradition of the one-room school of pioneer times when it was the hub of most community affairs, where citizens could meet for any purpose pertinent to the life of the community. Whatever may be the problems of adapting this simple model to the complex nature of modern society, many see it as a means of 'holding the community together', of recreating a modern technique for meaningful involvement of individuals in shaping the character and quality of life.

415. Counselling Services. Guidance and counselling services, referred to earlier in connection with basic education programs, are likewise features of educational services for adults, more especially for those whose participation is recurrent. Such services at this level tend to focus on helping individuals to understand their own capabilities, aptitudes and interests through testing programs and counselling, on furnishing information regarding programs and courses available and on procedures for registering in and entering upon courses. Virtually all institutions provide some form of guidance and counselling, and some offer non-credit programs in group counselling, group discussion and inter - personal communication experience to promote among participants clearer understanding of themselves, the ability to interpret and manage their own aspirations, and a sense of realistic self-confidence. Although counselling services are mainly based in institutions, there is a growing body of opinion that a first-line educational counselling service for adults should be community-based with a view to serving people before they make decisions about particular programs and institutions. Toward this end the Alberta Department of Advanced Education is establishing a province-wide adult counselling service, with centres located at strategic points for the convenience of users.

416. Although somewhat peripheral to the counselling aspects of recurrent education, the recent emergence of day-care centres, mainly in institutions, reflects a growing recognition of the interests of the family unit in matters pertaining to participation. This trend is likely to gain momentum as a feature of wider involvement of adult members of families in educational programs, and may well receive further impetus from the growing interest of provincial governments in day-care centres as a general community service.

417. Student Assistance. Although student assistance programs are applicable to some aspects of recurrent education, recent studies and inquiries in all four provinces have cited the importance of financial policies to facilitate greater participation in both credit and non-credit courses. Specific approaches presently under study indicate a policy based on increasing grant support to institutions, with a view to maintaining tuition fees at an absolute minimum. For example, Alberta's guidelines for non-credit further education propose grants to agencies ranging from $4 to $30 per hour, depending on the community orientation of a course or program, and providing it has been approved by a Local Further Education Council. Saskatchewan has stated its objective that the cost to adults in community college courses should not exceed 20 percent of direct costs, and that this amount is subject to remission in individual cases.

418. Library and Educational Technology. Libraries, public, provincial and university, have played a major role in adult education in Western Canada since the early 1900's. However, in recent years, these resources have taken on a new and different type of interest and purpose in the context of developments in the field of educational technology and educational communications systems. Libraries as such, having moved very considerably from the print-centred tradition to the concept of a learning resource centre, have assumed a new importance and relevance to education at all levels and for all purposes. Illustrative of this changing direction,

Saskatchewan's Library Inquiry Committee in 1967 observed that "libraries in Saskatchewan are information centres catering to the educational, cultural and recreation needs of everyone in the community, through books, pamphlets, periodicals, pictures, clippings, and in many cases films, records and cassette tapes". [40] That province at present has a fully integrated provincial library system comprising seven regional library areas, two major urban public libraries and the Provincial Library. The Provincial Library assists the regions and the regional library boards by furnishing consultant staff, coordination and centralization of cataloguing and inter-library loan services as well as back-up service of materials. British Columbia is currently implementing a public library system and information network to serve 27 regional districts. Manitoba and Alberta have recently completed studies for the same general purpose.

419. In all four provinces the principles underlying these developments relate to the most effectual use of total media resources, to a coordinating but not directive role for provincial governments and to promotion of local involvement and management.

420. The trend toward a broader concept of learning resources is further exemplified in Alberta's Worth Report which envisions library services in combination with other media. Using the term 'learning resource unit' in the place of 'library', the Report envisions such units as offering "computor terminals, video printers, facsimile receivers, newly developed micro-media, a variety of audio and video retrieval devices served by co-axial cable, receivers for the direct transmission of communications satellites, a variety of copying devices, several cartridge and computor display systems . . . and all the necessary software ... required to make the machines work". [41] These are contemplated as linked to a central agency and to be a part of a total system with regional learning centres, learning resource units and home terminals. In the same general field, the Western Canada Post-Secondary Coordinating Committee of education ministers is exploring the feasibility of linking the universities in the four Western Provinces for some programs through use of a satellite.

421. Notwithstanding the complex problems and expense inherent in the translation from objectives to operational systems at this level of sophistication in telecommunications for educational purposes, educational authorities are increasingly persuaded of the potential values for all aspects of education, but more especially adult and community education. Building on the foundations of educational radio and television facilities and services which have been developed over past years, all four provinces have commenced to create some of the mechanisms and structures essential to an over-all plan. Toward this end, Alberta's provincial legislature passed the Alberta Education Communications Corporation Act in 1973, modifying earlier legislation designed to give shape to the direction of this type of services through the Alberta Education Communications Authority. Under the new legislation, the Alberta Education Communications Corporation, commonly known as ACCESS, is linked to government through the Authority (Ministers of Education and Advanced Education) and will be responsible for integrating all aspects of educational communications in the province. The Corporation has already assumed management of two educational television production units and one non-commercial radio station.

422. Saskatchewan passed similar legislation in 1974, establishing the Saskatchewan Educational Communications Corporation and providing for a 'provincial authority' to give direction to programming for educational purposes. In both provinces, the Corporations are responsible for production and distribution of educational programs, of audio-visual materials and for acquisition of programs and materials from other sources, subject to program requirements and specifications of the provincial Authority. British Columbia is studying a Report prepared for its government and which tends to favour a development similar to those of Alberta and Saskatchewan.

423. Although computers are extensively used in the larger educational institutions and in some school systems for data storage and some aspects of planning, computer-aided instruction has been limited to a few universities where some outstanding developments are in progress in a number of professional fields, for example, medicine. The future of computer-aided instruction in basic education is at present in some doubt and does not represent a major immediate priority in educational technology.

424. Teachers. The preparation of teachers in Western Canada has conventionally been basically oriented to the teaching of children and young people, to development of the professional aspects of the teaching act, classroom skills, the techniques of instruction, and to certification of those so trained. Experience with adult programs over the years has indicated that these emphases in teacher preparation are not necessarily the most suitable for those engaged in teaching adults. The teacher of adults tends more to be seen as a person skilled in working with people, somewhat in the manner of nurses, social workers, doctors and therapists, as a person whose role is that of a facilitator of learning or of what the Faure Report refers to as 'organizer-educators'. In specialized areas of instruction it has been necessary to recruit the services of non-certificated but skilled persons in a wide variety of specific fields.

425. The teacher training institutions have made some beginnings in adapting training programs based on these considerations. Several universities now offer courses in the concepts and practices of continuing and community education, in utilization of community resources of talent and expertise, and in communications. Other evidence of new directions include special admissions policies concerning 'unqualified' persons in teacher training courses, the emergence of graduate programs and degrees in continuing education (Universities of Saskatchewan and British Columbia) and a growing number of under-graduate courses under such titles as Group Processes, Contemporary Issues in Education, The Community and the Role of the Teacher, Social Psychology and Education, to cite a few. An example of 'unqualified' persons being admitted to teacher training include such special projects as Manitoba's IMPACTE, a joint venture of the University of Brandon and the Government of Manitoba for the training of persons of Indian ancestry as teachers. Similar ventures are in planning or in progress in the other provinces as well.

426. In the retrospect of the foregoing description of recurrent education, with all its variety of activities and delivery systems, it will be apparent that educational authorities in Western Canada place a high priority on

future planning which will produce an integrated and fully coordinated 'system' of recurrent education. An equally high priority is the expansion of services and participation.

427. In the course of evolution of the provincial educational systems during the past half a century the tendencies to isolate the various components and levels of education have gradually disappeared, giving place to a view of education as a continuum of learning experience. First the artificial line between elementary and secondary education was bridged and the notion of basic general education emerged. Then followed a blurring of lines separating higher and post-school education from secondary education, whether viewed in hierarchial terms or as lateral movements to educational services at the adult level. The basic underlying philosophy is in many respects similar to the ideal set forth in the Faure Report. However, in so far as coordination of recurrent education through the formal system and structures of education is concerned, there are differences in the approach of the provinces to Faure's ideal of a single state authority with over-all general responsibility for educational activity. British Columbia has retained the principle of a single ministry for education, and the three other provinces have two separate departments of education, one with responsibilities for basic education and another for post-school education. In Manitoba and Saskatchewan the two departments are presided over by the same minister and in Alberta by two ministers. Processes of internal and inter-departmental coordination are therefore necessarily determined by the type of structure in each case and by the practical considerations which underly those structures at this stage of development of the over-all educational system. The extent to which experience with the several approaches presently in vogue in the provinces produces the desired results in terms of coordination, imaginative planning and program development and effectual deployment and application of resources will determine whether or not the provinces move toward or from the Faure 'ideal'.

428. Notwithstanding tendencies for educational departments and agencies to accept responsibility for programs traditionally in other agencies, for example, nursing education, there remains a host of educational activities conducted by other government departments. Among examples of these are Apprenticeship Training (ministry of labour), natural resources technologies (ministries of natural resources), outdoor, recreation and cultural education (ministries of culture, youth and recreation), to cite a few, with nominal and often minimal association or consultation with educational departments. The current situation is marked by a tendency to proliferation of such activities, giving added point to the importance of adequate liaison. The prospects for strengthening inter-departmental liaison and coordination may be enhanced by the emergence of planning and consultation mechanisms which are now appearing at the cabinet level in provincial governments.

Native Education

429. The lineage of Canada's native population of Indian and Inuit ancestry, believed to have had its origins in immigration from Asia many thousands of years ago, is continued in Western Canada in the seventh largest of its ethnic groups. Although greatly outnumbered as a result of

European immigration in the past two centuries, the Indian population has steadily increased, particularly in recent years to approximately 180,000 or slightly over 3 percent of the total population of the four Western Provinces.

430. In historical terms education of native people is but one aspect of provisions embodied in Royal Proclamations, the British North America Act, Indian Legislation and in Indian Treaties dating from 1763 forward. The basic intent of these provisions, to protect the Indian population and their 'rights' as original inhabitants, in effect resulted in the Government of Canada assuming responsibility for their education. However with the passing years, settlement by non-Indian people eventually resulted in the emergence of two main groups or categories of people of native ancestry. Those recognized for purposes of federal government responsibility were classified as Registered Indians, and the others as Non-Status Indians. The latter group comprises persons of native origins who were not involved with Indian Treaties, or who had otherwise not been registered in an Indian Band list or who had lost registered status by reason of inter - marriage. Included in this group, for example, were the Metis who are persons of mixed blood. In terms of numbers, the Non-Status group is larger than the Registered group, and is presently estimated to be about 220,000. Technically, this group has no statutory claim to special status under federal law, but individual members of the group are Canadian citizens with the same legal rights, privileges and responsibilities attributable to Canadian citizenship, including access to educational services of and in the province of their residence.

431. In this situation of divided jurisdiction in which the education of Registered Indians is a federal responsibility and of Non-Status Indians a provincial responsibility, the development of services to these groups has followed somewhat different patterns. Although these differences are attributable in part to historical and constitutional influences, one of the major determinants relates to demographic circumstances. For the most part, Registered Indians live on Indian Reserves, lands set apart for them by the federal government, maintaining a mode of life based on their traditional tribal organization. Indian Reserves, situated in widely scattered parts of the provinces, are located in areas where the Indian bands tended to concentrate prior to the period of settlement by Europeans. On the other hand, Non-Status Indians having no special land rights, are much more widely scattered throughout the general population, although many reside in small informal 'settlements' in various parts of the provinces, often in the North where they may engage in hunting, trapping and fishing. A more recent trend among both groups, but especially of the Non-Status group, is toward migration to urban centres.

432. The evolution of educational services for Indians is characterized by several stages of development. In the pre-Confederation period various Christian denominations assumed responsibility for education of Indians generally as a missionary activity. For several generations following Confederation, the federal government elected to carry out its legal responsibility for Registered Indians by delegation to the churches who were already providing services, with financial support to assist in their task. By 1949, however, the federal government was building, staffing and

operating schools of its own on Indian Reserves. As of 1971, all schools on reserves were under direct jurisdiction and management of a federal department responsible for Indian Affairs, and the churches had ceased to be actively involved in administration of services. Although the federal schools were fully subsidized for capital and operational purposes and were staffed and administered by civil servants, provincial standards were formally observed. For example, the teachers employed held teaching certification of the province concerned, provincial courses of study were used and schools were subject to inspection by provincial officials under agreements with the federal government.

433. During the period of transition from church to federal administration of the schools, particularly after the 1950's, a new trend appeared in the federal approach, based on a policy of integrating Indian education with non-Indian education in the provincial system. Under these arrangements, the school on the reserve gave way to nearby provincial schools. In effect, the federal government purchased educational services from local school boards. However by 1970, many Indians had become concerned with the objectives, methods and possible cultural implications of integration. These concerns emerged in pressures on the federal government to restore educational services on the reserves and to place the management and control of the schools in the hands of Indians themselves, under full subsidization by the government.

434. Provincial school systems, serving the Non-Status Indian people in their right as citizens and residents of a province, emerged shortly after Confederation as publicly administered and supported organizations. Hence the services available to this group were the same as those available to all citizens, except for certain adaptations of program in areas where the concentration of Indian population was sufficient to permit modifications in consideration of local circumstances. For example, in the Northern portions of three of the four provinces where there are relatively high concentrations of Indians, the provincial authorities established administrative areas in which special provisions are made for Indian representation on administrative boards and for local school committees representative of the individual school community. In their various continuing efforts to adapt educational services to the needs of Indian people, provincial authorities are inevitably confronted with the scattered nature of the Indian population and the fewness of their numbers in the service area of a school or school system.

435. Purposes and Objectives. To put the current situation in perspective is to take note of philosophical considerations which tend to underly present thought concerning Indian education in general. In this sense the current issues are the same irrespective of technicalities of legal status or administrative responsibility. The major underlying concern of both the Indian people and educational authorities is to redefine the purposes and objectives of native education and to identify mutually acceptable strategies for giving effect to these objectives in a rapidly changing society. In this connection the Indian people, in a time of heightening interest in multiculturalism generally in Canada, have given a high priority to revival and maintenance of their traditional culture, their language, religion, social structure and history, and to a search

for identity in a society which inevitably places considerable strain on all traditional modes of thought, custom and practice. Indian spokesmen emphasize the crucial importance of self-determination as a feature of accommodation of these circumstances, and at the same time urge the necessity of being full participants in the mainstream of Canadian life. In recent years in particular, the Indian people have, with encouragement and financial support of both federal and provincial governments, developed a variety of organizations and structures for communications among themselves and with government agencies.

436. Access to Educational Services. Access to education by native people tends at present to be governed by geographical location, level of services available where Indian people live, financial resources available to students, and to the level of interest of Indians in the services available.

437. In geographical terms, Indian children who reside in settled parts of a province have access to the same services at the elementary-secondary level as all children in a community. Although schools on Indian reserves are ordinarily limited to the first six or eight, and in some cases to ten, years of schooling, it is usual for the federal authorities to make arrangements for students to attend secondary school in nearby provincial schools at the cost of the federal government. Problems of access tend to be aggravated in the Northern parts of the provinces where Indian settlements are often scattered and isolated, sometimes accessible only by airplane. Although there has recently been a reversal of the trend of the 1960's toward integration of federal reserve schools with provincial schools, more than 60 percent of the Registered Indian school population still attend provincial schools.

438. Technically Indian students have the same access to colleges and universities as other students in a province. The numbers who attend however have always been small, in part by reason of the high drop-out rate in secondary schools and in part by cultural and financial factors. It should be noted however that for Registered Indians, full financial support is available from the federal government, and all four provinces have various types of programs to assist Indian students taking further education. Some adult courses are furnished by provincial and federal authorities on-site on Indian settlements and on reserves.

439. Psychological and cultural barriers, attributable in the main to feelings of inferiority, inadequacy in use of the English language and to value orientations with regard to conventional education, are undoubtedly central to problems of participation in education, not only in higher education but also in secondary education. Table 32, which shows enrolments of Status Indians in federal and provincial schools in 1971-72 indicates the extent of drop-out after the eighth year. The regional ratio of registrations in Grade XII to Grade I is one to fourteen, compared with four in five in the enrolments of the provincial schools as a whole. This disparity, even greater at the post-school level, is viewed with concern by Indians as well as by the educational authorities, for it has become abundantly clear that the existence of services is in itself insufficient to ensure participation.

TABLE 32

ENROLMENTS - NATIVE EDUCATION

(STATUS INDIANS)

1971-72

	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Federal Schools														
British Columbia	459	474	390	386	286	342	2[illegible]	191	9	--	--	--	--	2,799
Alberta	561	443	433	391	379	370	36[illegible]	247	147	112	27	15	8	3,438
Saskatchewan	598	548	398	382	339	272	259	[illegible]43	104	46	--	--	--	3,089
Manitoba	554	832	819	590	629	589	575	471	430	214	19	--	--	5,722
REGIONAL TOTAL	2,172	2,297	2,040	1,749	1,633	1,573	1,401	1,052	690	372	46	15	8	15,048
Provincial Schools														
British Columbia	861	963	880	904	769	805	740	726	1,044	842	602	389	227	9,752
Alberta	231	686	667	617	547	540	566	556	453	337	382	250	138	5,970
Saskatchewan	327	1,197	960	803	789	745	677	665	479	393	262	156	87	7,540
Manitoba	359	586	527	441	466	403	376	435	335	440	403	212	130	5,113
REGIONAL TOTAL	1,778	3,432	3,034	2,765	2,571	2,493	2,359	2,382	2,311	2,012	1,649	1,007	582	28,375

Source: IAND Publication No. QS-0339-000-EE-A1, Information Canada, 1973.

440. Precise enrolment data with respect to Non-Status Indians are not available by reason of the fact that these students are registered in the manner of all students in provincial schools and therefore without reference to ethnic origin. They would, however, probably number in the order of 55,000.

441. Apart from the various attempts of the past to improve accessibility to educational services on and off Indian reserves and in other areas of Indian population, provincial authorities have also initiated measures with respect to curriculum development, Indian involvement in school administration and cultural preservation. For example, curricular programs in all the provinces have been opened up to permit very wide latitude in the selection of content relevant to the learning environment of Indian students. In recent years an increasing assortment of textbooks and reference materials with an emphasis on Indian history and culture has been developed. Experimentation with use of native languages in instruction is under way and a significant beginning has been made in the preparation of larger numbers of native teachers. In the area of school administration legislative provision now exists in most provinces by which Indians may establish their own school districts and/or have representation on school boards of the school systems which serve their children. These measures tend however to be interpreted as relatively minor adaptations of the provincial school system and not fully relevant to Indian goals of self-determination, cultural renaissance and full participation in the benefits and responsibilities of Canadian citizenship.

442. With respect to educational objectives there is yet no clear consensus among the several Indian organizations as to how these goals may best be accomplished - whether in integrated schools or in schools in exclusive control of Indians, whether to educate for and in their traditional environment or for the environment of the dominant society. In the meantime there appears to be growing certainty of the desire of Indian people to have maximum control of the education of their children, including programs, preparation of teachers and administration. As has already been noted, provincial authorities, having recognized these aspirations, have taken some steps consistent with their constitutional mandate and responsibilities for education in such areas as curriculum, teacher-training, and administration. Likewise, universities and other institutions have adapted a number of their programs to accommodate the special needs of Indian students and to provide training programs for native teachers, teacher aides, counsellor aides, language instructors and the like. These developments have been accomplished with increasing involvement of Indian people in both planning and implementation.

443. At the level of adult or continuing education, governments and native organizations presently provide a considerable variety of adult courses on Reserves and other centres in such fields as academic up-grading, driver education, construction (building related courses), life skills, business education, home economics, cross-cultural communication, band training, alcoholism counselling. In some cases these courses, along with Native Education Centres or Cultural 'Colleges', are direct operations of Indian organizations under federal and/or provincial funding programs. On the other hand the response to legislation enabling Indian groups to establish

school districts has been very nominal, apparently on the grounds that provincial procedures for elections and allocation of powers to school boards do not conform to traditional patterns of Indian organization, particularly those which are rooted in tribal structures.

444. As to future developments, current policies of governments and of native organizations clearly indicate continuing efforts to arrive at mutual accommodations with respect to definition of objectives, to more meaningful involvement of native people in decision-making and administration in educational affairs. A major problem for both the Indian and governmental authorities with regard to accessibility of services will continue to be the widely scattered population and increasing mobility among native people. The other equally important aspect of future planning relates to the need for Indian people themselves to reach a measure of consensus on educational objectives and to harmonize these more precisely with goals which they have defined in general terms. For example, there is wide diversity of opinion among Indian people concerning weighting of Indian cultural content in courses as against cultural features of the rest of society of which in goal-terms they wish to be a part. There are as well questions of the pros and cons of educational services isolated from the mainstream of educational services in a province. Likewise, there are serious concerns with educating the young in such a way as to prepare them adequately for life in their traditional environment as well as for life in the larger realm of Canadian society confident of their ability to participate on equal terms in the benefits and responsibilities inherent in that society.

445. Recent years have been marked by a rising tide of studies, research, consultation, experimentation and innovation by Indian organizations and government authorities in an effort to evolve a common and mutually viable approach to future planning of native education. This mass of activity from which both knowledge and experience are important by-products seems likely in due course to produce the understandings necessary to bring about changes in harmony with the expectations of Indian people in the context of a Canadian society, itself an amalgam of diverse peoples, cultures and aspirations.

B. Educational Planning, Research and Decision-Making

1. Overview

446. Underlying the particular developments referred to in the preceeding section as well as the expository features of earlier chapters is a complex variety of approaches to planning, research and decision-making. What follows is a gathering of thoughts intended to bring into focus some trends and tendencies in the broad sweep of educational planning in Western Canada.

447 Governing Principles. In educational management, as in other areas of organized social enterprise, planning consists of the processes by which objectives are accomplished. In its simplest form it may involve a

single decision. In its more complex form it may require definition of goals or purposes, data-gathering, research, information analysis, consultation, evaluation of alternative courses of action, and ultimately the decisions which become the plans for achieving a desired end.

448. Educational planning takes place in a variety of settings. Teachers plan for their teaching. School principals plan for the total educational programs of their schools. School boards plan with respect to local educational policies and the means by which those policies are to be implemented. Likewise, provincial departments of education plan on the wider base of educational developments relevant to provincial objectives. Universities and other institutions plan their educational programs and the facilities required to accomplish their objectives.

449. Irrespective of the particular setting or level at which educational planning takes place, its basic nature is the same in that:

- it is a process related to decision-making and implementation of programs;
- it is an organized and thoughtful attempt to identify and analyze the best alternatives to achieve goals;
- its purpose is to assist the decision-maker to arrive at informed choices by identifying and describing alternatives, and by selecting and assembling information which is most useful in definition of alternatives;
- it involves the analysis of educational priorities in their social setting, of alternatives or options for achieving those priorities, of probable future conditions or contingencies, and of operational features of the educational system which may affect implementation of available alternatives;
- it consists of several elements: a policy analysis element, a management element to support the decision-maker, a coordinating element, an information element and a research element.

450. These generalizations are not intended to infer that all planning at all levels is conducted in a highly systematized manner. It is intended to reflect a general approach to planning, subject to the great variety of situations in which planning occurs and the nature of the involvement of the participants in the process. In Western Canada the process is strongly influenced by the importance attached to openness, to rationality and to increasing involvement of those affected by the results of planning. By reason of the manner in which the educational system is structured and administered, the decision-makers are never very far removed from those whose interests are affected by their policies and the processes leading to decisions. To speak of those involved in process is to speak of political parties and politicians, public employees, local governments and their officials, teachers, special interest groups and members of the public at large and in more recent times, the students themselves.

451. Closely related to matters of involvement is the movement toward decentralization and to what is referred to as participatory planning. Alberta's Worth Report asserts that "the reshaping of Alberta's educational system must seek to involve all of our citizens". Saskatchewan's Minister of Education noted that "governments provide leadership, but they can only lead where the public is prepared to go". [42] Although the tactic of 'going to the public' is one of long standing in the Western Region, it is now emerging with a new sense of timeliness and vigour. For example, the 1973 series of educational conferences in Saskatchewan were predicated on the stated belief that "educational policies at all levels - from provincial to local - should indicate an effective way of allocating resources to meet society's aspirations for its schools; that it should evolve through several cycles of scrutiny and modification; and that it should have the support of those concerned about education". [43] The regional conferences were supplemented by mini-conferences organized at the community level "so that general and local issues could be discussed in each community". Plans for all of the conferences were designed to include as participants parents, teachers, students, school boards, and the general public as individuals or organizations. The Worth Report emphasizes the involvement of a concerned society in shaping the vision of education by noting that "key roles await students and parents, elected officials and community workers, business people, trustees and taxpayers, teachers and administrators, and communications personnel".

452. Structural Context of Planning. The nature and content of educational planning in Western Canada are influenced very substantially by three important features of the structures of the educational system. First, the basic over-all control of education lies with provincial legislature(s). Second, a provincial legislature exercises its administrative role through its executive council or cabinet of which the minister of education is a member and through whom cabinet control of education is exercised. Third, provincial governments have by legislation, created a system of local governments with delegated powers to legislate and administer educational services at the community level. The division of powers and responsibilities between these two levels of government lies in the prerogative of provincial governments to amend from time to time as circumstances appear to warrant and as provincial objectives change. It follows therefore that planning at these two levels of government is in large part determined by the scope of authority and responsibility allocated to each at a given point in time.

453. Structural relationships of post-secondary institutions with provincial governments are somewhat different from those of the basic education system, the main characteristic of which is the scope of powers of governance allocated to the institutions themselves. Although the universities are created under provincial statutes which prescribe the basic framework of institutional organization, the main element of provincial control or influence on university planning has traditionally related to the level of financial support provided from government sources. However in more recent years, as a result in part of increasing dependence on government grants for university budgets and in part the growing public interest in university education, new structures have emerged. The most significant of these are the university grants commissions and the new government departments responsible for post-school or higher

education. These developments, referred to in Chapter II, have materially altered traditional patterns of university-government relationships, particularly in terms of planning processes. The college system, although having some features of governance similar to those of universities, has tended to have a more direct and closer relationship with governments.

454. Techniques of Planning. The historical record of educational development in Western Canada is replete with evidence of the priority attached by decision-makers to improvement of the quality of information available to them. This priority is reflected in the various strategies employed by governments in particular, but also by other groups in modified forms, in giving shape to their planning systems and procedures. Royal Commissions on education have a tradition as old as the provinces themselves as structures for policy formation. With their more contemporary counterparts, the Task Forces, these models provided ad hoc mechanisms of inquiry designed to respond to problems of major importance or of far-reaching consequences in terms of longer-term policy decisions. They were and are used by governments to express their concern for improvements in education, and more importantly to furnish ample and authoritative information. Commissions were seen to combine political wisdom, public opinion and the findings of research in their comment, advice and recommendations. Sometimes criticized on the grounds that they are costly, ponderous and time-consuming or that they may be used as substitutes for action in solving policy problems, they have been influential in matters of long range policy-making - aims and objectives of education, general organization and reorganization of the educational system or of some major component of it, education of teachers, curriculum development, to mention a few. By the nature of their terms of reference and mode of operation, commissions and task forces also afford both a platform and a learning experience for citizens, as interest groups or individuals, in the planning process.

455. Among recent royal commissions and task forces which have attracted a widespread interest both in its province and in the Western Region, is Alberta's Commission on Educational Planning: A Choice of Futures in 1972, and Saskatchewan's Royal Commission on University Organization and Structure in 1973. Likewise, Manitoba's Task Force on Post-Secondary Education in 1973 and British Columbia's Task Force on the Community College in 1974 exemplify the application of the task force approach to planning.

456. In recent years, other strategies and mechanisms have emerged as alternatives or as supplements to the more traditional approaches. An example of this is the "White Paper". In the sense of dialectical dialogue as a feature of planning and policy-making, the White Paper is used to expose issues and policy proposals for public discussion and debate with the object of securing a feed-back which may contribute to decision-making. Other values attributed to this technique such as increased public access to policy information from governments and the informality and relative ease of involvement by groups and individuals have tended to enhance this technique of participatory democracy.

457. Toward the same end of improving the quality of planning in-put within government itself, all four provinces have established internal structures for planning. For example, each education department has a branch or division

concerned with activities pertaining to planning. These are variously referred to as research or research and planning branches. While the specific mandate in individual cases ranges from information gathering to coordination of planning and research, some function influentially in the area of policy analysis and initiation of innovations. Development of research units in education departments was a gradual process which can be traced from the statistics branches, which all education departments have had for half a century, to the formal establishment of research branches, mainly in the 1960's, to the more recent branches or units with a research and planning mandate.

458. The rationale for developing research branches is found in the growing importance of the planning process itself as a feature of decision-making. If for no other reason, the magnitude and complexity of the educational enterprise dictated the necessity of access to the best information available as well as expertise in the analysis of policy proposals. In this capacity research branches served mainly in a supportive role to planning and policy-making in education departments. That supportive role has, however, expanded in the current context of education department operations to include involvement in a very large part of planning and policy-making, and even to involvement in implementation. Examples of this may be found in the variety of tasks assigned to research and planning branches. In recent years the provinces have investigated the feasibility of new administrative systems oriented to decision-making, cases in point being Management by Objectives and Planning-Programming-Budgeting System. Following a pilot project in PPBS a few years ago, Alberta has now authorized implementation of this program in 1974-75. Manitoba has conducted a demonstration project in PPBS in one school system and its Department of Colleges and Universities is in the process of adopting an MBO procedure. Other illustrations include analysis of computer applications for the development of comprehensive information systems and more sophisticated forecasting models.

459. Departmental research and planning units may be put at the disposal of commissions, task forces, Special Advisory or Minister's Committees. An example of the latter is found in Saskatchewan's 1973 series of regional conferences on 'Issues and Choices' in Education, when the Research, Planning and Development Branch undertook preparation of the design and the subsequent analysis and report of the project under direction of an advisory committee.

460. In addition to research and planning branches of education departments, several non-government research organizations are active in the provinces. In British Columbia, The Educational Research Institute, originally supported chiefly by The British Columbia School Trustees' Association, is now largely funded by the provincial government. The Research Centre of The Saskatchewan School Trustees' Association has commissioned a number of major studies or inquiries on subjects of concern and priority in terms of planning and policy-making.

461. The purposes, strategies and techniques referred to above with respect to governments have somewhat parallel applications at the level of school boards, educational institutions (mainly the universities) and non-government organizations.

2. Levels of Planning and Research

462. In the broad spectrum of activity of the educational enterprise ranging from the teacher in the school to the Cabinet priority committees of a provincial government, there are numerous focal points of planning and decision-making. Without in any way minimizing the importance attaching to the plans and decisions made at any of these points, the description which follows has three basic reference points, namely the school-community, the province and the Western Region.

463. To view the nature of educational planning in Western Canada in the current context is to see it in the perspective of relevant issues and developments of the past quarter century. It is to recall the problems of providing educational services to thousands of armed services personnel at the close of World War II, whose needs ranged from secondary education to vocational training to university education. In the 1950's the post-war babies came into the primary schools and elementary enrolments doubled in that decade. Planning of facilities and allocation of resources took on a new meaning and importance after 20 years of relative inactivity. By the 1960's expansionism spread to the secondary field and enrolments more than doubled in that decade. If planning with respect to expansion resulted from imperatives attributable to numbers of clients, amounts and kinds of facilities, provision of programs and teaching personnel, these imperatives were almost concurrently coupled with demands for improved programs, broader curricula, more courses, more specialized teachers - and a better assortment of facilities, gymnasia, laboratories, shops, libraries and instructional resources. While the 1970's witnessed a decline in enrolments, population shifts also brought the anomaly of vacant class space in existing locations and pressure for similar facilities in other locations.

464. The expansionism of the 1950's and 1960's in basic education was equally intense in the post-school sector, with the initial impact being felt in the universities, where full-time enrolments alone trebled between 1960 and 1970. New needs were met by expansion of the facilities of the older universities and by the creation of several new universities, again more than doubling their number. In terms of campus facilities in the Region, some two-thirds have been planned and built in the past 15 years. In the same period, most of the institutes of technology and a variety of vocational centres and colleges came into being, adding further to the massive capital investment for education which has taken place since 1950.

465. If planning throughout a major part of the post-war period were motivated by the imperatives of quantitative problems, its focus in the past decade has broadened to include other priorities. These priorities, characterized by growing emphasis on qualitative improvements, emerged in the form of new or revised concepts of educational content and process - individualization of learning experience (continuous progress plans, independent study, variety of learning situations), widening of the curricular program (vocational, environmental, consumer, drug, safety, second language), the teacher as an organizer of learning experience, utilization of educational technologies. These and other related aspects of programming reached deeply into the planning functions of principals and teachers, of school boards and their officials, of provincial

ministries of education, of universities and their faculties of education. This too was the era of major program extensions such as early childhood education, education of the handicapped, recurrent education, native education, already referred to in this Chapter. It was as well the period marked by significant reorganization of relationships of and among governments, school boards, universities, educational organizations and the public at large in shaping developments of education as a whole.

466. Educational planning and decision-making, infinitely more complex than even a generation ago, are seen increasingly as shared responsibilities, predicated on consultation, participation and even negotiation among those whose interests and educational mandates are involved or affected. This is apparent in the complex variety of committees, councils, task forces, and like mechanisms which have representation from government departments, school boards, the teaching profession, the universities and interested organizations or special interest groups, and at times, students.

467. In recent years, collective bargaining processes have added another dimension to planning relationships, for example, between school boards and their teaching staffs. Collective bargaining agreements, traditionally concerned with salaries, and other employee benefits, tend increasingly to include a variety of provisions concerned with conditions under which employee services will be performed. Where these conditions bear on matters such as teacher-pupil ratio, hours and scheduling of work, assignment of duties, relationships between employer and employee tend to become formalized and subject to technicalities of interpretation in issues of planning and decision-making. The extent to which the necessities of formal contracts will influence the attitudes of school boards and their teaching staffs in professional matters as these relate to planning remains to be seen. At the post-secondary level, a similar trend is developing in the university sector. Many faculty associations accustomed to informal bargaining with boards of governors with respect to salaries, are considering measures to establish themselves as formal bargaining units under provincial labor law. Very recently one such bargaining unit was certified. Another association withdrew its application for certification ostensibly to re-examine the implications of more formalized bargaining with respect to the professional role of its members in university planning.

Planning at the School-Community Level

468. For the present purpose the expression 'school-community' is interpreted to refer essentially to educational institutions and the educational community each serves. At the level of basic education the chief participants include the staffs and administrative officials of the schools, the school boards, parent organizations, local provincial supervisors and consultants (education, health, welfare, recreation) and frequently local municipal officials. In the post-secondary or post-school sector, the principal figures are the governing boards, administrative officials and academic committees of universities and colleges, together with various advisory committees, usually with representation from special interest groups and agencies, public and private, which have concerns relating to services for youth and adults.

469. By reason of the manner in which basic education evolved and developed, legislative prescriptions of powers and duties as well as custom and usage have tended to allocate to school boards functions pertaining to over-all policies of a local school system (program, administrative organization and management, personnel and finance) and to assign to the instructional staff of the schools the professional functions relating to the internal management of the school and the program authorized by the school board. Although school boards and teachers have always guarded what they regarded as their respective prerogatives with considerable zeal, lines of demarcation have become increasingly blurred. Sensing the importance of their decisions concerning over-all programming of the schools, boards of trustees have found it necessary to be better and more fully informed concerning the objectives, content and instructional features of the school. Likewise, teachers display increasing interest in the activities of school boards in managing the delivery system for educational services. These tendencies have the effect of drawing school boards and their teaching staffs together in some aspects of planning. A somewhat similar trend has appeared in the relationships of parents with school boards and with teachers.

470. Traditional methods of communication among school boards, teachers and parents, commonly one or two more or less formal meetings a year have given way to other strategies, some innovative and others as by-products of employer-employee relationships, and of the electoral system by which school trustees hold office. Experience with various types of school meetings, radio and television programs (including phone-in participation), 'open-house' events, and parent-teacher interviews, indicates that while it is relatively easy to disseminate educational information, it is manifestly much more difficult to produce effectual two-way communication and feed-back to the school boards and their staffs. Among less common strategies, the example of joint-sponsorship by the school boards and the teacher associations of an urban school district of a study and evaluation of the school system of a Western city is illustrative. A working committee of citizens, headed by a judge and without school board and teacher representation spent many months holding public meetings, receiving briefs and compiling public opinion on educational issues. Its report and recommendations are reported to have been very influential in subsequent planning by educational authorities in that community. Variations of this technique have been applied elsewhere with somewhat similar results. As a planning device, its strengths lie in its potential for widespread community involvement, in its emphasis on community initiatives, and in the educative experience of active participation by lay citizens. It does not, however, provide a vehicle for continuing participatory planning or for interaction with trustees and teachers.

471. In the belief that there is a reservoir of latent public interest in educational planning, ministries of education and local governments are devoting a good deal of attention to possible alternatives of a somewhat more structured character. Among these possibilities is the 'School Council', referred to in Alberta's Worth Report in 1972 as "a mature partnership among people which reflects not only responsiveness and influence, but essentially builds on respect, trust, the right of initiative, and a flexible formula for participation in policy decisions". Because provincial authorities in Western Canada are not convinced that school councils should be established by legislative fiat, current policies are presently directed toward promotion

of the principle and experimentation at the community level. Initiatives have been taken by a few school boards, resulting in the establishment of a number of parent or community councils, particularly in Alberta and Saskatchewan. Membership of school councils in generally seen to be widely representative of a school and its community, parents, teachers, administrators and students. The present tendency is to regard school councils as advisory in function. Future development of this concept or of some variation of it would appear to turn on the evolution of a mutually acceptable accommodation with respect to the rights of individual citizens within the system, to the authority and responsibilities of elected school boards, and to prerogatives of teachers in their professional capacities.

472. The role of research in educational planning at the school-community level tends to be informal and to be confined to activities of a survey and information gatheri ; type, activities which can be conducted by personnel whose main and usual preoccupations are in administrative or professional tasks. Exceptions to this are found in a few of the larger school systems which have established research and planning mechanisms or units.

473. At the post-school level the perception of 'school-community' is quite different from that of basic education. The community of a university may be regional or it may be province wide. Its sense of community is more oriented to its student body than to the public at large. Its system of governance, described in Chapter II, is not predicated on an elected board of management. It is not subject to direct supervision of governments, except in Alberta, and the large mass of its relationships with government typically involves an intermediary body such as a grants commission. Likewise, the college system, with exceptions, is administered by relatively independent boards. Other institutions such as institutes of technology are commonly administered by education departments.

474. Internal planning in a university is accomplished through a network of committees at the levels of departments, faculties and divisions. Academic plans are subject to Senate approval before being referred to the Board of Governors. Moreover, major program expansions and new programs are normally also subject to approval of grants commissions. An exception to the latter is found in Alberta where the functions of a grant commission are performed by the Department of Advanced Education. Grants commissions having in their control the allocation of government funds voted to university purposes can exercise an influence on program development. Their powers do not otherwise enable them to intervene in purely academic and administrative policies of a university. Albeit an oversimplificati n of the complex nature of university planning processes, it is in essence a process which at various points involves students, academic staff, administrative heads and staff, the alumni and indirectly the public at large through various interest groups, and finally the membership of the Board of Governors with whom the ultimate power of decision lies.

475. In addition to ongoing planning, universities apply other mechanisms such as task forces and occasionally commissions to examine into issues of major import. These devices have been used to obtain information concerning the views and attitudes of the public toward university education, to inquire into and recommend with respect to university governance, to investigate alternatives and feasibility with respect to implementation of major new programs.

476. Institutes of technology which are administered by education departments rely on various types of advisory committees for purposes of contact with the interested public, other institutions and other government departments. Because they are in essence government operations, they come within the scope of planning processes of the department to which they are attached with respect to over-all program development, budget appropriations, and personnel. The principal institutional functionary in this connection is the head of the institution in association with his senior program and administrative officials.

477. The college system, in the main administered by semi-public boards of management, does not have the highly structured organization characteristic of universities. Boards of management function much in the manner of boards of governors of universities with respect to program policies, general administration, personnel and finance. Academic planning falls to the academic staff, through various committees under the direction of the head of an institution. Because the colleges tend to have a regional orientation, planners and policy-makers place a good deal of emphasis on two-way communication of information and opinion with the population in the area mainly served in each case.

Planning at the Provincial Level

478. If educational planning and decision-making at the school-community level are basically oriented to goals, issues and problems pertinent to the interests of the educational communities served by institutions such as schools, colleges and universities, these processes are at the same time a part of the fabric of planning and policies on the wider base of a province. For purposes of a perspective in this connection, it is useful to recall that provincial governments are sovereign and responsible in matters of education, that the public sector of education at all levels is based on provincial legislation and heavily dependent on public funds. It follows that in the discharge of its mandate, a provincial government defines educational goals and priorities for a province as a whole and expresses these in terms of provincial policies and programs. It follows also that provincial authorities, local governments and educational institutions share a common responsibility to respond to the aspirations of the people of a province and to provide leadership toward that end in their respective spheres.

479. Some reference has already been made to university grants commissions in the context of their administrative role as intermediaries between the universities and provincial governments. However, by reason of their mandates, they also have a planning function. The Manitoba Universities Grants Commission is empowered to allocate funds and approve programs. The corresponding body in Saskatchewan has no direct mandate to approve programs but is empowered to distribute funds to the universities. British Columbia's new Universities Council, established under legislative enactment in 1974, replaces the former grants commission and has wide powers in matters of finance and university development. Until 1973, Alberta had two commissions, one for universities and one for colleges, each responsible for distributing provincial funds to the institutions concerned. These functions are now in the purview of the Department of Advanced Education.

In the perspective of planning, grants commissions have necessarily to be concerned with decisions which have program implications. Planning is inevitably bound up with considerations of the amount of funds available for allocation, evaluation of the budgetary proposals of the institutions, rationalization of programs among institutions, and new priorities, and in addition, with their interpretation of provincial goals for post - secondary education.

480. Representing, as they are presumed to do, the interests of both the public and the institutions themselves, commissions have also to recognize that post-secondary education is perceived as an integral part of the educational enterprise, and therefore subject to many of the same societal forces and influences of change and adaptation as other sectors of the educational system. Not the least of these circumstances is the role of post-secondary education as an instrument of the social and economic policies of governments. It is for them to plan in terms of harmonization of public and institutional aspirations at a period in educational development characterized by a strong desire to forge a 'system' of post-secondary education out of existing institutions, some with long traditions of apparent autonomy and independence.

481. Although government planning for education at the provincial level has been, and still is, focused primarily in an education ministry, some provincial governments have in recent years broadened the planning base to include other cabinet ministers. To illustrate, the provincial cabinet of Manitoba has a Planning and Priorities Committee and a Committee on Health, Education and Social Policy. In Saskatchewan, the Executive Council (cabinet), with its planning and research unit, has within it a group concerned with Health, Education, and Welfare. Alberta has a Priorities Committee of Cabinet and a Cabinet Education Committee (the two education ministers and the minister of manpower and labour). Although the roles of these cabinet committees vary somewhat in detail, they give a central focus to planning in terms of over-all objectives, of conceptualization of problems and of the nature of planning and decision-making processes in dealing with problems.

482. In summary, planning within ministries of education is broader in scope and more general in nature than local planning. Planning at this level is concerned with the general organization of schools in a province from kindergarten to post-secondary, with legislation relating to establishing and operation of institutions and to educational governance, with defining the broad goals of education and development of programs to attain those goals, and with provision of the financial base for operation of the educational system as a whole. The planning processes reflect not only the decision-making responsibility of a province inherent in its constitutional mandate, but also recognition of a long tradition of shared authority with local governments and institutions in the development and delivery of services. Notwithstanding a continuing strong public commitment to a grassroots approach to planning, the growing complexities of adapting the educational system as an instrument of social and economic development in modern society have necessitated introduction of more sophisticated planning techniques, particularly in the area of research, with a much greater emphasis on policy analysis and more elaborate information systems.

Planning at the Interprovincial Level

483. Constitutional provisions make no provision for formal structures or arrangements by which provinces may engage in interprovincial activities. Notwithstanding constitutional silence, the provinces have made legislative provisions, enabling education ministries to enter into agreements with one or more other governments for purposes of mutual advantage. Interprovincial activity therefore lies in provincial initiatives, informal structures and agreements or contracts.

484. Until the 1940's interprovincial contacts were limited and sporadic, and usually involved only departmental officials interested in seeking or exchanging information which might be useful for planning purposes. The early informal contacts among education ministers following World War II gradually became more frequent but until the late 1950's were entirely unstructured. In the early 1960's the Standing Committee of Ministers of Education for Canada took form with the stated purpose of meeting once each year solely for informal discussion of educational matters of mutual interest. From this beginning the Council of Ministers of Education, Canada, emerged in 1967. The motivations which drew ministers together at the national level were soon to result in a similar pattern of communication among ministers at the regional level in Western Canada.

485. In the meantime, from the mid-1940's, with ministerial approval several groups of officials organized interprovincial meetings, first for exchange of information and then gradually to reach understandings in matters which were of common interest to the provinces in their planning processes. As an illustration, provincial officials joined forces in an effort to facilitate interprovincial movement of students by proposing a common student transfer card or cumulative record form and by producing a document to assist educational authorities in evaluation of student credits on transfer from one province to another. Other matters of consideration in like manner included such as Canadian content in social studies courses, selection of school textbooks, school library services, educational broadcasting, to cite a few. Among the groups which have met regularly for many years are the directors of curricula, directors of supervisory services, and officials responsible for educational broadcasting. The activities of the latter group were influential in the decision of the four Western Provinces to enter in an agreement for joint production of broadcast material and for interprovincial exchange of provincial material.

486. Until 1964, interprovincial communication among post-secondary institutions was informal and mainly through an annual meeting of university presidents. In that year the First Ministers of the three prairie provinces formed the Prairie Economic Council, and as its working arm in education established the Interprovincial Committee on University Rationalization, later to be replaced by the Western Canadian Post-Secondary Education Coordinating Committee. Apart from the extension of this committee to include British Columbia, the change to the present committee format is significant on two important counts, first that its terms of reference were broadened to embrace the whole field of post-secondary education, and second, that its members are ministers and not solely officials as was the case with its predecessor. Although generally concerned with all aspects

of higher and further education, the present committee is primarily concerned with coordination of services, cost implications of federal research programs, advance information concerning new program proposals, and possible significant cooperative ventures. An example of the latter is found in the recent agreement between Alberta and Saskatchewan to share in the operation of a regional college at a border point to service the program needs of both provinces in an area which straddles both provinces at that point.

487. Among the very few precedents to this type of development, referred to in Chapter II, is the Western College of Veterinary Medicine at the University of Saskatchewan. Established in 1963, following studies involving provincial ministries of agriculture and senior university officials of the Western Provinces, this College was purposed to serve the needs of the four provinces for veterinarians. Given current trends in interprovincial planning, future similar developments to rationalize programs and program facilities in their mutual interests, are more than likely to be the result of planning by the Post-Secondary Education Coordinating Committee and under formal agreements among the ministers concerned.

3. Trends and Prospects

488. Of the various tendencies discernable on the present scene of educational planning, five seem clearly to emerge as trends: an increasing sophistication of planning techniques; an increasing reliance on planning agencies and a diminishing use of ad hoc approaches; a movement from research to planning in terms of policy development and analysis; increasing interest and activity in regional planning; and a sharpening focus on local involvement in planning.

489. Planning has come to be recognized as an increasingly complex process requiring precise definition of purposes to be accomplished, competent research to assemble data requirements for decision-making, involvement of groups and individuals likely to be affected by a plan or policy, careful and insightful assessment of alternative plans or policies, and last but not least, evaluation of plans and policies on implementation.

490. Second, although policy-makers are prepared to employ various methods for securing information and advice, it is evident that governments are convinced of the need to have research and planning capabilities as an in-house feature of the planning and decision-making processes. The prospect is that this trend, already strong in education departments, will gain strength at the level of local government, including school boards and other governing boards of institutions. The further evolution of this trend will tend to eliminate older practices of ad hoc decision-making and enhance the rationality of planning.

491. Third, the urgencies of quantitative expansion of the 1950's and 1960's have abated in the present decade, and the major focus of planning is rapidly shifting to the qualitative aspects of educational development. Qualitative concerns will go beyond the more immediate issues of strengths and weaknesses of existing educational services to include consideration of

the fitness of education in terms of the expectations, hopes and aspirations of people. This infers a tendency to greater decentralization and wider participation in the processes of planning at the several points of decision-making.

492. The emergence of cost-benefit analysis in budgeting, program evaluation and policy reviews as features of planning seem likely to contribute to a more definitive approach to evaluation as a component of planning. In at least one province it is established policy that when a new government program has been implemented it is subject to an external review after two or three years. The use of pilot projects is an increasingly common practice with the same object in view, namely to ascertain whether or not the program is to be continued in its existing form and to identify modifications which may be necessary.

493. Fourth, the potential of regional planning has been enhanced by the recent trend toward direct involvement of education ministers in the process. Interprovincial consultation and cooperation at the level of officials tends to focus on provincial policies which have already been established, and on ways and means for cooperative action within those policies. On the other hand, ministers have, by reason of their role in the over-all context of government policy-making, a more particular concern for new directions in education, for identification of problems and issues common to them or which have regional connotations. Moreover, they are in a position without delay to initiate activity - research or investigation - which may be necessary to a subsequent decision in a matter of common interest and possible action on a regional basis or under bilateral agreements.

494. Fifth, the search for new or improved strategies for meaningful consultation and involvement of the public is likely to be intensified. Planning in education is coming to be regarded as "systems thinking", not confined solely to educationists. This trend toward comprehensive planning is evident in provincial government planning, more especially in the social services fields. To earlier references to interdepartmental committees of health, education and welfare in connection with services to the handicapped, may be added similar committees of education, agriculture and natural resources departments for planning environmental education and conservation.

495. In the retrospect of the evolution of educational planning as a feature of change, growth and development of education in Western Canada, trends which have emerged in the past decade indicate an increasing emphasis on longer-range planning, a future-orientation, and on greater sophistication of the planning processes. The basic motivation of educational planning, traditionally regarded in general terms of 'improving' educational services, has clearly become one which comprehends the needs and expectations of individuals and of society in the future as well as in the present. The more specific objectives of planning which have been defined over the years, those relating to orderly growth and development of the educational system, to harmonization of educational development with economic and social goals, to operational efficiency of the system, and to qualitative improvements, remain equally valid for the future. However if the educational system is itself perceived by society as one of the instruments by which it charts its future, educational planning assumes a

new dimension as a contributor to the shape of the future, and the educational system becomes a reflection of planning both for and of the future. An obvious inference is the very great importance to be attached to planning processes, not only in a technical sense, but especially in the sense of meaningful involvement and participation of people, of society, in decision-making. Implicit in the commitment to decentralization in educational affairs is the necessity of harnessing the increasingly sophisticated technology of planning in harmony with the value systems by which society defines its goals and purposes. The traditional closeness of Western Canadians to their institutions, their 'grass-roots' approach to problems and issues, seem likely to ensure that scientific management processes, whether in planning, decision-making or administration, will continue to be their servant and not their master.

GLOSSARY

1. Adult - A person of or over the age of 18 years.

2. Consolidation - An amalgamation of a number of small school districts or of small attendance areas in a larger unit of administration for purposes relating to provision of educational services.

3. Course - Unit of study related to a particular discipline, the successful completion of which may constitute one or more credits toward a certificate of standing, diploma or degree.

4. Course Credit - The value attributed to a specific course, usually expressed in numerical terms or time values. Requirements for completion of secondary education and for diplomas and degrees usually prescribe the number of course credits to be accumulated for those purposes.

5. Course of Studies - An outline of courses prescribed or authorized by a minister of education for a school grade or division. Sometimes referred to as a 'program of studies'.

6. Curriculum Guide - An elaboration of a course of studies with respect to subject matter, teaching techniques, learning materials, etc.

7. Department of Education - The division or section of a provincial government responsible for educational affairs, presided over by a member of the government (cabinet), assisted by an appointed deputy minister and other administrative and staff officers.

8. Elementary Education - The first six years (seven in British Columbia) of study next following the kindergarten year for the age group six to twelve or thirteen years in the elementary schools.

9. Elementary School - A school which ordinarily provides elementary education to students enrolled in Grades I through VII in British Columbia, Grades I through VI in Alberta, Divisions I and II (each Division comprising three years) in Saskatchewan, and Grades I through VIII in Manitoba. Kindergarten education is typically provided in the elementary schools.

10. Full-Time Student - A student who is registered in an educational institution in a program of studies defined by the institution to constitute the equivalent of not less than 70 to 80 percent of the studies usually required in one period or session of study, which may be a year, term or semester.

11. Grade - A horizontal division in the organization of elementary - secondary schools for purposes of classification of the educational status of students and to identify the composition of the studies required at a given level, normally to be completed in one year. A student in Grade VI is in the sixth year of the twelve-year program of the elementary-secondary schools.

12. High School - A school which ordinarily provides instruction at the secondary level, the eleventh and twelfth years (Grades XI and XII) in British Columbia, the tenth, eleventh and twelfth (Grades X, XI and XII) in Alberta and Saskatchewan, and the ninth to twelfth (Grades IX through XII) in Manitoba. High schools are also variously identified as secondary schools, collegiates, composite schools, comprehensive high schools.

13. Intermediate Education - The three years of study next following the elementary years for the age group twelve or thirteen to fifteen or sixteen, Grades VIII through X in British Columbia, Grades VII through IX in Alberta, Saskatchewan and Manitoba, provided in Junior-Secondary Schools in British Columbia, Junior High Schools in Alberta, and Division III Schools in Saskatchewan. In Manitoba these grades are provided for in junior high schools in major centres and elsewhere in elementary and high schools.

14. Minister of Education - A member of the provincial legislative assembly who has been appointed a minister of the cabinet of the provincial government with responsibilities pertaining to educational affairs of the province. When the expression 'Ministry of Education' is used, it refers in Western Canada to the Minister and his Department.

15. Private School - A school owned, financed and operated by a private, voluntary or denominational group or agency.

16. Part-Time Student - A student registered in an educational institution for one or more courses, but fewer than the equivalent of the 70 to 80 percent of the courses required for full-time status.

17. Post-School Education - Education which follows exit from basic education; comprises post-secondary education (for which secondary school graduation or the equivalent is a prerequisite requirement) and various other educational programs for persons, normally adults, who may or may not have formally completed secondary education.

18. Public School - Any school established under provincial law, administered by a public authority, and eligible to receive financial support from a provincial government.

19. Regulations - Extension or elaboration of statutes (of a province) or by-laws (of a school board) pertaining to administrative requirements or procedures prescribed or authorized by law.

20. School Board - The local education authority of a school district, consisting of three to fifteen or more persons elected by the residents eligible to vote in a school district, with powers and duties prescribed by provincial law to administer educational services in the area of its jurisdiction. A school board, also referred to as a board of school trustees, may have appellations such as board of education, divisional board, school unit board, county council, depending upon the type of local administrative unit.

21. School District - A geographical area established under provincial law for the administration of educational services by a local education authority. Other designations of the unit (area) of local school administration include the school division, larger school unit and county.

22. School Grants - Payments by provincial governments to school boards in support of educational services and administration at the local government level. Amounts of grants are usually determined under various types of formulae which may be specific as to purpose, such as grants for operating, capital, equipment, transportation, and special purposes.

23. School Principal - A teacher who has been designated the head teacher of the staff of a school, whose functions are in general prescribed in provincial legislation and whose duties as administrative head of a school are assigned by the school board.

24. Secondary Education - The three years of study (two in British Columbia) following completion of intermediate education. Programs are provided in high schools, composite and comprehensive schools, technical high schools and senior secondary schools (British Columbia).

25. Separate School - A public school which provides educational services to a religious minority, Roman Catholic or Protestant.

26. Superintendent of Schools - An official of a department of education who has been assigned professional and administrative duties at the local school system level, or, the senior official employed by a school board as its chief executive and educational officer.

27. Teacher's Certificate - An official statement, issued by a minister of education, which certifies with respect to the professional qualifications of a teacher and which constitutes a licence to teach in the province in which it is issued, subject in some cases to endorsement as to level in the school system.

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