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ABSTRACT

These papers present the major issues and directions in five areas: (1) the socioeconomic and demographic environment (demography, the economies and labor forces of Canada and of Ontario, and the international and social environments); (2) education (K-12, postsecondary, adult, and the educational media resource market); (3) the broadcast environment (federal policy, Canadian Radio-Television and Telecommunications Commission, economic dimensions of the broadcasting system, the Canadian production and cable industries, audiences, educational broadcasting in Canada, public and commercial broadcasting in the United States, and the international environment); (4) the government environment (Canada, the Meech Lake Accord, and Ontario); and (5) the technological environment (cable, satellites, high definition television, stereo, VCRs, digital, videotex, and interactive television). The papers are a compilation of the opinions and understandings of those who work in, plan for, and study in each of the various fields. Sources are footnoted in each paper. The discussion in some of the papers exhibits the contradiction and lack of consensus evident in compiling the materials. The papers, therefore, do not provide answers but reflect the uncertainty of the environments in which TVOntario operates. Designed to stimulate discussion relevant to the future of TVOntario, each paper begins with a summary of the developments judged to have the most significance for the next few years. The remainder of the paper then provides details on these and other issues. (GL)

WORKING PAPERS OF PLANNING AND DEVELOPMENT RESEARCH

88-5

EXTERNAL ENVIRONMENT PAPERS

Planning and Development Research

April 1988

TVOntario

Planning and Development Research
Planification et recherche en développement

Working Paper 88-5

EXTERNAL ENVIRONMENT PAPERS

Prepared by

Planning and Development Research

April 1988

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EXTERNAL ENVIRONMENT PAPERS

Introduction

This series of external environment papers presents the major issues and directions in education, broadcasting, demographics, the economy, government policy and programs, and technology. The difficulty of reflecting multiple environments is evident in the limitations of these papers. They are not comprehensive or unbiased and only time can tell their significance or correctness. However, they are a compilation of the opinion and understandings of those who work in, plan for, and study in each of the various fields. All sources are footnoted in each paper.

The discussion in some of the papers present the contradiction and lack of consensus found in compiling the materials. Therefore, the papers do not provide answers but reflect the uncertainty of the environments in which TVOntario operates.

These papers were designed to stimulate discussion relevant to the future of TVOntario. Each one begins with a summary of the developments judged to have the most significance for TVOntario in the next few years. The remainder of each paper provides detail on these and other issues. There may be agreement or disagreement with the inclusion and exclusion of issues, on the interpretation or weight given them. As a step in planning, it is important that this consideration takes place.

Planning and Development Research has compiled these papers. While the opinions expressed are not necessarily those of the authors, we take responsibility for the selection of the content.

Judith Tobin
Manager
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April 1988

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DOCUMENTS SUR LE MILIEU EXTÉRIEUR

Introduction

Cette série de documents sur le milieu extérieur décrit les principaux problèmes et orientations dans les domaines de l'éducation, la radiodiffusion, la démographie, l'économie, la politique et les programmes gouvernementaux ainsi que la technologie. Bien entendu, il est difficile de présenter ces environnements multiples dans les limites de ces documents. Ils sont partiels et subjectifs, et seul le temps jugera leur portée et leur exactitude. Ils représentent, cependant, une compilation des opinions et des points de vue de ceux qui travaillent et étudient dans chacun de ces domaines et qui les planifient. Toutes les sources sont indiquées dans les notes en bas de page.

La discussion, qui apparaît dans certains documents, présente la contradiction et le manque de consensus dont a fait l'objet la compilation de la documentation. Les documents ne donnent donc pas de réponses, mais reflètent l'incertitude des milieux dans lesquels TVOntario fonctionne.

Ces documents ont été conçus pour stimuler la discussion sur l'avenir de TVOntario. Chacun commence avec un résumé des facteurs qui ont été jugés comme ayant le plus d'impact sur TVO au cours des prochaines années. Le reste de chaque document offre des détails sur ces problèmes ainsi que quelques autres. Il peut y avoir accord ou désaccord sur l'inclusion et l'exclusion de certaines questions et sur l'interprétation ou l'importance qu'on leur a attribuée. Dans un premier temps, il est important de laisser la porte ouverte à ces considérations.

Le service de planification et recherche en développement a compilé ces documents. Même si les opinions exprimées ne sont pas nécessairement celles des auteurs, nous assumons la responsabilité de la sélection du contenu.

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SOCIOECONOMIC AND DEMOGRAPHIC ENVIRONMENT

Major Challenges for TVOntario

An ethnically mixed population of which many are under the age of 44 and an aging population of French and English Ontarians resulting in populations with different educational needs and expectations for programming.

Educational needs around industry restructuring, vocational training, re-training, and literacy.

Educational needs around health and medical issues, personal and family life, environmental pollution, and deterioration of ethics and social values in an increasingly individualistic and multicultural milieu.

A possible slowing of the economy resulting in lower demand for services and a possible rise in unemployment resulting in economic and social stresses.

DEMOGRAPHY

- According to Statistics Canada projections, the Canadian population will be 28.5 million people in 2001. The 1981 population of 24.3 million included 50.5% under 30 and 49.5% over 30 years of age. By 2001, these ratios will change dramatically to 38.4% under 30 and 61.6% over 30.

- Ontario's population is increasingly multicultural and cross-cultural in character. Ontario will continue to receive approximately half of the number of immigrants to Canada with more than 60% coming from Asia, the West Indies, and other developing countries. (19)

- "Multiculturalism" leads to multiple interpretations as it can refer to racial/ethnic diversity, the cultural heritage of a multitude of nations, or the cultural present of Ontario residents. It is also an issue of religious differences, racial discrimination, and a "third reality" in the English/French character of Ontario. Multiculturalism is also more of an urban reality than

a rural or northern one. The Ontario population includes increasing numbers of immigrants, but the multicultural nature of the province is a far broader issue.

- In 1987, the net migration to Ontario was 110,000 people. The largest number emigrating to Ontario came from the Caribbean and Guyana (13,326). Other countries of origin included Portugal (6,652); Hong Kong (6,174); Italy (6,008); the United Kingdom (5,452); India (5,000); Africa (4,482); Poland (4,556); the U.S.A. (3,864); Central America (3,300); and Vietnam (2,652). Those 22-44 years of age were the largest age group at 23,033. (20)

- The federal government is considering allowing growth of immigration to a level of 175,000 per year by 1990. (19) However, it is possible that publicity surrounding illegal entry of immigrants and confusion in immigration policies may lead to lesser immigration.

ONTARIO POPULATION (20)
1986 TO 1991
(in thousands)

Age	1986 Census	1991 Projection (26)	Percent Change
0-4	631	666	+5.5
5-14	1,238	1,284	+3.7
15-24	1,504	1,375	-8.6
25-34	1,583	1,712	+8.1
35-44	1,317	1,506	+14.3
45-54	950	1,070	+12.6
55-64	886	895	+1.0
65-74	603	700	+16.1
75+	390	482	+23.6
Total	9,102	9,689	+6.4

- Almost one Ontarian in five (19.1%) reported a mother tongue other than English or French in 1986. The largest non-official or Heritage mother tongue language groupings in Ontario, after English and French, are in descending order: Italian (289,779); German (150,150); Chinese (114,965); Portuguese (108,050); Polish (73,000); Dutch (67,405); Ukrainian (60,960); Greek (58,455); Hungarian (38,800); Spanish (38,190); Filipino/Tagalag (20,380); Arabic (18,440); Punjabi (17,520); Vietnamese (14,520). (20)

- Ontario's francophone population, according to the 1986 Census, was 543,825. Of this number, 424,720 gave French as their only mother tongue (i.e., language first learned and still understood); 104,550 gave French and English as their mother tongues; 3,540 gave French and a non-official language as their mother tongues; and 11,015 gave French, English, and a non-official language as their mother tongues. (20)

FRENCH MOTHER TONGUE (FMT) INDIVIDUALS
1986 Census

Region*	Number	FMT as Percent of Region	Percent of All Ontario FMT Population
East	211,560	16.6	38.9
Northeast	157,685	27.8	29.0
Central	124,240	2.2	22.8
Southwest	39,045	3.0	7.2
Northwest	11,285	4.9	2.1
Ontario	543,825	6.0	100.0

* Descriptions of regions are available from Planning and Development Research.

- The 1986 Census indicates that Ontario still has the highest aboriginal people's population in Canada. Of aboriginal peoples, 2,285 considered themselves Inuit, 14,565 Metis, and 99,555 North American Indian (status and non-status) for a total of 116,405. British Columbia has the second highest number of aboriginal peoples. A Department of Indian Affairs study in 1985 projected a trend toward living on reserves by status North American Indians. By 1996, about 90,000 would be living in large bands (1,000-3,000 people) on reserves. (11)

- The 1986 Census did not ask about religious affiliation of Canadians. The most recent figures are from the General Social Survey conducted by Statistics Canada in late 1985. These indicate a shift in the historical distribution of the Canadian population between Protestant and Catholic. Population affiliated with the Roman Catholic Church began to increase from 41% to approximately 50%, while the number of persons affiliated with the mainline Protestant denominations over the same period fell from 54% to less than 40%. From 1981 to 1985, persons reporting "other" religions increased to approximately 5%. This includes the smaller

Protestant denominations (the largest of these being the Pentecostal Church) and Catholics other than Roman Catholics.

- The 1981 Census identified several religious groups whose size had been stable for several decades accounting for a total of one million Canadians in 1981. These included Eastern Orthodox denominations, Eastern non-Christian religions, and Judaism. The largest of the Eastern non-Christian religions were Islam, Hinduism, Sikhism, and Buddhism.

- With the increase of immigrants from the Far East since 1981, these numbers have risen. There are other groups which cannot be classified into conventional categories, including Native Indian and Inuit religions. The number of followers of cult or sect religions is small.

- There is considerable variation in the religious make-up of the provinces. Ontario has the highest percentage of persons affiliated with religions other than Catholic or Protestant. Religious affiliation still reflects important underlying social differences among Canadians. (10)

THE ECONOMY--CANADA

- Economic prospects for Canada in the short term, as seen by the federal Department of Finance, are for real output growth to slow in the remainder of 1988 and to rebound after mid-1989, led by business, non-residential investment, and stronger consumption The unemployment rate is expected to continue to decline from its February 1988 level of 7.8%. The inflation rate is forecast to average close to 4% in 1988 and 1989. Conservative Government policies include more responsive approaches to regional development extended; support is being provided to farmers; energy accords with the energy producing provinces. (1)

- Canada's medium-term (1990-1993) economic prospects will be influenced by domestic events but also by policy actions in the large industrial nations to deal with trade and fiscal imbalances.

- Both the Canada/U.S. Free Trade Agreement and tax reform are expected by the federal government to strengthen growth prospects in the medium term, the former by lowering consumer prices, and the latter by increasing incentives to work and save and invest. (1) Growth projection has recently been revised because of continued volatility in the equity markets and slowdown in the U.S. economy, and is expected to average 2.6% for the remainder of 1988-89 9) and 3.2% from 1990 to 1993, allowing the unemployment rate to fall below 7%. (2)

- The stock market crash of 19 October 1987 will cause a relatively minor reduction in gross domestic production for 1988 of about 0.6 percentage points. (3) Because of the lower consumer debt, higher savings, and a

boost to personal income from tax reform, consumers will have more breathing room. (2)

- The federal government is committed to stimulating the private sector through deregulation of the energy and transportation sectors, opening of financial markets to global investment and greater competition in financial services. Changes in the federal sales tax are expected. (1)

- The average annual rate of increase in government spending has been cut to 3.5%. The deficit for fiscal 1988 will be cut to $29.3 billion from $38 billion in 1984. Beginning in 1989-90, there will be a reduction in non-statutory spending by government departments of $300 million. (4)

- This attempt to reduce expenditures is part of the federal government's goal to reduce the national debt. In 1988, public debt charges will be more than $29 billion--an amount equal to the deficit, or almost 25% of total government spending. A reduction in public debt charges would increase the resources available for more productive spending on programs. (1) Moves toward privatization, such as with Air Canada, will likely continue.

THE ECONOMY--ONTARIO

- Despite uncertainties remaining as a result of the market crash and subsequent reactions, the forecast of the Ministry of Treasury and Economics is that the current expansion of the Ontario economy will continue, although more slowly from 1988 to 1991. For the medium term (1989-91), the Ontario forecast is based on some, but not major, slowdown in the U.S. economy, on improvement in the U.S. budgetary and trade deficits, sustained global expansion, a 5% rate of inflation, and a Canadian dollar below 80 cents U.S. On this base, real growth is expected to be an annual average of 2.5%, job creation about 87,000 jobs per year, and unemployment in 1991 to be 5.6%. Interest rates will peak in 1989 and soften in 1990-91. This forecast assumes implementation of Stage A of the federal tax reform as a stimulus toward economic growth through the effect of lower personal income taxes. Business spending and exports will play a leading role in economic growth, supplanting housing and consumer spending. (7)

- The Ontario Government expected that in 1987-88, public debt interest costs will fall to 11.7% of budgetary revenues from 12.4% in 1985-86. This is an indication that the government is attempting to decrease its overall spending and decrease its deficit. (7)

- The impact on Ontario of the Canada/U.S. Trade Agreement through 1991 will likely be small because of low tariff reductions throughout the period. There will be dislocation in some industries, especially food processing and household appliances. Some consumer prices will be lower.

However, from 1991 there will be problems for Ontario under free trade. The Ontario government is concerned that there may not be a real enhancement of "security of access" to the U.S. market for Ontario and Canada as the agreement is presently written. Impact on investment in the auto parts sector, which is very important to Ontario, remains uncertain. (7)

LABOUR FORCE--CANADA

- Highlights from the federal budget tabled in February 1988 indicated that 1,150,000 jobs have been created since 1985. Employment gains in 1987 occurred primarily in commercial services, construction, and manufacturing. (3)

- Employment growth in the manufacturing sector is forecast to increase 4.5% in 1988 and 2.6% in 1989. Service sector employment will also be strong with an average annual growth of 3% through 1989. Employment gains will be mainly by those age 25 and above, with youth employment declining due to decreasing source population. For those over the age of 25, women will continue to find jobs at a faster rate than men, with jobs for women increasing by 4.4% in 1988 and 3.6% in 1989. (5)

- By 1995, 57% of women age 15 and over will be participating in the labour force. This is related to the growth of service-sector occupations, many of which are dominated by women workers. The Canadian service sector is expected to generate almost 1.9 million new jobs by 1995, or three-quarters of all new jobs. (17) The service sector in 1988 employs nine million Canadians representing 69% of employment. Most job losses continue to be in blue collar occupations. Persistent unemployment in traditional industries is leading to a larger proportion of the workforce now working in non-union environments. Some unions have attempted breakthroughs in retail stores and banking with varied success. Some unions are amalgamating in order to remain viable. Although wages and benefits remain key concerns, programs for job re-training and upgrading will likely emerge as concerns in the future.

- By 1996, women will have 49.5% of all paid jobs in Canada. (18)

- Between 1986-1995, the 5-14 age group will grow slightly but the 15-19 age group will continue to shrink. This will mean fewer young people entering the labour force. As older workers leave and the labour force shrinks, there may be increased need to upgrade and re-train existing employees. Reflecting age changes in the population, jobs should increase in the cultural, recreation and hospitality service industries, as well as health and lifestyle occupations. (6)

- It will be necessary for Canada to successfully develop new industries and international markets as global economic competition increases. The

electronics industry and the biotechnology industry are seen as having potential for export. (6)

- Entrepreneurship is being stressed by all levels of governments for individuals as well as businesses.

LABOUR FORCE--ONTARIO

- Employment from 1988-1991 will gain at an average annual rate of 1.8% and the labour force at 1.7%. (7)

- Interprovincial migration is expected to moderate as growth in the Canadian economy becomes more regionally balanced but international migration is expected to be higher and should add over 30,000 persons to the Ontario labour force in 1988. Women's share of the labour force will rise to about 45% in 1988. Employment growth will be down 1% from 1987 and new jobs will go from 146,000 in 1987 to 105,000 in 1988. Of 139,000 new jobs created in the first 10 months of 1987, 73,000 were managerial and professional, and 38,000 were service, sales, and clerical. (7)

- In Ontario, the service sector (i.e., all economic activity other than primary industries and manufacturing) accounts for 73% of employment and an estimated 80% of all new jobs that will be created by 1996. Aside from public administration, the major industry groupings within the service sector include retail trade (employing 13.9% of service sector workers in 1985); health and welfare (9.4%); education (8.9%); wholesale trade (6.5%); accommodation and food (6.4%); business services (6.2%); and transportation (4.4%). Blue collar workers now represent a smaller proportion of the workforce than 10 years ago (just over four million people, or one-third of the Canadian workforce). (12)

- It is estimated that by 1995, 20% of work will be done at home increasing the load on communications. (13)

- In spite of the strength of Ontario's labour market, there is a significant number of long-term unemployed. In the first 10 months of 1987, workers who were unemployed for more than six months represented 17.2% of total unemployment compared to 13.8% in 1980. (7)

INTERNATIONAL ENVIRONMENT

As Canada is highly dependent on international trade, world economic issues have particular consequence.

- World economic growth is expected to decelerate compared with recent years as a result of slowdown in the economies of the U.S., Japan, and West Germany which together account for 60% of the output of the OECD countries. Real growth of the global economy will be 3% in 1988. OECD economies are unlikely to grow significantly. Asian developing countries are expected to grow by close to 6% in 1988 and China by 9.8% (down from 12% in 1986-87). African economies are expected to grow by 3% in 1988 and Latin American economies by 4%. A global recession is not forecast in 1988. The assumption is that Japan and West Germany will loosen their fiscal policies sufficiently so that this will offset moderating growth in the U.S. and prevent a collapse of the U.S. dollar. There is an increasing urgency for governments to discuss policy coordination to ensure a fundamentally consistent U.S. dollar exchange rate based on the recognition of an increased interdependence of the world economy. A global economic slowdown will affect the prices of Canada's tradeable commodities and Canadian interest rates. (21)

- According to the International Monetary Fund, the volume of global trade in 1988 will pick up by 4.4%. However, the Conference Board of Canada predicts that the volume of Canadian merchandise exports will grow by 2.6% in 1988 and 3.6% in 1989. Canada has improved its position as an alternative supplier to the U.S. (Canada's major trading partner accounting for more than 75% of Canada's total exports) due to the appreciation of the Japanese yen and the German mark. (22)

- There is an increasing trend toward international business and growth in global markets as a result of advances in transportation, technology, and training transfers. Increasingly, corporations treat all the world as a source of supply as well as demand. Since 1965, the developing countries' share of world manufactured exports has arisen from 7.3% to more than 17%. World Bank figures indicate that Hong Kong, South Korea, Singapore, and Brazil now rank among the top 20 exporters of manufactured goods. Twenty years ago, no developing country even made the top 30. Forecasts are that over the next few decades, China, India, and most of Latin America will follow in the footsteps of Japan and South Korea. Interdependence among developed countries has been accelerated by a boom in direct foreign investment. For example, direct investment by Canada in other countries grew from $302 million (U.S.) in 1970 to over $3.25 billion in 1986. (22) Foreign-owned companies account for more than 20% of industrial production in West Germany, 30% in Brazil, and over 50% in Canada. (22)

- Toronto is the site for the economic summit meeting in June 1988 of the leaders of the seven major industrial nations, i.e., the U.S., Britain, France, West Germany, Italy, Japan, and Canada. Subjects on the agenda will likely include the slow pace of the multilateral trade negotiations under the General Agreement on Tariffs and Trade, the need to end agricultural subsidy trade wars, the problems of Third World and middle-income debtor

nations, and the continuing need for international economic coordination. (The Europeans are working on a full integration of their economies by 1992.) (24)

- At the present time, there are 25 wars going on in the world. These wars have killed about three million people so far, four-fifths of them civilians. It is estimated that since 1945, 17 million people have died in wars. Ideology is declining as a cause of war--less than half of the 25 are wars about ideas (e.g., Marxism). Also declining are wars of national identity (e.g., Sudan, Namibia). In spite of the end of the "empires" of the 19th and early 20th centuries, two kinds of classic wars remain: those between states to decide who is most powerful (e.g., the Gulf War) and civil wars (e.g., South Africa, Lebanon). These wars are particularly devastating to civilians since small weapons are used for the most part throughout a country. In many of the wars, there is help from the large powers. Of wars that have cost over 1,000 lives a year, there are currently five in Latin America, two in the Middle East, eight in Africa, and eight in Asia. (23)

- Major problems of deterioration in the world's natural environment continue. These include major loss of farmland in the West due to intensive agricultural techniques, loss of an estimated 25 billion tons of topsoil in Asia, wastage of genetic resources in tropical rain forests, destruction of wildlife, water pollution, and air pollution as a result of burning solid waste.

- Safe disposal of nuclear and poisonous industrial waste is a world problem as is disposal of household garbage. Such garbage includes metal, plastic, glass, and foam products which gradually release chemicals that destroy the earth's ozone layer. Of the three widely-approved methods of dealing with waste--burial, burning, and recycling--only the last meets the requirements for environmental safety set by the Worldwatch Institute. (25)

- Environment Canada will be hosting an invitational conference on "The Changing Atmosphere: Implications for Global Security" in late June 1988 in Toronto. This conference is Canada's response to the report of the Brundtland Commission, a U.N. commission on the environment chaired by Dr. G.R.O. Brundtland, Prime Minister of Norway. A portion of the agenda is for the scientific community to put forth to world political leaders, social scientists, and business leaders its view that environmental issues are not separate but rather integrated issues, and that acid rain, climate change, and depletion of the ozone layer are related problems. The scientific community hopes to move these problems to a high priority in international and national policy-making. (27)

SOCIAL ENVIRONMENT

- Trends that have created major changes in the way we live continue. These include the increase in the number of women in the workforce, the increase in the number of non-family households, and the aging of the population.

- Family structure continues to change as a result of the women's movement, technology, and economic necessities. Traditional gender roles are showing some signs of accommodation to new realities.

- Issues such as single parenting will require ongoing public and private attention. According to Statistics Canada, there were 250,000 single parent families in Ontario in 1984. (15) The federal government has recently introduced the National Child Care Strategy geared to offering more choices to working mothers for child care. The strategy included the addition of 200,000 child care spaces, the creation of a $100 million Child Care Initiatives Fund for developmental projects for child care, an increase in the Child Care Expense Deduction from $2,000 to $4,000 for children six years of age and under or with special needs, and the phase-in of a $200 supplement to the Child Tax Credit for children six and under. (16)

- Health promotion is an ongoing issue. Attention to the control of AIDS, to drug and alcohol abuse, to healthful foods, and to fitness are high profile and will continue. As the population continues to age, there may be further need for chronic care facilities. However, it is becoming clearer that older age does not necessarily mean infirmity or poverty.

- Ethical issues around the fast-developing field of biomedicine will require discussion and decisions, e.g., issues raised by organ transplants and pressure for people to give organs. Balancing the rights of the individual against those of society are also issues for abortions, for removal of life support systems, for bioengineering. A number of medical institutions are hiring or consulting ethicists.

- Social welfare issues that require consideration and action include income maintenance for the poor. Five hundred and eighty-six thousand Ontario households (6%) fall below Statistics Canada low income cut-off, spending more than 58% of their total income on food, shelter, and clothing. (15) Issues of affordable housing, including housing for the homeless, need to be addressed as well as problems around family violence and child abuse, group homes, legal aid services, and adult literacy.

- New trends in human rights have long-term implications for society. An increasingly legalistic approach to social policy is developing. Behavior is becoming more individualistic and less defined by reference to easily identified social groups.

- Recently there have been shifts in social values. For example, the question of whether there is a decline in morality in public and private life is receiving attention. An Angus Reed poll indicated that 54% of Canadians believe corruption in upper levels of the federal government is widespread. A recent U.S. poll indicated that 90% of the respondents agreed that parents fail to imbue their children with decent moral standards, 76% of respondents said lack of ethics in business is lowering moral standards, and 76% criticized political leaders for failing to set a good example. (14)

- Education for life, as well as work, will continue to be a need as society becomes increasingly more complex and diverse and groups continue to be at variance with one another.

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EDUCATION ENVIRONMENT

Major Challenges for TVOntario

Current and potential MOE efforts in reducing dropouts, in teacher training, in media literacy, in computers in education, in native education, in race relations, and in evaluating performance at all levels.

The continuing shift to the use of videotape rather than off-air broadcasts in the classroom.

Pressure from smaller boards to increase availability of new curriculum and teaching resources being produced in larger boards.

Growing government funding for literacy and skills training and the Premier's Council announcement (April 1988) that education and training issues are at the top of its agenda "because the development of human resources is complementary to the development of Ontario's economy."

The new university environment that involves closer partnerships with government and industry, restricted funding, increased demand for entrance both from high school leavers and a growing population of older, part-time, and distance students.

The collaboration and technologically-based efforts in post-secondary distance education evident in the government-funded Contact North.

The college environment of reduced budgets and altered enrollment patterns because of federal and provincial support for increased privatization of training and workplace-based training.

K to 13

Enrollment Trends

- Declining enrollments over the 1980s are stabilizing. The 1987 total of 1,816,300 students is expected to fall to 1,791,300 by 1991 and to rise to 1,844,900 by 1995. (1)

- A total of 94,000 students were enrolled in French-language schools during the 1986-87 school year, making up 5.2% of Ontario's student population. Continuing the pattern of the 1970s, enrollment dropped during the first half of the eighties, more noticeably in French-language schools (5.2%) than in English schools (3.6%). (2) Over the past three years, however, enrollment in French-language schools remained constant, increasing slightly with the extension of funding of Catholic secondary schools. (3)

MOE Directions: Policy

- Since its November 1986 throne speech, the Peterson government has continued to make education a high priority issue and is working to introduce changes into the school system. Options are being considered and public hearings are being held in several areas as described in entries below. In some cases, this involves implementing directions taken by the previous government such as Catholic school funding and French school governance. Such goals as lowering the dropout rate or monitoring and demonstrating achievement have been chosen as priorities by the current government. (4)

- The MOE is awaiting recommendations from its Student Retention Project concerning additional programs and/or school ministry reorganization that would lower Ontario's exceptionally high dropout rate of 30%. These recommendations will be drawn from several studies, including the recent Radwanski report, *Ontario Study of the Relevance of Education and the Issue of Dropouts*. A research report on the workings of the provincial guideline for Ontario schools, intermediate and senior, is about to be completed and input is being sought from the new all-party Select Committee on Education whose mandate to consider a variety of issues has just been extended to three years. Some measures aimed at lowering the dropout rate, such as added resources for a cooperative work-study program, have already begun.

- Partly as a measure to lower the dropout rate, increasing emphasis is being placed on elementary schooling and the development of reading and writing skills. Over the next three years, class sizes for Grades 1 and 2 will be reduced to 20 pupils from 28.2 in 1987. (5)

- Implementation of Bill 30 extending funding to Roman Catholic high school students and Bill 75 concerning the governance of French-language schools is proceeding smoothly in many communities, however, conflict has arisen in several areas where difficult adjustments are required by this legislation. In some communities it is the overlap between the two sets of legislation that is creating situations which contradict the initial intentions, leaving some parents without representation in the board of their choice. Some of these difficulties may receive attention in a provincial study of French-language school boards due in December 1988. (6)

- Canadian natives in reserve communities are assuming increasing control of their children's education. Federal supervision is diminishing as a growing number of bands and native organizations work directly with the provincial Ministry of Education to shape curriculum and programs that meet their needs and circumstances. An increasing number of reserves are adding Grade 9 and 10 (and a few Grades 11 and 12) to their schools, and more graduates are expected to enter post-secondary institutions. As well, recent curriculum guidelines in History, Geography, and English for all Ontario students are reflecting a growing awareness of native life. As one measure to improve existing provincial schooling for natives, new curriculum guidelines have been developed for secondary level credit courses in native languages. (7)

- Work on developing and implementing a policy on race relations is underway. This policy is designed to promote equity for the 17% of Ontarians not of European descent and those experiencing discrimination due to their religion, language, culture, or nationality. The policy addresses, among others, the issues of racism, racial harassment, teacher training and staff development, assessment and placement of students, curriculum content, and school and community relations. (8)

- With increasing college and university involvement in adult and continuing education, and with Ministry subsidies to school boards falling below actual costs, school board involvement in continuing education is likely to decline. The Ministry is encouraging boards to focus their continuing education efforts on providing secondary level credit programs for adults, particularly during the day. The Independent Learning Centre is also focusing on providing secondary credit programs to adults. (7)

- With growing federal and provincial support for day care, the role of school boards in providing child care services is increasing as well. Between 1983 and 1987, the number of children in school-based child care centres grew from 15,000 to 24,200 in 42 school board jurisdictions. The Ministry of Education's $11 million in capital funding to ensure the provision of child care spaces in all new schools will be supplemented to support child care spaces in existing schools and neighborhood locations. (9)

- The Ministry has been putting considerable effort into assessing board and school achievements in implementing new curriculum and in teaching students effectively. Drawing on the resources of the Ontario Assessment Instrument Pool of guideline-related questions for students, student assessments will now be included as part of all provincial reviews. A review of the implementation of a recent geography guideline will be the first to use this approach. Provincial evaluation reports will be made available, but individual board and student findings will be confidential. Recurring suggestions for a return to standardized testing of students will be considered again as part of the recommendations of the Radwanski report and of the Premier's Council report. (10)

- The 1987 position paper on teacher education is likely to lead to growing teacher professionalism, based on substantial changes in teacher training and certification. Teachers' aides will likely be hired so that teachers can play a greater role in curriculum development and giving and receiving in-service training. The position paper includes proposals for closer TVOntario involvement with schools and teacher education. With the upturn in enrollments expected in the 1990s and the retirement of the numerous teachers hired to handle the postwar baby boom, a reconsideration of teacher training is very timely. (11)

- A major review of educational financing is being conducted by the Ministry. Changes in funding to school boards may be introduced to pool commercial/industrial tax revenues on a provincial basis. This would reduce local autonomy and encourage greater centralization of decision-making. Consideration is also being given to the suggestion for limited funding of the growing number of private or independent schools. Limited support for wholly independent, fee-charging schools would include only per-pupil funds for purchasing learning materials, access to lease or purchase unused facilities, and permission to pool school bus arrangements. The report also suggests a new category of associated schools which are independently operated by a board of governors, half of whom are parents of students in the school. These schools would be associated with a local school board and would charge no tuition fees. These schools would receive per-pupil grants comparable to public schools. (12)

- In 1987, there were close to 62,000 private school students at all grade levels, accounting for 3.4% of Ontario's school population. Private school enrollments in elementary schools continue to rise gradually, reaching 43,700 students in 1987. However, with the extension of public funding in Roman Catholic schools to include up to Grade 11 in 1985 and Grade 13 in 1987, secondary school enrollments in private schools decreased from a high of 50,000 in 1984 to 38,000 in 1985, 26,000 in 1986, and 18,000 in 1987. (1)

MOE Directions: Curriculum

- Once curriculum guidelines are issued, MOE relies on boards and regional offices for curriculum development. This creates an overload, especially in small northern school boards which find the continuous demands of new guidelines overwhelming. Sharing and exchange of curriculum resources among boards are increasing with Ministry encouragement. (13)

- Of particular interest to TVOntario is a joint proposal to establish a Curriculum Resource Clearinghouse which is being planned by the Ontario School Trustees Association, the Ontario Teachers' Federation, and the Ontario Association of Educational Administration Officers. (13)

- MOE documents and guidelines indicate a growing emphasis on developing students' thinking and problem-solving skills and a growing expectation that teachers develop a broader variety of teaching strategies in light of their students' varied learning styles. Teachers will be expected to provide a more flexible learning environment and to offer more opportunities for active and hands-on experiences, for use of visual materials, and for individual and small group activities.

- Classroom discussion of the media and student involvement in video production will increase as a result of recent English curriculum guidelines and the K-12 Media Literacy Resource Book being produced for MOE. Increased home use of VCRs and portable cameras will support this trend, but restrictions on off-air taping and showing video resulting from the new copyright legislation may cause difficulty for teachers.

- The Premier's Council report, *Competing in the New Global Economy*, encourages a number of changes in the education system designed to increase the number of scientists and skilled workers available for the labour force and lower the dropout rate. Along with the several measures mentioned above--province-wide testing, more teacher training, and smaller classes in early grades--the report also recommends regular national and international performance comparisons, greater use of computers and educational software in early grades, and an expansion of school cooperative programs by twining schools with companies or introducing internship programs at the high school level. (13)

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POST-SECONDARY EDUCATION

- The federal and provincial governments have agreed to intensify their cooperation in the field of post-secondary education. This has been motivated by the results of the National Forum on Post-Secondary Education held in Saskatoon in Fall 1987, co-sponsored by the Council of Ministers of Education and the federal government. The Council has formed a committee of the ministers responsible for post-secondary education and federal government officials which would meet regularly. (1)

THE UNIVERSITIES

Enrollments

- The 1986 Statistics Canada census figures demonstrate that the percentage of Canadians with university degrees has doubled since 1971 and now stands at 9.6%. In Ontario, 12% of residents are university educated, ranking second to Alberta with 13% of the population. (2)

- More women than men are pursuing a university degree, accounting for 55% of all graduates. Also, the most dominant factor in increasing university enrollment is the increased participation of women. (3)

- There has been a substantial increase in the number of 19 year olds enrolled in university in Ontario. In 1980, one out of every six 19 year olds was enrolled and today that figure has jumped to one in five. In Ontario, women now make up more than half of all first year students in universities and more than half of the total undergraduate student body at nine universities. (3)

- The Council of Ontario Universities reports that applications are up 10.3% over the 1987-88 record high, and it is expected that one in 10 high school students will fail to gain acceptance even though they meet the standard entrance requirements. (3)

- University enrollment of adults over 25 years of age in 1985-86 in Ontario was 34,371 for full-time study and 74,048 for part-time study, compared with 22,423 for full-time and 50,219 for part-time in 1974-75. In 1985-86, 18.6% of all full-time students in Ontario universities were over 25 and 76.5% of all part-time students were over 25, compared with 15.3% and 73.5% in 1975-76. (4)

- The budget for Indian and Inuit post-secondary education for fiscal year 1987-88 is $93.7 million representing a 14.8% increase over 1986-87. Over the past 10 years participation by Indians in post-secondary education has grown from 3,500 full-time equivalent students to 12,000 in 1986-87. Indian participation, including part-time and full-time students, has grown from 1.5% of the total Indian population in 1979-80 to 4% in 1986-87. (25)

- In the U.S.A., the number of undergraduate and graduate students over 25 has risen 114% since 1970 to 5.1 million, or 42% of the total of 12.2 million college students. The surge in adult students is expected to continue through the end of this century and has already resulted in changes in the way courses are taught, e.g., broader use of computers, closed-circuit TV lectures, and videocassettes. Administrative changes to accommodate

students are also taking place, such as evening and weekend hours for counselling and placement services, credit for on-the-job learning, introduction of more career-related and graduate level credit courses, and campus child care centres. (5)

Funding

- Operating grants to universities were increased by 4.5% in November 1987 to $97.5 million. The Council of Ontario Universities says that additional funds will be required by all universities to keep up to increased demand for spaces. (3)

- In the fiscal year of 1987-88, the Ministry of Colleges and Universities allocated $24 million to Ontario universities for the purchase of equipment that would enhance student learning. This equipment included automated library systems, print, and audiovisual resources, as well as computers for student use. It is not possible to obtain a breakdown on purchase of video. (7)

- In fiscal year 1987-88, the Ministry of Colleges and Universities allocated $13 million to Ontario universities to lower the age profile of existing faculty and to alter the predominance of male faculty. The funds could be applied to subsidize salaries of new staff for up to five years. (7)

- American universities have been setting up satellite campuses in Canadian cities with a concentration in Ontario and British Columbia and it appears to be a phenomenon that is catching on. In Ontario, seven U.S. institutions are offering working professionals opportunities for part-time study. Most of the degrees are at the post-graduate level in the field of education. The Council of Ontario Universities has expressed some concern over this issue. In a study commissioned by the Ontario government on the potential effects of free trade, it is stated that an increase in programs offered by U.S. institutions is likely, and "some of the more prestigious American universities might follow suit." (6)

- In Ontario, six centres of entrepreneurship have been established to provide a focal point for entrepreneurship in colleges and universities, develop curriculum materials, provide training courses for teachers and guidance counsellors, and stimulate research and the dissemination of the results. They will also sponsor visits by practising entrepreneurs. A grant of $150,000 per annum is provided and an additional $50,000 from the business sector.

  The centres are:

  York University, Toronto
  Ryerson Polytechnical Institute, Toronto

Lakehead University and Confederation College, Thunder Bay
Queen's University, Kingston, in conjunction with St. Lawrence College, Cornwall, and Loyalist College, Belleville
Canadore College and Nipissing College, North Bay
Centennial College, Scarborough

UNIVERSITIES AND COLLEGES: Distance Education

- Governments of the Commonwealth decided to set up a distance learning institution at the Commonwealth Conference in Vancouver in 1986. A planning group from the U.K., Australia, Nigeria, India, Brunei, and Canada has been working on the structure and role of the organization, now called "Commonwealth of Learning." This is to indicate that not only university, but literacy training and other courses will be available. This organization will deal at a government level, working on projects that the government of a developing country sees as important for its advancement and training needs. Courses will be supplied on a 'wholesale' basis to governments, rather than a 'retail' basis to individuals (as was outlined in the initial proposals). There will be small local liaison offices to coordinate cooperation among international educators. The planning is still very preliminary with the current goal as setting up a board, finding an executive director, and being operational by September 1988. The headquarters are in Vancouver. The current funding is 13 million pounds, with Canada as the major contributor. (8)

- While student enrollment numbers are not available, distance education has experienced a slow but steady growth with 10 out of 28 degree-granting institutions, and 13 out of 22 colleges offering credit courses in the distance mode. However, really significant growth is not expected unless and until issues such as interinstitutional recognition of credits, student access to resources, and new funding structures for high development costs are resolved. (9)

- The Northern Ontario Distance Education Access Network began operating in September 1987. Now called Contact North, this project has set up nine access sites in the northwest region and 18 in the northeast, with plans for expansion. The site has a coordinator and a variety of technological and print materials to support community residents who wish to take a distance education course. Part of the project funding of $5 million per year supports development of new distance education programs, for example, a French Bachelor of Commerce degree, programs in gerontology and environmental assessment, and qualifications for teachers in isolated communities. Forty-seven courses were offered to over 800 registrants in the first semester in the Fall of 1987. The funding for the project continues to 1991. (10)

- The establishment of a worldwide francophone distance education network to be located in Canada was announced in September 1987. The governments of Canada and Quebec will provide $3 million toward the Centre international francophone de formation à distance. (11)

- In Ontario, French-language distance education is offered at both elementary and post-secondary levels. The Centre d'études indépendantes (Ministry of Education) offered 60 secondary courses in 1986-1987 and nine elementary courses with an enrollment of 2,180--a 33% increase over the previous year. French-language distance education at the Colleges is just beginning to evolve. Cambrian College offered its first community program in 1987-88. The College de technologie agricole et alimentaire d'Alfred, in collaboration with the University of Guelph, offered 10 telecourses beginning in 1987. Laurentian University and the University of Ottawa are more firmly established in French-language distance education, each offering about 20 courses. (24)

COMMUNITY COLLEGES: Funding

- Ontario's 22 community colleges are currently facing instability and uncertainty in their funding because of policy changes at both the provincial and federal levels which support a shift toward the privatization of training, especially in the area of skilled trades. Ottawa has cut its guaranteed purchase of certificate training seats in the colleges to $127 million from $166 million in three years. This seat purchase will drop still further to $102 million in 1988-89. The provincial government has failed to fill the financial gap as the Ministry of Skills Development is also supporting the shift to the private sector. College sources predict that unless there is a return to more stable financing, some will have to eliminate their skills training activities altogether. (20)

- Some observers believe that the push towards privatization will require innovations in course curriculum and delivery systems, as well as cooperative community-based arrangements in order for the colleges to maintain economic viability. There are several examples of such innovation, particularly George Brown College in Toronto which has entered into new and unique arrangements with voluntary and community organizations. (21)

Enrollments

- Community colleges, particularly in the Metro Toronto area, are seeing a significant drop in applications in 1988. The application dip appears to be affecting a variety of programs. College officials attribute the drop to a booming job market and to a decline in the overall high school population.

Another reason cited for the decline is that the universities have stepped up activities and programs related to business and industrial training which have traditionally been centred in the colleges. (20)

- The latest figures for enrollments by subject area which are available (for the period 1984-86) show that enrollments are down slightly in technology (-6%) and in business (-2%); up by 5% in applied arts; and holding steady in health sciences. A consultant is currently exploring the issue of the decline in technology enrollments. (23)

FRANCOPHONE EDUCATION

- In the next five years, the Ministry of Colleges and Universities will almost double its spending ($24 million to $42 million) to make it easier for Franco-Ontarians to study in French. (12)

- In December 1987, the Conseil de l'education franco-ontarienne (CEFO) released a working paper outlining a series of recommendations for improving and guaranteeing Franco-Ontarian post-secondary education. Development objectives and proposed planning processes and documents were presented for both colleges and universities. Options for administrative and academic structures were suggested ranging from the establishment of distinct Franco-Ontarian institutions to the maintenance of the status quo. Once community consultation is complete, CEFO will release a position paper. It is anticipated that the Ministry of Colleges and Universities will be involved in implementing the recommendations. (13)

- L'association canadienne-française de l'Ontario (ACFO) released its working paper on francophone post-secondary education in February 1988. It argues in favour of the promotion of distinct Franco-Ontarian colleges and universities. The paper discusses the need to identify a position or a department within the Ministry of Colleges and Universities which will be dedicated to furthering francophone post-secondary education. As in the CEFO document, the need for ongoing province-wide consultation in matters pertaining to post-secondary education is stressed. The Ministry of Colleges and Universities, although sympathetic to the ACFO and CEFO positions is firm in its continuing support for designated bilingual colleges and universities as set out in Bill 8. (14)

- Largely due to the politically sanctioned absence of French-language secondary schools when they were growing up, about one-third of Franco-Ontarian adults (25-64) has less than Grade 9 education (functionally illiterate). In the very long term, the situation will probably improve since young Franco-Ontarians have a better opportunity to be educated in French from kindergarten to the end of high school, unlike their parents and grandparents. (15)

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ADULT EDUCATION

Enrollment

- A Statistics Canada study conducted in 1986 indicated that in 1985 more than 1.8 million Canadians age 17 to 65 were engaged in full- or part-time training, i.e., formal educational activity undertaken with employment-oriented motives. The majority--1.3 million--participated in short-term or part-time programs. The rest were full-time trainees: 68,000 apprentices; 51,300 people in employer-organized programs; and 449,400 "returnees" or adults who had been out of school for at least a year and who trained full-time for one month or more at a university, community college, technical institute, public or private trade or commercial school, or in courses organized by unions or professional associations. (3)

- Participation in training was highest among people under 45 years of age. The highest participation rates were in Alberta (16%), with Ontario third at 11.6%. Training rates were higher among men (12.1%) than among women (10.5%). University degree holders had the highest training rate (21 6%) with the rate falling to 2% for the group with less than Grade 9. Community colleges and universities were the primary source of training for all categories, with unions and professional associations playing a significant role in short-term, part-time training. Employers contributed mainly as program organizers or providers and as funders. Seventy-five percent of all returnees took part in programs funded by the federal government, primarily the Canadian Jobs Strategy programs of Employment and Immigration Canada. After successful completion of training, the percentages of returnees and apprentices who had jobs were higher than in the six months before they enrolled. (3)

- A comparable study conducted in Sweden, also in 1986, indicates a substantially greater commitment to recurrent education and training in that country than in Canada. The study's suggested conclusion is that Canada's overall effort in labour market training is insufficient, with highly uneven distribution among educational groupings between age groups and between regions. (2) It is estimated that Canadian workers get two hours of in-plant training annually, while Japanese workers get 100 to 200 hours. (1) Because the number of youth between the ages of 18 and 24 years is expected to decline from 3.1 million in 1986 to 2.6 million in 1996, there will likely not be enough young people to meet skills requirements and it will be even more necessary to train and educate existing employees. (4)

- Older adults are increasingly participating in adult education activities. There is an increase in organizations specifically established to meet the needs of this group, such as Third Age Learning Associates and Elderhostel, and participation in these organizations is growing as well. (19)

- Between 1975 and 1985, the total expenditures nationally for non-degree credit courses increased from $23.2 million to $87.5 million, almost a fourfold rise. In Ontario, expenditures have risen from $6.8 million to $32.3 million during this period. The national average shows the adult learner to be paying 65% of the course costs through tuition and presumably the remainder through taxes.

Job Training

- The Canadian Jobs Strategy (CJS) of the Federal Government and the Ontario Training Strategy (OTS) of the Province of Ontario encompass these governments' policies and funding allocations in regard to national

and provincial job training. The CJS focuses on the longer-term unemployed and the OTS on short-term unemployed.

- The CJS was announced in June 1985 as an ongoing federal program and is administered through Employment and Immigration Canada and local employment centres. Some funds under CJS are directed to assist communities hit by layoffs and plant closures ($21.4 million in 1988-89) but the major objective is to assist the long-term unemployed, re-entry women, aboriginal peoples, handicapped individuals, disadvantaged minorities, and disadvantaged youth to train for necessary new skills through partnerships with employers, local industrial training committees, and public and private educational institutions and trainers.

The final budget allocated to Ontario under CJS in 1987-88 was $437 million. As of 1 April 1988, the allocation for 1988-89 fiscal year for Ontario is $383.6 million which could be adjusted upwards by the end of the fiscal year. Allocations for workplace-based training under CJS for Ontario for 1988-89 are as follows:

Skills Shortage Program (Workplace training on federally-designated occupations for employed people)	$ 15,250,000
Skills Investment Program (Workplace training or re-training for employed workers threatened by technological or market change)	$ 10,300,000
Job Development Program (Training for long-term unemployed in a combination of workplace training plus course work including training for social assistance recipients)	$ 56,182,000
Job Entry Program (Training for re-entry women, unemployed youth, handicapped persons and disadvantaged minorities including social assistance recipients in a combination of workplace and course work training)	$ 26,805,000

- In addition to the above allocations, there will be for Ontario in 1988-89 the sum of $166.3 million for purchase of training from the institutions that can best supply the training. About $101 million is expected to go to community colleges for direct purchase of seats with another $39.5 million to community industrial training committees to purchase training on behalf

of employers. The remaining amounts will go to employers for workplace-based training costs and to private trainers. (5)

- There have been criticisms of the CJS's strict guidelines for job programs. Starting in July 1988, the federal government will revise some guidelines relating to length of time unemployed in order to qualify for training. Other revisions will improve training for re-entry women, for re-location and travel assistance, and for disabled persons. A recent government survey of CJS participants indicated that, in spite of administrative difficulties, 88% were satisfied with the program and more than 70% either found jobs or took further training. (9)

- The Ontario Training Strategy (OTS) was announced in 1986 with a $100 million a year skills development commitment to 1991 through the Ministry of Skills Development (MSD). The five key services of the OTS are: (i) the establishment of a training consultation service to business ($15 million annually); (ii) training incentives to firms to offset training costs ($43 million annually); (iii) trades updating courses provided to technologists and technicians without charge; (iv) access programs that include support allowances for travel, accommodation, and child care to remove barriers to training for the disadvantaged; and (v) free training in basic numeracy and literacy skills through the community colleges. Now coming into place, funded at $6 million annually, the Ontario Training Corporation will encompass: (a) a computerized data bank listing materials and resources to improve links between users and suppliers of training; (b) training materials for short-term, on-the-job training on an industry sector basis; (c) a skill technology fund to invest on a joint-venture basis in the development of training technologies; and (d) professional development for trainers. The provincial government expects that, by 1991, about one million Ontario workers will benefit from OTS initiatives. (6)

- The best developed program to date under the OTS is the Futures Program for youth employment. Between 1985 and 1988, some 75,000 youths under 25 have been assisted to get work experience, skills, and educational upgrading. By 1992, it is expected there will be 60,000 apprentices training in Ontario compared with 40,000 in 1987--most in new trades. Women apprentices are expected to increase from 2,000 to 5,000 in the same period. Under the OTS Transition Program for laid-off workers over the age of 45, it is expected that 6,500 older adults will gain new skills annually through a workplace or course training initiative. (By 1997, workers over age 45 will make up 30% of the labour force.) (7)

Literacy

- In 1987, the Ministry of Skills Development became the lead agency for literacy in Ontario with a $40 million annual budget for institutional and community-based literacy programs to 1991: $20 million will go annually

to the CAATs for basic upgrading; $5 million annually to community literacy providers; a grant of $1,900 to school boards for the equivalent of a full-time adult student enrolled in credit and basic education, and for wraparound support services such as child care and transportation. It is estimated that 16.8% of Ontario adults in the 25-64 age group require basic instruction in reading, writing, and numeracy. (8)

- The cost of illiteracy to Canadian society as a whole is estimated at approximately $10 billion, with the cost to business about $2 billion. (4)

- The Ontario Federation of Labour (OFL) has stated that inability to read is preventing employees from being trained or promoted. (The Ford Motor Company is now requiring a minimum of Grade 12 for entry-level jobs on its production line.) In the late Spring of 1988, the OFL will launch a province-wide literacy project. Funded by the Ministry of Skills Development at $4.5 million over five years, the project will establish over 100 workplace literacy/ESL/FSL programs in the first year. All programs will be led by specially-trained coordinators. (10)

Women

- In a recent study on women's education and training in Canada, it has been found that women are disadvantaged in the formal labour market as they are in jobs in areas that tend to be characterized by low pay, high turnover, vulnerability to technological change, low union penetration, and relatively high incidence of involuntary part-time work. The study identified that while education and training are key factors in women gaining access to high quality jobs, they get significantly less 'value' out of their education than men. Women with highest level of education, university graduated, are still much more likely than men to be unemployed after graduation and the wage gap at this level is still significant. In spite of this, the study concluded that women's education levels are single most significant factor in determining whether the individual will gain access to high quality, continuing employment. (11)

- This same study identified that while there was a general and apparently increasing recognition on the part of politicians and bureaucrats of the legitimacy and importance of equality issues for women, this recognition has not been translated into specific supporting policies designed to increase the effectiveness of education and training in creating greater economic equality for women.

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EDUCATIONAL MEDIA RESOURCE MARKET

Market and Sales: Canada

- The Educational Media Producers and Distributors Association of Canada (EMPDAC) reports that its sales in 1987 totalled $25 million a 12% increase over 1986. Ontario's share increased from $7.4 million in 1986 to $10.8 million in 1987, representing a jump from 33% to 43% of total sales. EMPDAC members sell classroom videos and films, documentaries, and short and animated films to public institutions and, to a lesser degree, to private business and industry. Public buyers include provincial educational departments, colleges and universities, public libraries, museums and art galleries, and hospitals. (2)

- Of EMPDAC's reported sales of $25 million in 1987, $6.4 million (26%) represented sales of Canadian (versus foreign or unspecified) resources. (2)

- According to EMPDAC, total dollar sales of prerecorded videotapes by its members are expected to continue rising as are sales and leasing of rights and rental income from videotapes. From 1984 to 1987, Canadian sales of videocassettes jumped from $2.1 to $10.5 million. During the same period, sales and leasing of film rights rose from $644,000 to $1.8 million, while rental income from 16mm films and videotapes increased from $318,000 to $2.1 million. (2)

- Sales of computer courseware by EMPDAC members have decreased from $608,000 in 1984 to $316,000 in 1986. In 1984 and 1985, only foreign products were sold but in 1986, Canadian computer courseware represented 8.3% of total sales. No sales of computer courseware were reported in EMPDAC's 1987 report. (2) EMPAC members are only marginally involved or interested in distributing computer courseware. It was recommended by EMPDAC's committee in 1987 that computer courseware sales should no longer be included in financial reports as amounts are relatively insignificant. Computer companies produce, promote, and distribute their own products. (3)

- According to estimates prepared by the Non-Theatrical Film Industry Task Force, the total non-theatrical market in 1985 was between $25 and $33 million. Of this total, 30% to 40%, or $7.5 to $13 million represented Canadian materials. This market may include educational/training films, videotapes, filmstrips, slide sets, videodiscs, and computer software designed for educational institutions, business and industry, the health and social service sector, community groups, special interest groups, sports and recreation, etc. (1)

- With revenues of over $900,000 in 1987-88, TVO's share of the (non-Ontario) provincial education department market is about 15%, with variances of 10% to 25%, depending on individual provincial budget allocations. This includes both broadcast and non-broadcast rights. The share of sales to education departments has decreased slightly since last fiscal year in favour of brisker commercial sales. Some of the major competitors in the Canadian market are the NFB, TVO, Magic Lantern, Thomas Howe Associates Ltd., and International Tele-Film. (4)

- In Ontario, in 1986-87, the TVO VIPS program distributed 16,843 videotapes, 87% of which were distributed to schools, 7% to post-secondary institutions, 1% to libraries, and 4% to other institutions or associations. (5)

- In light of the declining use of film and growing use of video in schools, the National Film Board has begun video production for schools, with 25 titles

for secondary schools and 19 for elementary to be released in 1988/89. (20)

- According to the National Film Board, a consumer market for educational video distributed through libraries and video stores now exists in Canada. (6) However, expanded production for the home video educational market directly by the NFB and private producers and distributors will depend on the extent to which copyright laws can be unified, clarified, and enforced to prevent illegal copying, and the extent to which support funding for production and distribution can be obtained from governments. (1)

Market and Sales: The United States

- The U.S. educational resources market is approximately $2.8 billion. The non-broadcast cassette market represents approximately $30 million in expenditures. The broadcast ITV market totals about $10 million. TVO's share amounted to about 20% or $2 million in 1987-88 (including publications). Out of a total of about 65, the top five competitors in the ITV market include the Agency for Instructional Technology (about a 40% share), TVOntario (20%), Great Plains National Instructional Television Library (19%), Western Instructional Television (less than 10%), and Educational Program Service (less than 10%). TVO has less than 1% share of the non-broadcast cassette market with seven months of activity. Top competitors in the non-broadcast market include Encyclopedia Britannica and Coronet Films and Video. (7)

- PBS video sales and rentals (home and institutional) for the first half of 1987-88 surpassed the $1 million (U.S.) mark for the first time in the history of the 10-year old enterprise. (8)

- The number of software items listed in the OESS catalogue increased from 67 in March 1987 to 112 in March 1988. The 1988 listing includes five items for the IBM EDNET computer which now qualifies as a GEM (Grant Eligible Microcomputer), along with the ICON. Of the 107 items now available for the ICON, 22 are in French. Over 50 software items are now in production from earlier contracts along with approximately 12 Business Studies items and 12 Junior Division items for Grades 4, 5, and 6 being negotiated. (1)

Educational Resources Budgets

- Media resource centre budgets of Ontario school boards have increased marginally since 1986-87. Budgets had been decreasing or had been stagnant over a 10-year period. Media resource centres are finding ways of maximizing the financial resources available to them: (a) Spending has shifted to purchasing video over film; (11) (b) Buying consortia have

formed to purchase media packages from producers and distributors. Collective buying permits groups of school boards such as "Media East," including 14 boards in eastern Ontario to purchase one copy of packages with duplicating rights. For example, Magic Lantern sold one copy of 30 telecourses to Media East along with duplicating rights for five years. Other companies offering package deals include Encyclopedia Britannica, McNab & Connolly, Coronet Film & Video, and CBC Enterprises. (10) TVO Educational Services is exploring the feasibility of consortium purchasing of extended VIPS rights. (11) (c) With the availability of relatively low cost, high quality portable equipment, and the availability of qualified personnel, there is a renewed interest in in-house video production. (10)

Use of Educational Resources

- Off-air use will continue to decline. In 1985, only 8% of TV-using elementary school teachers relied solely on off-air broadcasts compared to 27% in 1982. (12)

- Since a new committee has been asked to report to the Ministry on the use of technology in schools and a new head of the Computers in Education branch of the Ministry has been appointed, changes in the Ministry's direction in this area may be forthcoming. (14)

- Since September 1986, the number of ICON workstations in Ontario schools increased from 11,200 to 20,000, and an additional 7,500 are expected to be installed by the end of 1988. In this same 18-month period, the number of file servers grew from 1,500 to 2,000, and by year-end, another 500 are projected to be installed. This pace is expected to continue unless the MOE subsidies are lowered. (13)

- Expectations for school computer use during the next two to three years included the establishment of computer networks, 32-bit microcomputers and megabyte memories, CD-ROM databases, a shift toward colour monitors, and more sophisticated animation capabilities. Four to five years from now, enhanced networking, cheap, high-quality printing, and possibly a merging of CD-ROM and videodisc standards will be found. Beyond five years, generally enhanced microcomputer capacities and users who see the micro as an appliance are expected. (15)

- U.S. sales projections for the children's home video market suggest growth over the next two years. Sales were expected to rise from a 1987 level of $276 million (U.S.) wholesale on 23.7 cassettes, to a projected level of $472 million (U.S.) wholesale on 52.5 million cassettes. During this same 1987-1990 period, the market share of children's video material was expected to increase from 18.5% to 21%. (9)

- As a result of shrinking marketing budgets in the U.S., private business is turning to the production of corporate videos as a more economical way of promoting products and communicating with employees. (16) Organizations reporting participation in their own video program production and distribution have grown from 300 in 1974 to 8,500 in 1986. (17)

- A recent survey of 2,550 organizations in the United States indicated that videotapes were the instructional method used in 80.5% of cases which was exceeded only by lectures at 81.5%. Non-computerized independent study programs were used 27.6%; teleconferencing (audio/video) 23.9%; teleconferencing (audio only) 10.8%; and computer conferencing 3.4%. (18)

Source

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BROADCAST ENVIRONMENT

Major Challenges for TVOntario

The impacts of increasing direct competition with TVO for audiences and product as the market is fragmented by the introduction of new Canadian (English and French), U.S., and European (French) services in Ontario; and by the repositioning of PBS programming toward a more educational focus.

The impacts of weakness in the four main pillars financing the Canadian production industry: Telefilm (international housekeeping problems), CBC (underfunded), Canadian private investment (threatened by Capital Cost Allowance reductions), and U.S. production in Canada (threatened by rising Canadian dollar and increasing Canadian production costs).

Uncertainty as regards the passage of a new Broadcast Act and how changes in the Act may affect the broadcast environment.

Increasing pressure for visible minority and women's participation in programming. This includes more presentation on screen, increased employment in the industry, increased access to television signals, and increased involvement in production and distribution of programming.

Global trends towards decreased government support for public broadcasting in favour of commercial broadcast models.

FEDERAL POLICY DIRECTIONS

- The underpinnings of the Canadian broadcasting system may or may not change significantly in the next few years. The Minister of Communications has tabled a new Broadcast Act and passage prior to an election is possible. If an election intervenes and dependent on its results, the proposed Act could die or be reformulated.

- The current Broadcast Act does not specify the role of provincial educational broadcasters. This is set out by Federal Order in Council and requires programming by provincial broadcasters to be educational in nature. The new Act appears to downgrade the role in referencing only

"educational programs" while eliminating the clause that "facilities should be provided... for educational broadcasting." ATEC is concerned that the Act moves away from the idea that there should be stand-alone educational broadcasters. (1)

- Other issues include: requiring consent of the signal provider before retransmitting signals regardless of transmission means; forbidding importation of foreign signals which duplicate existing Canadian services; requiring provincial educational authority consent for importation of educational services into a province, whether Canadian or foreign based; calls for an Alternative Programming Services; and others. (6)

- Policy directions for telecommunications in general are also in the process of development. Current thinking at Communications Canada is articulated in their 1987 document, *Communications for the Twenty-First Century*. (2)

- Telecommunications and broadcast policies must balance the often conflicting objectives of guaranteeing free and open markets for world information and information products while ensuring a healthy supply of distinctive Canadian materials relating to Canadian education and culture. (3)

- Communications Canada thinking distinguishes two types of carriers: those that own the basic infrastructure and those that use it to provide value-added services; and it provides two different sets of rules to govern the operation of the carriers. Basically, it requires Canadian control of the infrastructure and limits entry to new carriers while allowing open and unrestricted entry with no restrictions on foreign suppliers for value added network suppliers and resellers of authorized services. (3)

- The major outstanding policy decision in the development of high capacity distribution systems for both telecommunications and television is whether to allow competition between the cable industry and the telephone companies. With the advent of fibre optic cabling there is no technological barrier preventing both industries from offering a full range of voice-data-video services for the home. (4)

CANADIAN RADIO-TELEVISION AND TELECOMMUNICATIONS COMMISSION (CRTC)

- The relationship between the Federal government and the CRTC has appeared to be a stormy one over the past 18 months. There have been specific conflicts over the timing and nature of specialty service licensing and has involved cabinet reviews of CJOH ownership and CBC news service decisions. It is also illustrated by the CRTC decision to extend CBC radio's license for only three instead of the normal five years.

- Under a new CRTC Act, the balance of power may shift toward the government and Minister of Communications, particularly if cabinet is mandated with power both of direction and of review. (6)

- In the absence of clear policy directions from government, the CRTC has continued as the consistent powerhouse in broadcast policy. In 1987, CRTC rulings significantly changed the environment in which broadcasting will be carried out over the next five years.

- In 1987, the CRTC licensed 10 new Canadian special-interest satellite-to-cable services (7) which will expand (for some viewers/subscribers) the range of alternative viewing options. These include five French services:

  Consortium de télévision Québec Canada ("TV Québec Canada")
  Premier Choix: TVEC Inc. "Canal Famille"
  CHUM Limited and Radiomutuel (1985) Limitée: "MusiquePlus"
  Le Réseau des Sports (RDS)
  MétéoMédia: Méteo-Instant

  and five English services:

  Canadian Interfaith Network "Vision TV"
  YTV Canada, Inc.
  The Family Channel
  CBC News and Information Service
  MeteoMedia: Weather Now

- The CRTC simultaneously allowed cable carriage of five new U.S. pay services. These include: WTBS-TV Atlanta, WGN-TV Chicago, WOR-TV New York City, WPIX-TV New York City, and the U.S.A. Network. (7)

- This brings to 24, the number of approved non-Canadian satellite services, not including the four U.S. services approved for carriage on CANCOM, and "local" U.S. signals (five in Toronto: CBS, NBC, ABC, Fox Broadcasting, and PBS).

- The CRTC decisions create a much more competitive environment for TVOntario. Vision TV, YTV, The Family Channel, and WTBS all program to some degree similar types of programming targetted at similar audience segments. The impact on la chaîne is harder to gauge since cable carriage of the approved French signals in Ontario is uncertain. However, TV5 and Canal Famille plan to schedule similar programming. An increase in choice of French-language television options in itself would create a more difficult competitive situation. (6)

- Other key CRTC decisions in 1987 included: licensing of Global and CTV with the imposition of expenditure requirements for Canadian content and

an increased emphasis on social issues such as sex-role stereotyping, visible minorities, and closed-captioning for the hearing impaired; and permitting the migration of MuchMusic and TSN to basic cable. (6) Ontario's first French-language community radio station, located in Hearst, was also licensed. (8)

- In 1988, the CRTC is expected to hold license renewal hearings for Pay TV and ACCESS Alberta, among others, to review the Radio-Québec commercial advertising policy, to decide on importation of WNEQ, and to deal with the future of the all news service. It may also, depending upon applications, consider national ethnic and native services. (6)

ECONOMIC DIMENSIONS OF THE BROADCASTING SYSTEM

- In 1984, the Canadian public directly and indirectly paid out more than $3.1 billion to fund the Canadian broadcasting system. This amount is made up of federal and provincial appropriations to public broadcasting, which were derived from taxes; subscription to cable television including pay TV; and of advertising expenditures on radio and television. $3.1 billion represented .7% of Canada's Gross National Product that year. By comparison, in the same year Americans paid $31.4 billion (Cdn) to fund their broadcasting system. This represented .8% of the U.S. Gross National Product in 1984. (9)

- Excluding radio, the Canadian television portion of the system accounts for about $2.4 billion. (10) The major economic interests are private broadcasting, CBC/SRC, and cable. Educational broadcasting as represented by the ATEC members represents only about 5% of television revenues, and TVO only about 1.9%. Even in Ontario, TVOntario represents only a small percentage of expenditures of the broadcasting industries.

- Private sector television generally enjoyed a better than average rate of return on investment over the past 15 years. But industry forecasts for the next five years reduce profit projections by half. (9) Reduced advertising revenues resulted in high profile layoffs at CTV over the last year, and the press reported a number of battles for control within private broadcasting organizations, while cable return on investment climbed.

- The CBC has become a favourite target for economic restraint and future plans are dependent upon increasing commercial revenues in a period of increased competition and declining rates of television advertising growth. The CBC board has approved an ambitious plan to eliminate American programming and increase Canadian drama in its prime time schedule over the next three years. (11)

- Provincial broadcasters face an uncertain future dependent upon provincial economies. Radio-Québec has achieved stability in its government grants but relies increasingly upon advertising revenues for its growth. ACCESS Alberta and the Knowledge Network have not had grant increases matching inflation for several years.

CANADIAN PRODUCTION INDUSTRY

- The Canadian film and television industry has experienced a boom over the last several years, with production activity especially in Toronto at an all-time high. Several elements have combined to drive this:

  - Government funding through Telefilm Canada and CBC;
  - Canadian private capital investment spurred by a 100% capital cost allowance and the leverage provided by Telefilm;
  - United States production in Canada based on a Canadian dollar below $0.80 U.S. combined with lower Canadian labour costs. (12)

- Garry Neal, General Secretary of ACTRA has indicated that their independent production agreement now accounts for 50% of all ACTRA fees (1987). Of these, 60% were generated by U.S. production in Canada and 40% by independent production fueled primarily by Telefilm and the CBC. (13)

- The situation is changing rapidly and projections are for major downturns in activity causing severe dislocation in the industry by 1989. Telefilm Canada is currently going through a management crisis. CBC continues to suffer from inadequate federal funding and political opposition. The government has reduced the capital cost allowance to 30% and indications are that private investment in production will dry up under these conditions. The Canadian dollar has recently passed the $.80 mark at which U.S. studio executives have said it will no longer be advantageous to shoot in Canada. Pressures from Canadian unions and performing rights societies for parity with U.S. wages have weakened the cost advantage to shooting in Canada and some scheduled major productions have been withdrawn in the last few months. (12)

- It can be expected that the independent production community may react to the reduction in U.S. production by increasing pressure on Canadian public broadcasters to pick up some of the slack. The CBC has already announced plans to Canadianize the network and has moved substantially away from in-house toward independent production. The newly licensed specialty channels promised substantial Canadian production but their ability to deliver may be seriously compromised by the difficulties of attracting private investment under the new Capital Cost Allowance. (12) It is unlikely that pressure on TVOntario to generate more work for the

work for the Ontario private production sector will increase under these conditions.

- Telefilm's administrative problems became public in the Fall of 1987. Following the resignation of executive director Peter Pearson over policy conflicts, an alarming set of announcements relating to Telefilm budgetary overcommitments were issued. (14) By Spring 1988, the budget of Telefilm appeared to be balanced, 35 staff members had resigned, issues of chairman Jean Sirois' interference in management decisions and questionable expenditures were made public, and Mr. Sirois asked not to be re-appointed upon expiry of his term in April 1988. The House of Commons Committee on Culture and Communications will begin an inquiry into Telefilm management in April 1988. Pierre DesRoches has now been appointed Executive Director, effective 1 June 1988.

CANADIAN CABLE INDUSTRY

- There are 77 individual cable systems in operation in Canada. The top 10 cable operators account for 73% of the entire cable subscriber universe (15) which was estimated at over six million subscribers in August 1986. (16) In 1986, the cable industry generated gross revenues of about $924 million. (15)

- Currently, 91% of Ontario households have access to cable and 73% actually subscribe. Forecasts provided by the cable industry indicated a modest penetration growth of 1-2% per year. (17) Since cable penetration is unevenly distributed throughout the province, much faster growth is occurring in certain localities, such as Windsor. People living in remote and rural locations are unlikely to be able to receive cable in the foreseeable future. However, the TENO (Television Extension in Northern Ontario) project will result in the cabling of about 99 small northern communities over the next few years. (18)

- The Canadian Cable Television Association (CCTA) 1988 Action Plan identifies the industry's key objectives. These include promoting cable's role in programming as well as distribution, opposing all telephone involvement in broadcasting and promoting cable as an alternative network to the telephone monopoly. This is a critical issue for the industry since the *Communications for the Twenty-First Century* document indicates that fibre optic technologies will shortly make it possible for Telco's to provide television services and for cable to provide telephone service. Decisions will be made in the next few years about the degree of competition which will be allow, and this will define the future prospects for cable.(4)

- Cable has defined competitive technologies as fibre optics, direct-to-home satellites, MMDS (Multichannel Multipoint Distribution Service), and

SMATVs (Satellite Master Antenna Television). It will explore the potential of HDTV (High Definition Television) in meeting future subscriber needs. It will be lobbying tc minimize government technical regulatory constraints, to obtain the introduction of pay-per-view and expand freedoms for cable advertising, and to introduce new U.S. services. (19) In general, the industry will seek greater freedom from regulation except in cases where regulation can help protect it from competition.

- In lobbying for lighter regulation, Canadian cable can point to the precedence of recent United States policy. On 1 January 1987, the U.S. cable industry became significantly deregulated. The industry is now free to price the basic service and repackage services provided according to the perception of the marketplace. Previously, local and sometimes state governments had authority over basic rates. (15)

- The industry will also be preoccupied with the implementation of Free Trade and Copyright provisions which will require cable to pay retransmission rights to foreign rights holders for signals which were previously retransmitted for free. Estimates on the size of payments to United States rights holders under the agreement range between $20 to $100 million per year, depending upon the definitions of distant and local signals. This is money which will be withdrawn from the Canadian broadcasting system. (5)

- Cable will also be concerned with the strategies for carriage of the new services licensed or approved by the CRTC for carriage beginning 1 September 1988, as well as the impact of allowing TSN and MuchMusic to be carried on basic. Except for YTV, all the other new Canadian services will be carried by Anik D satellite. Few cable companies currently have the capacity to receive Anik D signals and this creates another barrier to the ability of the services to reach substantial numbers of viewers in the near future. (20) On the other hand, the approved U.S. signals are carried on satellites which cable can currently access bringing the likelihood of introduction of U.S. signals before the Canadian ones.

AUDIENCES

- Canadians watched television an average of 24.2 hours a week in 1986, two-thirds of it foreign programming. StatsCan says that viewing levels have been fairly stable in recent years. (21) Following is StatsCan data for Ontario viewing by program type.

Ontario (Fall 1986)	Anglo-phones %	Franco-phones %
Drama	34.9	35.4
News and Public Affairs	16.7	18.0
Comedy	16.5	12.6
Variety and Games	8.6	11.9
Sports	6.4	4.4
Instruction--Academic	1.1	2.1
Instruction--Social/Recreational	1.6	1.8
Documentary	1.1	1.5
Music and Dance	1.2	1.2
Religion	.4	.9
Unknown	11.5	10.3
	100%	100%

- The audience for information programming--in contrast to tha audience for entertainment programming--is overwhelmingly loyal to Canadian programs. Of the total Canadian program viewing time on all stations, information programming attracted 54% in 1986. (22)

EDUCATIONAL BROADCASTING IN CANADA

- The Association of Tele-Education in Canada (ATEC) is made up of four members: TVOntario, Radio-Québec, ACCESS Alberta, and the Knowledge Network. Associate members from Manitoba, Newfoundland, Nova Scotia, Saskatchewan, and the Northwest Territories take part in programming committee meetings. The collective total revenues of ATEC members amount to $151.6 million (1987) and they employ 1,492 people. (6)

- ATEC is made up of two relatively large organizations with annual budgets in excess of $60 million and two relatively small organizations with budgets under $17 million. Two of the members operate in the French language and one (TVO) in both languages. The reality of differing corporate agendas and no full-time coordinating staff makes arriving at common positions difficult. For instance, positions on the potential for a national educational network vary widely among the members. (6)

- Funding is an issue for all the ATEC members. Radio-Québec ($68.6 million--1987/88 budget) has recently undergone substantial cuts including the elimination of regional operations and is expected to achieve significant revenues from advertising. ACCESS Alberta ($16.2 million--1987/88 budget) has had no substantial grant increases since the Alberta economy took a downturn several years ago and has recently upgraded

attempts to raise funds through membership, corporate underwriting, and program sales. Knowledge Network ($5.6 million--1987/88 budget) has recently been merged with the Open Learning Institute and the total budget of the new organization remains less than $1 million. (6)

- ATEC has demonstrated its ability to establish an ad hoc national programming network (for broadcast of *Reckoning* in 1987), as well as to foster co-production and co-acquisition. It has made a number of coordinated interventions with the Federal government. The future of the organization over the next several years may depend in part on the increased participation of associate members and the pressures to establish a national educational network.

UNITED STATES PUBLIC BROADCASTING

- Public broadcasting continues to struggle to meet its mandate within adequate and uncertain funding in an increasingly competitive environment. While total income in 1986 reached $90 million, more than half the 174 licensees operate on annual budgets of less than $3 million. A 34% increase to $214 million in federal aid between 1984-1986 still leaves federal support below the 1982 level after adjustment for inflation. (23) It is more difficult for public broadcasting to continue to justify federal funding because of the competitive environment and influential individuals who generalize about similar material being offered by commercial enterprise. (24) In 1987, corporate underwriting of $63 million was up 8.6%. (25)

- Average prime time ratings were 2.7. Cumulative audience figures showed 58% of television households watch public broadcasting in an average week. The identity of public broadcasting is being challenged by programming strategies of competitors such as The Arts and Entertainment Network and The Discovery Channel, as well as by public broadcasters running classic commercial programs. (23)

- Court decisions declaring must-carry rules unconstitutional threaten public television's ability to reach its public. PBS needs must-carry and has allied with the Association of Independent Television Stations (INTV) to fight for reinstitution of the rules. (25)

- Top PBS priorities for 1988 include: efforts to obtain long-term stable federal funding; improvements in advertising and promotion; projects to increase the non-tax funding base of stations; enhanced programming capacity through co-productions and other ventures; and technological advances. (26)

- The PBS Adult Learning Service (ALS), which distributes college-level telecourses, will inaugurate its first full year of direct satellite service on 27

August 1988. In 1987, PBS started a nationwide ITFS-based distribution system, the National Narrowcast Service, to deliver video-based professional training to workers across the country. (27)

- Public broadcasting completed a long-term plan for education. Its first priority is an advocacy effort to make educational, government, and corporate decision-makers, as well as parents, aware of the potential benefits technology holds for motivating and instructing children. PTV stations now relay instructional TV (ITV) programs and support services to more than 18 million students annually. (28)

- WTVS Detroit pledged half its resources ($5 million per year) through 1990 for a wide-ranging project serving youth, WTVS Youth Network. (29)

UNITED STATES COMMERCIAL BROADCASTING

- By 1987, the U.S. viewing environment had become increasingly competitive. Only 27.5% of homes had TV only, with no VCR or cable; 50.9% had VCRs; 49.5% had basic cable; and 27.4% subscribed to pay cable services. (24)

- Pay cable households exhibited significantly different viewing behaviour than the blended figures for all TV households. Nielsen reported the following prime time ratings: (23)

	All TV Households	Pay Cable Households
NBC	16.0	15.4
CBS	13.8	12.1
ABC	13.1	12.3
Independent Stations	6.9	6.0
PBS	2.6	1.8
Basic Cable Networks	4.4	8.6
Distant Signals	4.1	5.3
Pay Cable Services	3.2	11.4

- ABC, CBS, and NBC were all in their first full year under new management. They faced competition from Fox Broadcasting mounting a genuine threat and cable networks gaining audience. They were also under increasing pressure from affiliates pre-empting the network schedule to carry syndicated programs. All network studies predict declines in ad revenues and audience shares in the mature broadcast market. The response of the networks was to radically cut costs. (23)

- Major network news faced declining viewership, staff cuts, strikes (NABET at NBC), and Congressional hearings. Audience share has dropped from 76% in 1979-80 to 63% in 1986-87. News divisions were subject to unprecedented austerity measures. Meanwhile, Ted Turner's news divisions led by CNN moved into profitability. There was growth of regional news cooperatives and of syndicated news services. (23)

- The shakeout of independent stations continued with nearly 20 declaring bankruptcy. TV station trading slowed after a record 1986 year. One hundred and sixty-seven stations with a total value of $6.8 billion changed hands. Between 1984 and 1986, the cost of buying programming and producing local newscasts more than doubled. In 1987, costs stabilized. Issues facing independents include an attempt to restore syndication exclusively (abolished in 1980) and a fight to retain must-carry rules. This pits cable systems and superstations (themselves independents) against broadcast independents (some of which own cable systems) and public broadcasters. (23)

- Cable entered a new era of deregulation and increased competition. Revenues in 1987 reached $11.4 billion including advertising revenues of $1.14 billion. Four hundred and fifty-six cable systems with a total value of $8.9 billion changed ownership. (23) There are four million cabled homes, roughly half of all homes with television. Some concerns are being raised that cable system operators are now an unregulated monopoly with the power to exert an enormous degree of control over what programs are available to viewers. (31)

- Basic cable was the fastest growing segment of the television industry drawing viewers away from broadcast outlets. Prime time ratings rose 23% for the first six months of 1987. Lifetime, Arts and Entertainment, and Nashville Networks joined ten other basic cable services in the black. VH-1, Nick-at-Nite, and The Discovery Channel are at the brink of profitability. Nickelodeon reaches 34.2 million homes, The Discovery Channel--24.3 million, Arts and Entertainment--24 million, and The Learning Channel (TLC)--10 million. Pay cable networks experienced a turnaround in 1987 and now reach 27.4% of all homes with television. (23)

- Shares of estimated 1987 television advertising revenues are: (23)

Broadcast	Network	$8.9 billion	36%
	Local	7.0 billion	28%
	Barter	.8 billion	3%
	Spot	7.0 billion	28%
Cable	Network	$.9 billion	4%
	Local	.3 billion	1%

- There is a chance the U.S. government may restrict commercialization of children's programming and toy-related animated shows in response to initiatives spearheaded by Action for Children's Television (ACT). (30)

- By 1987, major studios had lost their hold on network prime time programming. Nearly 30 of 66 hours of the fall schedule were produced by young, aggressive studios. The majors increasingly are turning to foreign markets. Entertainment is the United States' second largest export earner showing a $4.9 billion surplus with $500 million net from television programs alone in 1987. (23)

- The rise in U.S. production costs slowed from 5% annually to 2-3% in 1987. Increasing domestic production costs had combined with the weak Canadian dollar to motivate U.S. producers to increase Canadian production, with an estimated 33% saving over producing at home. (23)

INTERNATIONAL ENVIRONMENT

- The creation of a commercial broadcasting infrastr 'ure for the global marketing of products is continuing at a rapid pace. Among others, India has adopted commercial television and so has China, potentially the world's largest market in the next century. (23)

- European broadcasting has experienced a period of transition from relatively few public broadcasters providing relatively few hours of non-commercial broadcasting to a commercial environment with new stations delivered both terrestrially and by satellite. Most television stations are funded by a mixture of license fees and advertising. The revenue from license fees in Europe is flat and that from advertising is growing. (32)

- New media channels in Western Europe will have to be filled primarily by U.S. content because not even the largest nations in Europe are capable of producing the massive amount of mass appeal programming these channels will demand. (33)

- Existing European broadcasters have increased their hours broadcast by an average of 5.4% per year during the last six years. Although there are a large number of satellite channels broadcast in Europe, these are only available to a small proportion of the viewing universe. Hours of television available to viewers has grown throughout Europe, but the number of viewer hours has not increased at the same rate as the growth in available television hours. (32)

- On average, national broadcasters produce between 40% and 60% of output themselves. For commercial stations, this is generally lower. For instance, BBC 1 and 2 produce 61%, co-produce 2%, purchase from foreign and domestic sources 6%, and repeat 31%. Channel Four on the

other hand produces 1%, purchases 23% foreign and 60% domestic, and repeats 16% of their broadcast hours. (32)

- It is forecast that about one quarter of European homes (some 31.3 million) will be capable of receiving satellite television by 1995. Before that date, over half of all Europe's TV channels will be wholly supported by advertising revenue. Public broadcasters will suffer a drop in audience share. (34)

- A massive restructuring of Australia's print and broadcast media is in progress. 1987 saw falling advertising revenues and increased costs for foreign programs due to a weaker dollar. (35) The country has entered a period of deregulation with increasing concentration of ownership of commercial broadcasting. The government articulated a policy for equalization of television services across the country. All areas, urban and rural, will have three commercial services and the Australian Broadcasting Corporation (ABC). (36) The government's remote area satellite TV policy experienced major difficulties and high costs. The first Aboriginal-controlled remote service, Imparja TV, went on air in Alice Springs. (37)

- Australia's public broadcaster, ABC, has undergone a year of controversy marked by staff cuts and management reshuffles. Government funding has been cut and this trend is expected to continue. A new focus on achieving audiences has resulted in share increases in all cities after a decade of continuous share erosion. In part, this resulted from programming decisions to increase entertainment programs in prime time, to increase first run Australian content, and to achieve major increases in Australian drama. (35)

- New Zealand announced plans to deregulate broadcasting, opening the industry to new radio and television companies that would not need licenses to operate. The stated aim is to improve economic efficiency and consumer choice. The government will retain public ownership of two TV channels. The Broadcasting Corporation of New Zealand will be restructured to make it operate on commercial and competitive lines. (38)

- Japan now has 32 million TV households and cable penetration is 15%. The public broadcaster, NHK, now operates three television networks: general, educational, and a new direct broadcast satellite (DBS) service. The DBS service is a 24-hour global news service, carrying news broadcasts from Japan and countries around the world. (37) NHK's developments of DBS and high definition television have put a severe strain on its budget. It has been cutting costs and reducing staff. (39)

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GOVERNMENT ENVIRONMENT

> ***Major Challenges for TVOntario***
>
> *Possible new copyright legislation that would create difficulties for the educational institutions with which TVOntario works.*
>
> *Under the Meech Lake Accord, if ratified as presently written, possible tensions between the federal and provincial government over social programs, women's rights, and aboriginal people's rights.*
>
> *A federal election possibly in Autumn 1988 that could mean revision of existing federal priorities relating to funding.*
>
> *Stronger emphasis on education and fostering an entrepreneurial culture to meet the province's goals for creation and introduction of specialized and high-technology products that can compete in global markets.*

CANADA

- The Canada-U.S. Free Trade Agreement was signed by both countries in October 1987 and, if ratified by both countries, comes into effect 1 January 1989. By 1998, all tariffs between the countries will be ended.

- Cultural industries are exempt from the provisions of the Agreement. This exemption which includes TVOntario covers any enterprise engaged in the publication, distribution, or sale of books, magazines, periodicals, newspapers, or printed music; the production, distribution, sale, or exhibition of film or video recordings and audio or visual music recordings; and "radio communication in which the transmissions are intended for direct reception by the general public and all radio, television, and cable television broadcasting undertakings and all satellite programming and broadcast network services." The exemption does not apply to advertising and promotional services and to commercial educational correspondence services. Existing duties on records, tapes, and film will be eliminated within 10 years. (1)

- The agreement sets out an obligation for Canada to recognize retransmission rights which would likely take the form of a compulsory license under the proposed Canadian Copyright Act with a level of royalties to be determined by an independent tribunal, or in other cases, only with authorization of the holder of the copyright. Local broadcast signals would be excluded from proposed retransmission rights. (2)

- Although cultural industries are declared exempt from the Free Trade Agreement, there are still concerns that under free trade the historical east-west bonds that unite Canada culturally, politically, and economically would give way and that north-south interests would prevail especially if the costs and benefits of free trade are unevenly distributed across the country. (4)

- The impact on schools and other educational institutions within new Canadian copyright legislation could be severe and awaits clarification. As of April 1988, the House of Commons proposals for Phase I of the Copyright Act, which are very favorable for the private sector, artists, and performers, are being criticized in the Senate by opposition senators. (3) The Senate has suggested revisions which may delay the Bill, causing it to die on the order paper in the event of a fall election. Phase I deals with computer programs which would now receive copyright protection with fines for piracy, with protection of industrial design, with the establishment of a copyright board to set royalty rates and license use of works with exemptions for collectives and implications of this for libraries, with protection for choreography, with new fee structures for sound recordings, and with the right to exhibit in public. Phase II of the Act is still scheduled for introduction into the House in Spring 1988. This is the phase that concerns educators and in particular media educators who want educational exemptions allowing classroom use of materials and off-air taping, rights of access, and fair use. At present, Phase II does not contain a specific exemption for education. If, as in the U.S., classroom use would be deemed to be "private" rather than "public" performance, it would be better for educators. There is opposition to this from business, industry, and the arts communities. Unfortunately, as presently proposed, the Copyright Act would put Canadian artists and performers in opposition to educators for economic reasons. (25)

- In response to the concerns of the Council of Ministers of Education and other educators, a consultative committee consisting of teachers, trustees, and producers of creative materials was formed in Fall 1987 by the Minister of Communications to offer advice regarding Phase II.

THE MEECH LAKE ACCORD ON THE CONSTITUTION

- Debate continues over negotiations to amend the Meech Lake Constitutional Accord signed in June 1987 by the federal government and

the premiers of the provinces. Since that time, the Accord has been ratified by The House of Commons, Quebec, Saskatchewan, and Alberta. In order to become effective, the Accord has to be ratified by all the provinces by June 1990. The Accord, with the objective of reconciling Quebec with the Constitution of Canada by recognizing Quebec as a "distinct society," has been criticized as jeopardizing equal application of The Charter of Rights and Freedoms including women's and aboriginal rights, allowing the Senate to influence legislative power, and weakening the degree of federal control over existing and future federal-provincial arrangements. (5)

- Since the Accord was written 1987, there have been political changes in Manitoba and New Brunswick which could create political uncertainties for ratification by all provinces. Critics view the Accord as being in contradiction to historic federal aims to make Canada a bilingual and multicultural society and say that the Accord's ambiguities will result in two unilingual Canadas--an English one outside Quebec and a French one within that province. (6) The Ontario Association of French-Speaking Jurists states, as do other francophone groups outside Quebec that under the Accord governments outside Quebec are obliged to "promote"--but not "preserve" the rights of their francophone minorities so that the protection of the rights of French-speaking Canadians is not the same everywhere in Canada. On the other hand, within the "distinct society" clause in the Accord, Quebec has agreed to "preserve" the existence of English-speaking Canadians "also present in Quebec" but not to "promote" them. This has already led to recent difficulties in Saskatchewan where the provincial government has exempted itself from having to translate all its laws into French for the purpose of providing full trials in French. (8) In Alberta, francophones are predicting that the Alberta government will make English the only language in that province.(9)

- Ontario has committed itself in favor of the Meech Lake Constitutional Accord and the government will introduce a resolution to establish a select committee on constitutional reform to consider the Accord. (13)

ONTARIO

- A new Ontario budget was introduced by the Treasurer of Ontario on 20 April 1988. A tax increase totalling $1.3 billion was announced to meet the costs of government programs and to decrease the deficit. The tax increases will include an increase of 1% in the sales tax, raising it to 8% and an increase in provincial personal income tax. There will be an increase in the surtax on high income earners to 10% of Ontario income tax in excess of $10,000 replacing last year's surtax of 5%. The total corporate tax increase will be $50 million. The sales tax increase will bring in nearly $1 billion in 1988 and the income tax increase will bring in $286 million in 1988. Sales tax credits will be extended for low income

households. Forty million dollars will be devoted to exempting the poorest Ontarians from paying income tax and an additional 30,000 individuals will receive free health care.

- Spending is expected to be $37.9 billion overall, an increase of 8.6% over 1987's spending target of $34.2 billion. There will be a budgetary deficit of $473 million with a rise in the accumulated provincial dept to $38.8 billion. This includes $308 million for higher debt charges. One-third of the spending will go to health care, a rise of $1.2 billion over 1987. The budget for health, $12.7 billion, is almost three times that for education. The Treasurer points to a continuing reduction in federal transfer payments which will cut federal revenue for health care and post-secondary education by almost $1 billion. The proportion of federal financing in these two areas has dropped from more than half in 1979-80 to less than 40% in 1987. Some provincial lottery profits, previously restricted to recreational and cultural projects, will be used for hospital operating expenses.

- There will be a three-year, $900 million capital commitment that will support an estimated $1.3 billion in elementary and secondary school construction, especially in rapidly growing areas, creating 100,000 new places for pupils. There will be a four-year, $440 million commitment to address capital needs of universities. This figure is less than university faculty and students hoped for and which they claim will result in eligible students being turned away from universities in 1988-89.

- A spending increase of 38% was announced for housing with an additional $2 billion available over three years to help finance 30,000 affordable rental housing units.

- Manufacturers will receive $120 million in tax breaks for investing in new equipment. There will also be a research and development tax break for technological research of $4 million. Unemployment is forecast to fall 1% to 5.1% with 180,000 jobs being created in 1988-89. (28)

- The Speech from the Throne delivered in November 1987 set forth commitments to affordable housing, environmental safeguards, health and safety protection in the workplace, development of strategies for healthy living, improvements in elementary education and literacy training, greater support for seniors and the disabled, and a social service network sensitive to the needs of ethnic and cultural groups. (13) A Premier's Council on Health Strategy was named at the end of 1987 to look into innovations in health promotion but guidelines are not yet developed. The establishment of two pilot occupational health and safety centres for workers in Hamilton and Toronto will be funded for three years with $5 million under the Ministry of Labour. The goal of these centres is to contribute to the prevention of occupational disease by means of independent assessment of work-related disease, research, training of

health professionals, monitoring of workers, and improving the accuracy of diagnosis closer to the workplace. (24)

- In March 1988, an announcement was made that the Premier's Council $1 billion Technology Fund will provide up to $14.3 million for industrial research projects that will link the private sector with university centres of excellence. These projects are in the fields of development of advanced ceramics, development of new plastic materials, utilization of a less-polluting method in pulp and paper production, and development of a laser microscope system. Another project of particular interest to TVOntario is the research and development project to develop the next generation of broadcasting video product lines that would use digital rather than analog technology. Five Ontario companies will work on this project which will receive $6.3 million from the Technology Fund over four years. Also of interest to TVOntario is the Telecommunications Research Institute formed by a network of the University of Ottawa, Carleton University, Queen's University, and McMaster University. The Institute will carry out fundamental and applied research in multiservice digital networks, radar systems, mobile and satellite systems, photonic networks and systems, and electromagnetic compatibility. Thirteen Ontario companies are members of the Institute. (20)

- On 11 April 1988, a report of the Premier's Council examining the state of the Ontario economy was released. The main thrust of the report centred on Ontario's failure to date to create an alternative to the province's traditional manufacturing base by developing Ontario-based companies capable of competing in computers, biotechnics, or other high-growth industries. Included is a 14-point program of industrial restructuring. The report also warns of danger in dependence on trade with the U.S. and states that the Ontario economy will be made worse by the Free Trade Agreement. The report recommends the establishment of a risk-sharing fund to encourage export companies to invest in developing new products or to help market products outside Canada. It also recommends that the province should not automatically assist companies whose imminent collapse threatens large numbers of jobs. It recommends tax credits for investors so that equity capital can be provided for firms operating in areas of present strength (auto parts, forestry products, specialty chemicals) to restructure and improve their productivity. It also advises tax incentives for research and development and subsidies of up to 50% of salary to firms that create new jobs for technical people. This is the first report of the Premier's Council and is devoted to incentives for new patterns of productivity. Later reports will deal with labour adjustment for industrial re-structuring, skills training, and changes in education needed to produce students better equipped for the highly competitive new technological world. (21)

- The development of Northern Ontario's economy remains a high priority. Government programs will focus on creating diversification in one-industry

communities. Through the Northern Development Program of the Ministry of Northern Development and Mines, loans and grants are being provided to small business to provide new jobs. A new five-year initiative, with $100 million from 1985-1991 has already been committed for the Northern Development Fund. Programs under this fund will modernize industry, create entrepreneurship, enlarge tourism, support development of labour skills, and meet the social needs of native peoples and other residents. A new fund, the Northern Heritage Fund, will support programs to help single industry communities. Nine northern regional councils will provide local input for use of this fund. (15) The new Ontario budget has announced $360 million for this fund over 12 years.

- Ontario Bill 154 is designed to eliminate gender-biased pay discrimination in the private and broader public sectors. As of January 1988, organizations including TVOntario, are required to design and post plans to address wage disparities by phasing in "equal pay for work of equal value." Skill, effort, responsibility, and working conditions are the criteria used to determine job value. If no objection to the posted plan is filed with the Pay Equity Commission, the plan is considered acceptable. By 1991, public sector employees must begin making annual adjustments towards pay equality equal to at least 1% of their payroll in the previous year. Bill 10 is similar legislation for pay equity in the Ontario Public Service. The Employment Equity Incentive Fund for the broader public service (school boards, universities, colleges, hospitals, and municipalities) has been given $12 million in funding to 1992. (26)

- Ontario's Pay Equity Commission decided in April 1988 that it will not issue regulations for the time being so that employers can work out their own solutions to equalizing men's and women's pay. The Chief Counsel for the Commission has stated that the process of achieving pay equity should be self-managed. Employers have up to six years (i.e., to 1994) to work out a system of equal pay for work of equal value. The Ontario Commission is preparing a set of guidelines which will be available in Summer 1988. (23) The Commission has developed a series of workshop presentations to give participants a detailed overview of the legislation and how to implement it.

- The French Language Services Act (Bill 8) became law in November 1986 and, as part of the implementation plan, the Management Board of Cabinet, on recommendations from the French Language Services Commission and the Office of Francophone Affairs, began allocating funds to provincial Ministries in the 1987-88 fiscal year. A total of $11 million from the Consolidated Fund had been set aside for the first year. A breakdown of the distribution of the funds and of the recipients is not yet available. In 1988-89, provincial government agencies will receive priority and finally, in the third year of the implementation plan, provincial associations will be funded. (22)

- The Office of Francophone Affairs has had a fund to assist non-profit Franco-Ontarian community associations to provide French-language services for the past seven years. This $870,000 fund (in 1987-88) is distinct from the funds made available through the Management Board of Cabinet. Demand is high as proposals for amounts totalling over $3 million were submitted in 1987-88. (22)

- In November 1985, the Ontario Film Development Corporation (OFDC) was created as an agency of the Ministry of Citizenship and Culture to stimulate employment, investment, and growth in Canada's independent film and TV industry, and foster a viable industry in Ontario. Specifically, the OFDC offers financial assistance in the form of investment, loans, and grants for Ontario-based independent producers and filmmakers to develop and produce their products and assists independent Ontario distributors to market Ontario products. It also encourages foreign film and TV producers to shoot in Ontario. The OFDC was initially funded with $20 million over three years to 1989 and is awaiting an extension of funding.

- In its first year of operations (1986-87), the OFDC committed to invest $5.4 million in 40 Ontario-made film and television productions, 81 scripts in development, and 27 special projects (travel, workshops, observers, etc.) with film receiving by far the largest portion of the funding. This investment helped create $40.7 million in new production and 42 new jobs. In addition, the Locations Program, using a budget of $500,000, attracted 63 U.S. and domestic film and TV productions to Ontario contributing $190 million to the economy of Ontario. More than $10 million in export sales was achieved at a cost of $200,000. (18)

- Several low-budget films (under $415,000) assisted by the OFDC were successful at the Toronto Festival of Festivals in 1987 and one film (I've Heard the Mermaids Singing) won the Prix de Jeunesse at the Cannes Film Festival. Twenty-five OFDC projects were nominated for Genie awards in 1988. Both private sector television and TVO productions have been assisted by the OFDC. The problem of obtaining adequate screening time in Canadian theatres continues. American films consume 93% of film time, foreign films--4%, and Canadian features--3%. (19)

- In 1987, 64 film and TV productions were served by the Location Promotion department of OFDC representing $214.1 million spent in Ontario, an 18% increase over 1986. Of this, Canadian productions and co-venture productions accounted for $116.8 million and American productions--$97.3 million. (19)

- The Ontario Arts Council (OAC), in March 1988, asked the provincial government to triple the OAC's $28 million budget over the next five years. This would give OAC $96.3 million by 1992-93. The increase would go to artists and art groups and to the province's major theatre and music performing groups. There would also be increases for audience and

community development including touring and outreach programs particularly in Northern Ontario. The professionalism of artists and art groups would be enhanced by workshops, support of innovative work, and research and promotion. New programs would be created for youth and for schools. (10) Ontario is estimated to have 46% of all arts activity in Canada while containing 35% of Canada's population. Ontario's cultural industries produce between 75% and 90% of English-language Canadian books, feature films, sound recordings, and television drama. (11) If the Ontario Arts Council receives the funding it is requesting, the impact on the arts and on cultural institutions and industries in Ontario could be very extensive.

- The Ontario Science Centre will be looking to a membership program, cooperation with the private sector, marketing of its expertise, and the development of consumer products to supplement its funding in order to engage in a major expansion program through 1993. Plans for expansion include the development of a "science playground" which would take advantage of the Centre's natural parkland site, the launching of an adult education program, production of a major in-house generated exhibition every two years (sports in 1988 and psychology in 1990), and making the Science Centre bilingual. (27)

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TECHNOLOGICAL ENVIRONMENT

Major Challenges for TVOntario

Some of the major technological challenges are the financial implications of the technological advances and the long-term timing of any major technical purchases and upgrading.

The use of stereo sound for production, distribution, and in receiving sets is already apparent and presents the most immediate, essential technical modification challenge.

It is expected that high-definition television and highly digitized production and distribution technology will eventually be in common usage. Especially with HDTV, North American development of equipment and industry standards has been accelerated due to Japanese advances and fear of broadcast bypass.

Anik E satellites will be able to provide more broadcasting services in both C- and Ku-bands on a nation-wide footprint. This may influence policy decisions on such issues as a nation-wide educational service.

The position of cable as the major distributor of television programming is unlikely to change. The positioning of TVOntario English- and French-language services on the dial for UHF or cable remains significant as the range of services expand.

CABLE

- The latest data available from Statistics Canada shows that by August 1986, over six million Canadian homes subscribed to cable, a 7.2% increase over 1985. Over 85% of Canadian homes are in cabled areas. The majority of Canadian homes (67%) are now connected to cable. The penetration rate for premium cable services (including households that receive premium as a part of basic) rose to 25.5% in 1987. (1)

- Converter penetration in Canada as of November 1987 was 62% of cable households. Ontario has the highest rate at 73% of cable households, reaching as high as 84% in Toronto, Hamilton, and Kitchener. (1)

- As of March 1988, cable penetration in the French mother tongue Ontario population is at 73% of people compared to 75% in the overall population. (29)

- The Canadian cable industry made a presentation in October 1987 to the House of Commons Standing Committee on Communications and Culture, in which it outlined the changes that the cable industry is anticipating in the decade ahead. The following predictions were made:

  - 50 channels, and in some centres, 80 channels;

  - Transactional options such as teleshopping, telebanking, and information retrieval, as well as HDTV and digital audio would be explored or provided. (2)

- The Ministry of Culture and Communications had received 105 applications to serve 99 northern communities under the Television Extension in the North (TENO) capital grants program. As of March 1988, 15 of these applications had been approved. (3)

- Various areas within the cable operation are expected to grow--channel capacity, converter penetration, and projected capital expenditure. By 1990, cable operations predict pay-per-program, premium quality services like HDTV, video downloading, local advertising inserts, and third-party access as contributing to their profit. Possible non-programming services include classified ads, security and alarm systems, business and information data, and some transactional service by 1990. Most of these changes would be in larger cable systems. (4)

- As of December 1987, the number of Ontario subscribers to the premium cable services are: (11)

First Choice	432,056
MuchMusic	567,358
The Sports Network	580,538
Super Ecran	4,126
Telelatino	94,435
Chinavision	6,943
Arts and Entertainment	353,864
Nashville Network	413,177
CNN	345,006
CNN Headline	243,621
Learning Channel	96,732
Financial News	141,035
Country Music	91,488

- Four of the new specialty cable TV channels recently approved by the CRTC are to be transmitted across the country via the Anik D2 satellite. However, many of the smaller cable companies may be unable to afford the equipment to receive the signals from Anik D2, especially as so few signals will be carried on the new satellite. The services are the religious, weather, the international French-language channel, TV5, and the uncertain CBC all-news channel. (5)

- In Ontario, approximately 1.2 million households have access to alphanumeric services ranging from phototext to digital consumer channels. The CRTC prohibition on moving video on alphanumeric services is seen as the prime factor preventing the cable industry from exploring the full market potential of these services. (11) The Canadian Home Shopping Network is now applying to the CRTC for a home shopping specialty network license so that it can use motion and live hosts/hostesses. (6)

- In the U.S., home shopping may have peaked at approximately 15% of cable subscribers. The current level of revenue is earned by repeat buyers rather than any expansion of market. There are multiple home shopping services offered, many of them on a nation-wide basis via satellite. Development of complementary services (i.e., Fashion Channel, Travel Channel) is seen as far better for the business than increased competition. (7)

- Bell Canada is running a trial of Integrated Services Digital Network (ISDN) from November 1987 to October 1988. ISDN is the total integration of all voice, data, and image communications in digital form on the existing two-strand copper wire or fibre optic system. The trial involves employees of three federal departments who will have remote access to file servers, shared personal computer screens, and other office services to assess. Among other applications being evaluated is the viability of "telecommuting" for some employees of Communications Canada. (9)

- The star-switched fibre optic loop for premium channel distribution appears quite attractive as a means of ensuring a service of high technical quality. However, a widespread move to this does not appear to be on the horizon until perhaps the turn of the century. (10)

SATELLITES

- The two Canadian Anik E satellites are still scheduled for launch in 1990. Each will have 24 transponders in C-band and 16 transponders in medium-power Ku-band. These satellites are improvements over the previous generations in the extension of Ku coverage northward, coast-to-coast Ku-band capacity, simplified ground-receive technology, and increased reliability. The cost of transponders will also be higher for

broadcasters. The satellites will have a life span of up to 15 years. Spar Aerospace is building the satellites and they will be launched by Ariane. (12)

- Services will be transferred from the Anik C and D series satellites after several months of testing. By the end of 1991, the traffic transfer will be completed. (12)

- The Ku-band technology is superior because of lack of microwave interference. The scrambled C-band signals may also increase pressure for Ku-band direct-to-home distribution. (21)

- There will be a steady conversion from C- to Ku-band over the next few years. (13)

- Superchannel has applied to the CRTC for a license to sell its signal to viewers across Canada who own home satellite dishes. Superchannel, which would have to move to the Anik D1 satellite, would then be in direct competition with First Choice in Eastern Canada. Superchannel would become part of the direct-to-home package of channels marketed by CANCOM. (14)

- After transmitting by microwave for over 25 years, CTV is changing to satellite distribution. The switch will be made in September 1988 and CTV will begin to broadcast in stereo. (15)

- Since July 1987, NHK in Japan has been broadcasting two channels by direct broadcast satellite. By May, around 140,000 households had been equipped with the necessary reception equipment. A new DBS antenna capable of receiving Ku-band signals has been developed that is only 45 cm (18 inches) in diameter and costs 120,000 yen (approximately $1,300 Canadian). Other manufacturers are also developing small, inexpensive antennae that they hope can be used in the U.S. market as well. (16)

- The German direct broadcast satellite, TV-SAT, a Ku-band satellite launched in November 1987, cannot be activated. The launch of the French DBS has consequently been delayed as the two share similar design. The European broadcast satellite industry has had continuous difficulties with the territory. (17)

HIGH DEFINITION TELEVISION

- High Definition Television (HDTV) in North America continues to be uncertain, although most broadcasters recognize the need to adopt it eventually. Both production and distribution standards are necessary, but incompatible systems are being developed. The Japanese plan to distribute their 1,125 line signal by DBS in 1990. It is expected that high-

definition VCRs will be available by 1991. Also by 1991, HBO in the U.S. plans to begin delivering high definition through certain cable systems. (19)

- In 1981, Japan first demonstrated high definition video pictures. This has now been refined to the MUSE system which uses 8.1 mhz, incompatible with North American NTSC's 6 mhz limit. MUSE would require adapters for all TV sets and increased spectrum space--both contentious issues. However, by 1989, NHK plans to have HDTV production equipment on the market, followed by TV receivers, videodiscs, and VCRs by 1990. (19)

- An advanced high-definition (ATV) system that is fully compatible with the current NTSC standard was developed by NBC and other partners. It uses only the 6 mhz bandwidth of a current broadcast TV channel and so would not require any additional spectrum. The Advanced Compatible Television System (ACTV) has been demonstrated only as a computer simulation. This would use a single 6 mhz bandwidth to transmit a picture of 1,050 scanning lines and is seen as a temporary system only, moving more slowly than the NHK system. (19)

- ATV would still require a large capital commitment by broadcasters for new transmitter, antenna, and other equipment. The real disadvantage to some ATV systems is that they still might not be the equivalent of the Japanese High Definition Television (HDTV) that can be transmitted by DBS and cable. By adopting ATV too soon, American broadcasters may lose out on access to additional spectrum space and limit them to a system that couldn't compete with the picture quality of video and cable. Consequently, HDTV is still an uncertain technology. (18)

- Another American system by RCA/Sarnoff would use 9 mhz of UHF spectrum, but would be compatible with NTSC receivers and VCRs, although requiring extra equipment. (19)

- Research into HDTV is taking place in numerous American labs. National interests play as large a role as technological as the maintenance of the North American broadcast equipment superstructure is crucial. Adoption of MUSE could render billions of dollars of equipment obsolete. (19)

- At the 1988 National Association of Broadcasters meeting, it was stated that the cost of taking any one of the "compatible" ATV systems from their present state to large scale implementation would cost somewhere between $50 and $100 million (U.S.). However, most of the broadcasters present at the meeting still pressed for an accelerated program toward a compatible transmission system. The terrestrial broadcasters are feeling the threat o' bypass as VCRs, cable, and direct satellite broadcasters move toward HDTV capacity. (28)

- The likely scenario for HDTV introduction will be first via VCRs and large screen sets, then via satellite to theatres, and finally via satellite to cable.

- For cable operators, as well as broadcasters, HDTV has become more important in the last year. As its advent seems closer, cable companies are looking at compatibility, standards, and timing on HDTV. Sending an HDTV signal requiring more than 6 mhz down a coaxial cable could force cable operators to find more space or dislodge services. (19) Skyline Cablevision in Ottawa claims the ability to provide spectrum for up to four HDTV channels now. (13)

STEREO

- The American networks are making major commitments to stereo broadcasting as set penetration reaches 10% in the U.S. By 1989, 90% of NBC affiliates will broadcast all prime time hours in stereo. CBS will be broadcasting all its programming in stereo by Fall 1988. PBS airs 35-40 hours per month in stereo--more than ABC and CBS. (20)

- The biggest hindrance for broadcasters is cost, as it is estimated that the NBC and its affiliates have spent between $25 and $50 million to go stereo. It also costs an extra $15,000 to produce a stereo network show. For satellite-delivered cable channels, a separate encoding device ($1,500-$2,000) for each channel is required. (20)

- Stereo television sets are about 7% of all TV sets in the U.S. in 1987. It is predicted that this will be 30% of all sets by 1991 and 40% by the mid-1990s. (20)

- Stereo television will be commonplace one day, but precisely when is still an open question. (20)

- Stereo television in Ontario is broadcast by Global in Bancroft, Midland, Paris, Sarnia, Toronto, and Uxbridge; CHEX in Bancroft and Peterborough; CKCO in Huntsville, Kitchener, Sarnia, and Wiarton; CHCH in Hamilton; CFTO, CFMT, and CITY in Toronto. (26)

- By 1990, one in four Canadian households will have a stereo-capable TV set (now about 100,000 sets) and 15 U.S. TV stations close to the border will be beaming their stereo signals into Canada. (21)

- The CRTC is seen as urging broadcasters to convert to stereo sound because of an increasing number of complaints from viewers concerning the lack of stereo on Canadian television stations and the substitution on cable of monophonic Canadian signals in place of stereo signals on U.S. channels. (27)

VCRs

- In November 1987, 51% of all Canadian television households had a VCR. Ontario ownership is also 51%, although only one Ontario city (Thunder Bay) is in the top 15 markets for VCR penetration. (22)

- Enhancements to both VHS and Beta formats allow users to reproduce from videotape a signal superior to that of broadcast television. JVC and Panasonic are producing the Super-VHS (S-VHS) system. Conventional VHS tapes are playable on S-VHS equipment, but tapes recorded in S-VHS is likely to be of interest to industrial trainers in applications where the presentation of high-detail video is essential, and to the most committed home video enthusiasts--those willing to upgrade their systems to maintain the highest available technical standard in productions using home video cameras. These machines were just introduced in the Canadian market early in 1988 at a cost of $1,899 for the VCR and $3,299 for the camcorder. (23)

- Sony, manufacturer of the Beta format VCR, has responded with an ED (extended definition) version of Beta that offers even less compatibility with its conventional counterpart than does S-VHS. (23)

- Videocassette sales in North America reached $3.5 billion in 1987, a 40% increase over 1986. Another 35% growth is predicted for 1988. The prices are coming down to the $40-$20 range and combined sales and video rentals have exceeded movie house admissions. (24)

- In the United States, VCR penetration now stands at 52%. Sales of home VCRs exceeded 13 million units for the second year in a row. (10)

- In 1987, American VCR sales (all types) increased by 2% compared to 1986 sales. The portable camcorder (single unit video camera and recorder) showed rapid growth during 1987 with sales of approximately 1.5 million units, up roughly 40% from 1986. By contrast, sales of home VCR recorders declined marginally during the year. (23)

DIGITAL

- A complete digital studio made up of already available equipment was exhibited at the National Association of Broadcasters conference in Spring 1988. (23)

- Digital processing is already a part of TV studios in the various graphics devices and electronic paint systems used for news graphics, weather maps, sports statistics, and station promos. (23)

- The most popular form of station automation today is the robotic MERPS (multiple event record and playback system). A MERPS typically houses several VCRs, a tape storage carousel, and a robot "hand." It can automatically execute a program schedule for days, locating, playing, and storing away videocassettes of shows and spots. One new model can handle 1,000 cassettes. CBS and NBC have both recently ordered MERPS for their news operations. (23)

- CBC is now building a transportable digital recording unit that will travel across the country, starting in Toronto in October 1988, to give production staff a feel for the difference between digital and analog equipment. It is expected that before long, there will be a post-production house in Toronto offering digital post-production services as an option. This year at the National Association of Broadcasters, a D2 composite digital recorder suitable for direct replacement of one-inch C-format recorders was demonstrated. This recorder costs only 10% more than a comparable analog unit and 50% less than component digital recorders. (13)

VIDEOTEX

- While mass market videotex ventures have been disastrous in the United States, Minitel's success in France is astounding. Hoping to replicate France's experience, several market trials are and will be conducted in Canada and the U.S. The Centre d'excellence en telecommunications integres (CETI) will distribute Minitel in Canada. The Royal Bank, Disnat, and Lotto Quebec are investigating the interactive potential of Minitel for their operations.

- The Caisse Populaire Desjardins of Quebec City has already signed on. Videotron, with its Videoway decoder, is conducting a trial in Brossard, Quebec. A Canadian version of Minitel, called Alex (after Alexander Graham Bell), is being developed by Bell Canada. An anticipated 20,000 subscribers over a two-year period in Toronto and Montreal will test Alex beginning in the Fall of 1988. Alex's service providers, which will number about 20, will include banks, retail chains, travel agencies, financial analysts, and brokers.

- Air Canada, Provigo Inc., and the National Bank of Canada are considering Alex. "Messageries roses" or sexual chat lines will not be permitted on Alex but will be available on CETI. Reminiscent of the incompatibilities of VHS and Beta and of Apple and IBM, Alex, Videoway, and Minitel (CETI) will be incompatible due to differing technical systems, language protocols, and services provided. It must be noted that the causes of Minitel's mass market success in France, such as free terminals and electronic telephone directories (and sexual chat lines in the case of Alex) are not factors in the Canadian trials. Despite the well-publicized failures of past U.S. videotex ventures, three trials are about to be

launched in Houston, in Atlanta and San Francisco, and in Marin County, California by U.S. Videotel, Trintex Prodigy, and GV-10 respectively. (25)

INTERACTIVE TELEVISION

- In interactive television, a television receiver or monitor can send control information to a variety of devices. One of the interactive systems works by modulating the luminance of the picture. This cannot be detected by the human eye, but a laser reader pointed at the television set will be actuated and load a control program into a printer, keypad, or other terminal device, allowing the viewer to copy or react to what is happening on screen. Commercial uses include children using toys to zap television characters, adults playing along with game shows, and print out of reply coupons for advertisements. Educational potential could include having students reply to test questions, receiving extra information on request, or doing writing assignments. (30) An alternate system that uses digital technology may be available in 1989 to corporate and military customers for $20,000. It is hoped that by 1991 the price may have dropped to $1,000. Referring particularly to children's programming, reservations about the commercial and cognitive impacts of the technology have been expressed. (31)

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