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SUMMER EDITION, 1975 VOLUME 4, NUMBER 4

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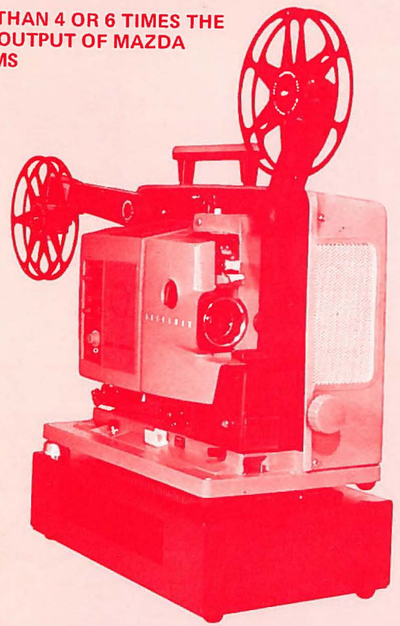

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media message

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CONTENTS

1 EDITORIAL 1
1 FROM THE SECRETARY
2 ACCESS - ALBERTA'S MEDIUM FOR MEDIA
Harry Pensby, ACCESS Editor
5 MANITOBA SCHOOL BROADCASTS
5 NORTHWEST TERRITORIES
Brian Lewis
Program Development Division
Department of Education
6 DESIGNING AN EDUCATIONAL TECHNOLOGY PROGRAM FOR NOVA SCOTIA
Edited version of a speech given by the Hon. William Gillis, Minister of Education
8 O.E.C.A. I: AN ELECTRONIC SANDPIT
Manuel Escott
10 O.E.C.A. II: EDUCATIONAL RADIO AND TELEVISION WHEN YOU WANT IT
Gregory Lass, Manager, VIPS
13 PRINCE EDWARD ISLAND
Lorne R. Moase
Deputy Minister of Education
14 SASKMEDIA CORPORATION
19 A REPORT ON THE SYMPOSIUM ON NATIONAL CONCERNS IN EDUCATIONAL TECHNOLOGY
Fred Johnston
22 NEW BRUNSWICK
G. Ray Steeves
Acting Director of Audio Visual Services
Department of Education
23 THE VIDEO DISC LOOKS READY FOR THE CONSUMER
Reprinted from Broadcast Management/Engineering
26 SOUND IN THE CLASSROOM
Ms. Sonny Lewis
28 NEWS CLIPS
31 NEW RESOURCES
31 COMING EVENTS
31 EDITORIAL 2

editorial 1

The decision by the Federal Government to decentralize educational communications has resulted in considerable activity and planning within provincial jurisdictions. In the case of Quebec and Ontario, the Government's decision was largely reactive; to the other provinces it opened up the whole question of the form, structure and purpose of a province-wide communication's system.

The articles in this issue report on the state and status of provincial thinking and activity at this time (Unfortunately reports from some provinces are not available for this issue.) The huge multi-purpose Ontaro Educational Communications Authority has perhaps the most complex structure and diversified programme, closely followed by Quebec and a financially invigorated Alberta. Events in Saskatchewan, Nova Scotia and British Columbia are in the formative stages of planning. For what might appear to be obvious reasons, little thought about systems has emanated from Manitoba, New Brunswick, Prince Edward Island, Newfoundland, Yukon and the Territories. The pattern set by the provincial "giants" may have intimidated some of the smaller provinces. The thought of a communication's authority in some of these provinces may even seem incongruous to some. But why should it? Surely P.E.I. needs a communications system as much as any other province. If we believe in the "mosaic" image of our country the need for a vehicle that will articulate what is unique about each sector is a vital concern. Moreover the impact of modern communications media is too powerful a force to ignore.

Unfortunately when one talks of "systems" what is conjured up is a picture of television microwave lines, televison and radio production studios, programme development for the open sector or the formal education system . . . . Such solutions hardly seem appropriate, in a cost-effective sense, when one considers the seemingly insurmountable challenge posed by distance and/or sparse population.

No greater service can be performed by the federal government than that it should assist these provinces to realize their potential in the communications field. While current attention is focused on the "have" provinces with their complex hardware systems, a true measure of the value of instructional communications and technology will be determined by events in the lesser provinces where problems can not be so readily resolved by recourse to sophisticated hardware systems solutions. Their problems will be resolved by considerable thought . . . . and imagination.

from the secretary

Bonjour! Hello! This is my last column in Media Message and I am delighted that instead of nagging you about memberships I am able to report that membership renewals are coming in regularly and that – thanks to the Calgary conference – we have received about 110 new members. This is such encouraging news to those of us who have worked so hard to make AMTEC a viable organization.

This is my last column because in early fall I will be leaving the national office – or more precisely, it will be leaving me! The Board of Directors has decided that the office must be located in a city which is more accessible to members than Kingston is. Therefore, the new office will be established in Toronto where the every day duties will be performed by a secretarial-business service. Other duties will be performed by the members of the Board. Thus, for instance, the elected treasurer will really be the AMTEC treasurer – writing cheques, keeping the books, etc. This is a move that I am in favor of – not because I'm so happy to see you go – but because I'm convinced it is necessary for Board members to be aware of things that are happening all year long, not just once or twice a year when an official meeting is called.

The Toronto office will be given a permanent Post Office Box number and telephone number. These will be given to you in the fall. Until then, please continue to send your inquiries to the Kingston address.

In saying "farewell" I would like to thank Fred Johnston for having the courage to hire me two years ago – on my "best" days I could type 30 w.p.m.! All of us must express appreciation to Queen's University for giving us office space and the use of many of their services at either no charge or at minimal cost. Without this hospitality, AMTEC would probably be in serious financial trouble. Finally, I want to thank all AMTEC members for teaching this Southern Yankee more about Canada and Canadian life than any textbook or film ever could.

Au revoir.

ACCESS - alberta's medium for media

by Harry Rensby
ACCESS Editor

ACCESS Alberta is that province's solution to the burgeoning jumble of educational media. ACCESS, the acronym, means Alberta Educational Communications Corporation, and the corporation means coordinated educational media services for all the students, educators, and citizens of the province.

Components of ACCESS include two television production and broadcasting centers, in Calgary and Edmonton, a video and audio dubbing center, a radio network, and a central administration office, in Edmonton.

ACCESS was established as an independent statutory Corporation by an act of the Government of Alberta in 1973. Concurrent to establishing ACCESS, the provincial government set up the Alberta Educational Communications Authority, AECA, through which ACCESS reports to the government. The role of ACCESS was to assemble highly skilled creative people to use communications technology to meet the broad cultural needs of the people of Alberta. The role of the AECA was to relate the work of ACCESS to existing departments, institutions, and agencies which already had been given responsibilities to meet those needs.

Specific mandates given the Corporation were: to provide regional/local production services for educational organizations; to improve efficiency of existing centralized operations; to add a new "theme" level of service for the province as a whole, in homes as well as educational institutions . . . including opportunity for employing Albertan skills and talents; to work cooperatively with other agencies to improve utilization of educational media materials; and, to discourage proliferation of expensive media production facilities.

Larry T. Shorter, former director of communications of the Alberta Department of Education, was named ACCESS President in October, 1973, and in January, 1974, began assembling a small central services staff. In April, 1974, ACCESS assumed full responsibility for the operation (and the personnel) of the educational TV setups in Edmonton, MEETA, and in Calgary, CARET. These became, respectively, ACCESS Television North, and ACCESS Television South. . . Both had been broadcasting in black-and-white to educational institutions and to a limited audience who were subscribers to cablevision in each of Alberta's two major cities. ACCESS assumed responsibility at the same time for Radio CKUA in Edmonton, a non-commercial station which had been funded by Alberta Government Telephones. Shorter and his staff at ACCESS Central Services, augmented by the dubbing center staff and equipment from the department of education, joined with the people at the broadcast facilities and began to develop a province-wide educational media system.

Today, ACCESS Alberta's services include production and broadcasting of colour television programs for schools and people at home, FM stereo radio, a magazine, and free audio and video dubbing service for educational institutions and organizations.

Coming Alive

The first major ACCESS project to see implementation was "Come Alive", an hour-long, five-mornings-a-week television program broadcast throughout Alberta. The program premiered last autumn, is continuing through the summer, and on into the fall. BBM statistics indicate "Come Alive" quickly captured a significant percentage of the home audience in its time slot.[1]

"Come Alive" has been an attempt to interpret educational principles into production. Educationally-oriented, the program was designed with a quick-paced, entertaining, magazine-style format for the home audience of adults and preschoolers, as well as teachers and their classes. Main areas of content concentration have been life-coping skills, learning activities, Alberta history, metrication, and fine arts. Each day, the final 15 minutes is geared especially to schools, with some of these program segments produced in Alberta and some procured outside the province.

In the beginning, "Come Alive" was produced at the colour studios of CITV in Edmonton. In January, however, ACCESS shifted the program to Television North, when new colour equipment was ready there.

The show is done live, Monday through Friday, with an on-camera host and hostess, interspersed with film segments mostly produced by ACCESS crews.

Microwave transmission makes it possible for "Come Alive" to be seen live simultaneously on CFRN Edmonton, CKRD Red Deer, and CFCN Calgary. Satellites of the commercial stations blanket much of the province. CITV Edmonton airs a videotape of the show from one to two p.m. Videotapes are also dispatched to CKSA Lloydminster, which broadcasts "Come Alive" on a one-day delay basis, and to CHAT Medicine Hat, where there is a two-day delay. The program's potential audience coverage area encompasses 85 percent of the population of Alberta.

Colourful programming

What first made colour programming possible at ACCESS Television North was the arrival of a mobile studio van in October, 1974. The 30-foot unit contains a quadraplex videotape recorder, a control room with audio and video control systems, and three Fernseh studio cameras. For the first few months, the van was stationary, producing and recording programs while docked at Television North.

In April, 1975, the unit became mobile. Accompanied by a small generator van so as to be independent of a stationary electrical power source, it began making forays to do on-location colour broadcasting throughout Alberta.

Meanwhile, ACCESS Television North and ACCESS Television South were both revamped to become fully professional colour production houses. Both act as centers to provide subsidized production facilities for educational and approved quasi-educational institutions in the northern and southern portions, respectively, of the province. About 30 percent of the two centers' production capacity is reserved for corporation projects at the provincial theme level; that means, primarily, "Come Alive".

Success of the "Come Alive" program is indicated not only by the surveyed percentage of viewers, but also by their participatory reactions. Enthusiastic letters offering congratulations and suggestions flow in from all over Alberta. In fact, ACCESS Alberta's intention to provide educationally-oriented programming to all the people of Alberta has caused an overlap into some border areas of British Columbia and Saskatchewan. The "Come Alive" mailbag reveals loyal viewers in those areas too.

The positive response to "Come Alive" has stimulated ACCESS to reach for a still larger audience, by inserting "Come Alive" into prime time evening broadcasting. Beginning this autumn, a special version of "Come Alive" will be put together for once-a-week evening viewing across the province. Scheduling details are still being negotiated with the private television stations.

End of cablecasting

In June, ACCESS closed down its cablecasting operations in Calgary and Edmonton. Starting in September, the Corporation will extend its open-air broadcasting operations from one hour on CFAC Calgary up to three hours each weekday, while continuing four hours of weekday broadcasting on CITV, Edmonton.

Reasons for closing down cablecasting are many. Broadcasting reaches larger audiences than cable and viewers don't have to pay additional fees to receive ACCESS open-air programs (which their taxes already support). Furthermore, only about 30 percent of Alberta's citizens are on cable, and many never will be.

Cable subscribers will, of course, continue to receive ACCESS programs, since open-air broadcasts are automatically carried by cable companies.

FM stereo radio network

CKUA Radio coverage is expanding also. In a three-phase plan, ACCESS is extending the station's coverage across the province in stereo.

The first phase of the extension calls for 100,000-watt transmitters in Edmonton, Calgary, Lethbridge, Medicine Hat, Red Deer, Grande Prairie, and Peace River.

CKUA's extended regional service will start in Calgary and Lethbridge in the fall. A CKUA studio for southern Alberta staff has been set up in Calgary at ACCESS Television South. CKUA-FM listeners in Edmonton will enjoy the power increase in mid-June. Transmission is targeted for Grande Prairie, Peace River, Medicine Hat and Red Deer early in 1976.

The second phase of CKUA's province-wide extension will be "step outs" from the above transmission centers to assure reception in such towns as Drumheller, Stettler, Vermilion, St Paul, Athabasca, Edson and the North Peace by the summer of 1977.

The third phase will be to provide CKUA coverage to remaining "holes" in the network during 1977-78.

FM transmission was chosen over AM because of its superior sound delivery and reliable reception and because four times as many AM transmitters would have been needed for blanket coverage equivalent to the CKUA network planned by ACCESS.

CKUA provides an alternative to the programming of commercial radio; it's not in competition with the commercial stations. CKUA's programs appeal to a broad range of different listeners, but most of the material would not attract enough of a general audience to be commercial. Fully two-thirds of CKUA's 139 weekly broadcast hours are devoted to music, much of that classical music, with some shows featuring jazz, blues, folk, ethnic, and contemporary music.

CKUA's programming is not intended to be instructive per se, but, as the station has defined its mission, "to give Albertans access to the learning experience through an innovative radio service structured and designed to expand their awareness, diversify their interests, and enlarge their world". Objectives of the station are outlined as follows:

> To give the widest possible expression of different perspectives on issues of interest and concern to Albertans
>
> To provide a showcase for the aptitudes, talents and skills of Albertans.
>
> To bring to all Albertans the riches of the world in music and spoken word.
>
> To provide a dedicated distribution system for Alberta instructional radio through an FM subcarrier.

Central Services

Presently, the Edmonton-based sections of ACCESS Alberta, Television North, CKUA, and ACCESS Central Services, are located in separate, rented quarters. There is a plan to bring them together in one building in 1977.

ACCESS Central, in addition to being responsible for the policy administration of the overall corporation, oversees the development, production, and distribution of all provincial theme level programs, including the daily flagship series, "Come Alive".

Out-of-province program acquisitions, too, are arranged through Central Services. Last year, ACCESS spent $150,000 on acquisitions, $100,000 of that for programs from Ontario Educational Communications Authority. Alberta has traditionally acquired educational programs produced outside the province, and very rarely sold any of its own productions for use elsewhere. However, that's changing, with the new, high quality of ACCESS equipment and production. A series called "Developing Your Own Business" has been sold to OECA, and other sales are pending. When acquiring programs from outside Alberta's borders, ACCESS negotiates for dubbing rights, as well as on-air rights, to maximize effective use of the programs.

The ACCESS dubbing center makes about 1000 audio and 1600 video copies per month. Institutions wishing copies of programs send in their own blank tape, and programs are dubbed onto this tape free of charge. Alternately, the institutions may buy tape from the dubbing center at bulk cost.

To help acquaint its clientele with ACCESS programs, ACCESS Central Services also distributes a quarterly magazine. Circulation is approximately 35,000, with 22,000 of these copies going to teachers and the remainder to a variety of target audiences. The magazine serves as a forum for educational media generally, and reports on diverse related events in the province, as well as providing publicity for ACCESS programs.

ACCESS has been on-air almost a year now, and the furor of daily broadcast demands has been organized almost to a routine. A main area of concentration now is on other media teaching aids. Slide and tape materials, a variety of print materials, phonograph records, cassettes, and combinations these in multi-media kits are now being developed for circulation. ACCESS is developing, too, towards providing a comprehensive educational media service.

TIME	STATION AREA	% OF CENTRAL TOTAL AUDIENCE	% OF CENTRAL ADULT AUDIENCE	NO. OF PERSONS, FULL COVERAGE AREA
9-9:30 am	CFCN, Calgary	38	82	5,000
9-9:30 am	CFRN, Edmonton	36	64	7,800
9-9:30 am	CKRD, Red Deer CFRN, Red Deer	88	96	not available
1-2:00 pm	CKSA, Lloydminster	42	44	2,800
1-2:00 pm	CITV, Edmonton	o2	o1	1,100
8:30 - 9:00 am	Medicine Hat	18	11	800
	Lethbridge	Not Available		

1. BBM analysis, reporting period Oct. 28 – Nov. 10/74.

MANITOBA school broadcasts

The Manitoba School Broadcasts Branch of the Department of Education is responsible for providing radio and television programs aired for schools by the CBC. Programs are coordinated for both the French and English networks. At present a large percentage of these programs are produced in cooperation with the CBC.

The personnel of the Branch consists of a supervisor, 3 program organizers, 1 cinematographer, 3 technicians and support staff. A limited number of productions are handled in their entirety by this staff.

All Manitoba programs are conceived or selected in cooperation with other branches of the Department of Education. After airing, these programs are available on audio or video tape for use at the convenience of teachers. The staff also acts in a consultive role to other branches assisting them in locating video taping or studio productions.

Some programs are produced in cooperation with the four Western provinces and with the Media Programming Committee of the Council of Ministers.

At present plans are being developed to extend the services of the Branch through the coordination of all departmental media branches. It is hoped that by doing so the role of media including school broadcasts will become more relevant to the teaching situation. It has been felt that the use of media in the classroom could be increased by making our services more readily available to the teachers. In most instances this would mean an extension of services already in operation but not utilized to the desired degree.

Services in video taping, audio taping, photography and production would become a greater support in implanting the activities of other branches in the Education Department.

NORTHWEST TERRITORIES

by Brian Lewis,
Program Development Division,
Department of Education,

A look at a map of Canada will give you some idea of the problems facing the N.W.T. administration. The N.W.T. covers 1,300,000 square miles, about 1/3 the land mass of Canada. From the Yukon border to Baffin Island is 2,300 miles and from the 60th parallel to the tip of Ellesmere Island is nearly 2,000. Yet the total population is just over 40,000 yielding a population density of only 1 person per 32 square miles. The largest centre, Yellowknife, has only 8,000 people. Any settlement of over 1,000 people is large by northern standards and there are many small communities of only 200 or 300 people.

Given the vast distances, the scattered population, and the isolation there would be great advantages to be gained from an educational communications network. But these very features of distance, isolation and scattered population have prevented the establishment of these networks. In a large urban southern centre, a single facility can reach a very large number of people. In the N.W.T. where each population centre would require a separate facility, the dollar cost per person becomes astronomical. Even conventional communications systems of telephone, telegraph and teletype are poorly developed outside the larger centres.

The Anik satellite system requires an earth satellite station to rebroadcast the T.V. signal. These stations are located in about 12 of the larger centres now and more are being installed each year, however, it will be some time before the majority of settlements receive this service. The Anik system, so far, has only provided a "one way" system, beaming down regular southern CBC programming complete with such gems as "The Edge of Night" and "Beat the Clock". The Anik technology would permit broadcasting northern interest and Educational material to northern settlements, but northerners do not have control for access to this system.

Another problem is that many native northerners do not speak English. Programming needs to be done in the native languages but there is no one central language which is universal either. There are speakers of Loucheux, Slavey, Dogrib, Chipweyan and Cree as well as various Inuktitut (Eskimo) dialects. Although many people do speak English as a second language, there are a number of events taking place (such as the pipeline inquiry) which requires the whole population receiving information on specific topics. This would require certain programmes being transmitted 7 times, using a different language each time. Given the small population there is neither the support staff for producing materials for the media nor the funds available to permit the purchase of the hardware or software required.

Because of the problems mentioned the approach of the N.W.T. towards Educational media has been quite restricted. A number of books and other printed material (in English and the native languages) have been produced, but other types of materials are extremely limited. A central film library, and regional resource centres, provide film service to the schools, but the isolation of, and poor transportation to the settlements results in long delays in supplying films.

A small VTR library is also being put together, but VTR equipment is not available in all settlements, nor does it provide the means for mass or "in home" viewing. All settlements do have 16 mm projectors however, and perhaps this would be the medium to use. This however would require an investment in production facilities and personnel to produce good (but not necessarily NFB) quality films. At present the N.W.T. Education Department would like to get into media production, but the whole N.W.T. Government is experiencing severe austerity measures, so expansion of production facilities is very much in the future.

In summary the cultural/language diversity, the vast distances, and the expenses involved, act to severly limit the use of media in the N.W.T. The need for effective use of media is seen, however, and hopefully, in the future, media will come into its own.

designing an educational technology program for NOVA SCOTIA

The products of today's electronic and other technological advances are clearly of tremendous value to teachers and students in our schools. We need only think of the advantages to education that can be derived from cameras, recorders, projectors, radios, television sets, and so on, not to mention the ubiquitous telephone and the awe-inspiring powers of the computer. We know that these things can be used in the schools with great benefit. The question is how can they best be made available, and be used to best advantage. We are fortunate here in Nova Scotia to have co-operation from the Federal government in surveying our stock of these resources, analyzing the problems and possibilities relating to their use in education, and laying plans for wise and effective utilization of these aids to teaching and learning.

The Department of the Attorney-General and the Department of Education of the Province of Nova Scotia, and the Department of Communications of the Federal government have been co-operating over a period of months in laying plans for development of a long-term rational program for using the equipment and techniques of modern technology to enhance the educational process in Nova Scotia.

The Steering Committee for the Nova Scotia Educational Technology Program consists at present of 18 members. They represent the Federal Department of Communications, various Departments of the Provincial Government, the Council of Maritime Premiers, the Nova Scotia Teachers Union, the Nova Scotia School Boards Association, the Atlantic Institute of Education, the Canadian Broadcasting Corporation, the Cable TV Consortium, CN-CP Telecommunications and the Maritime Telegraph and Telephone Company.

The objectives of the Nova Scotia Educational Technology Program are:

- To determine educational needs that might be met by the application of technology.
- To investigate the impacts of current and future technologies on educational needs and programs.
- To determine systems parameters that meet these educational needs.
- To advise on the most cost-effective and appropriate mix of delivery systems to satisfy these educational needs.
- To ensure flexibility for growth and for the incorporation of new technologies as they emerge.
- To ensure compatibility of Nova Scotia hardware systems with each other and with national systems.
- To produce an overall development plan which will rationalize and coordinate existing and planned Nova Scotia efforts and resources involved in educational technology.

The Steering Committee of the Nova Scotia Educational Technology Program has been active since late 1973. As a result of a preliminary study, it is envisaged that the program should be carried out over an extended period of time, in a series of some five major stages. Representatives of the three government agencies involved have approved the activities required for implementation of the initial phase of the program.

The purpose of the initial phase is to define in detail an educational technology program for the Province of Nova Scotia. When this initial work is completed, recommendations will be made to the Ministers involved, in light of the needs, resources and priorities that will be established as a result of the study.

The objectives of the first phase of the program are:

1. To determine current and future possibilities for use of modern technological developments, such as audio-visual equipment and the full range of electronic devices, by Nova Scotia's teachers and school students.
2. To make inventories of facilities and resources in Nova Scotia that will be involved in use of educational technology. These facilities and resources include human resources; equipment and material for use in educational courses; financial resources; technological and production facilities; and communication links.
3. To undertake short-term studies and to initiate continuing studies towards improved use of technology in education.
4. To make recommendations for further study and action in the subsequent stages of the Nova Scotia Educational Technology Program.

Several activities are involved in the Initial Phase. These activities, in support of the phase objectives, are:

DETERMINATION OF NEEDS

It is imperative that the educational technology needs of teachers, students, and school organizations be determined through extensive consultation with teachers and their representatives, students' representatives, school board administrators and trustees, and officials of both the Department of Education and the Atlantic Institute of Education. Some surveys and studies will be needed. Information to be collected will include reasons why educational technology has not been fully successful in the past, preferences for specific technologies, and requirements for teaching purposes and for teacher training.

OVERVIEW OF AVAILABLE FACILITIES AND RESOURCES

Studies will be undertaken and inventories will be prepared of all available facilities and resources which could be involved in Nova Scotia's future educational technology systems. These facilities and resources include human resources, equipment and course material, financial resources, technical and production facilities, and communication links. The studies will examine the current and potential use of these resources, and their relative effectiveness.

COLLECTION OF SUPPORTIVE DATA

Additional data collection will be undertaken to ensure that all information relevant to the Program is considered. This will include socio-economic data, educational organization data, information on technical and technological developments, and information on probable future standards of educational technology equipment and systems.

SHORT-TERM STUDIES

Studies will be undertaken in areas where it becomes apparent that a fairly simple application of educational technology can produce immediate improvements. This activity will involve short-term organizational, operational research and engineering studies. Among those now identified are: an operational research study of the distribution of video cassettes to schools, an engineering study of cable television installation within a school, and an organizational study of the relationship between the Program and the Teaching Resources Clearing-House.

CONTINUING SYSTEMS STUDIES

Systems studies of a more comprehensive nature will also be initiated in areas where long-term organizational, operational research and engineering studies are required; these studies will continue into the Systems Engineering Phase of the Program. Among the areas which may be studied are: the use of telecommunications facilities to interconnect schools, and the creation of a computerized data base to support the activities of the Teaching Resources Clearing-House.

PREPARATION OF RECOMMENDATIONS

Upon completion of these Initial Phase activities, information about needs, facilities and resources, and possible technical options will be integrated to produce recommendations. These will cover the scope, time-scale, allocation of resources, and approaches to be used in subsequent phases of the Program.

END-OF-PHASE DECISION POINT

Following these recommendations, decisions will be made by the Ministers involved in order to finalize and approve the subsequent phases of the Program.

The work of Phase I has been completed and the report on this initial phase will be released during the late summer. The form and direction of subsequent phases will depend upon the recommendations made in this report.

Editors note: Media Message will report on the progress of the Nova Scotia Program when the Phase I report is released.

ONTARIO o.e.c.a. I: an electronic sandpit

by Manuel Escott

On Saturday night last year some 180,000 Ontario citizens sat down to watch the movie King Kong on television. Not an unusual occurrence, perhaps; Saturday night, after all, is a peak viewing time for movies and King Kong is a classic of its kind. Yet this was a TV movie showing with a difference: it was carried by Channel 19, the educational TV station, and more than two-thirds of the viewers stayed tuned for a philosophical discussion about the nature of evil.

It's this kind of programming which has given the Ontario Educational Communications Authority a high international reputation as one of the most dynamic, adventurous operations of its kind in the world. OECA is breaking ground in all directions and destroying for all time the image of ETV as a talking head saying dull things in front of a blackboard. It is a unique operation because not only does the Authority produce hundreds of programs, it also disseminates them through on-air broadcasting, cable, film and videotape cartridges and cassettes — all supported by massive amounts of printed material. Its hands-on TV workshop is solidly booked for months ahead by students, teachers and adult groups — an electronic sandpit in which child and adult discover new perspectives on everyday objects.

ETV has existed in Canada since the mid-1950s, but those early efforts by the CBC to provide programs for schools were slowed by the problem of broadcasting material to mesh with 10 different provincial curricula. There were some further developments through the formation of META, the Metropolitan Educational Television Association of Toronto, and through the Ontario Department of Education's TV Branch. But it

was the federal government's decision in 1969 to drop the plans for a Canadian educational broadcasting agency that provided the impetus for the formation of the OECA. The Authority was finally established in 1970 with a formidable mandate from the Ontario government: "To utilize electronic associated media to provide educational opportunities to all people in Ontario where the use of such media will complement the educational opportunities being offered by other agencies, or alternatively will provide educational opportunities not otherwise available to such persons . . . and co-operate with other organizations in attaining social and educational goals."

Its birth could not be called trouble-free. There were jurisdictional snags: Education is a provincial responsibility and communications a federal one. And here was a provincial government politically opposed to the federal administration asking for a TV station, with all that meant in terms of propaganda power. The Canadian Radio-Television Commission made it clear that it would license OECA only if there were no interference from the Ontario government. This was spelled out in the OECA Act which gives entire responsibility to the OECA board. The government of the day cannot order the Authority to broadcast or not to broadcast.

The OECA therefore considers itself an autonomous public corporation on the lines of the British Broadcasting Corporation. Its 13-member board, under the chairmanship of Ranald Ide, is appointed by the Ontario Lieutenant-Governor. The Authority took a further step towards independence by the elimination of a proviso that three civil servants had to serve on the board. Board members are drawn from all walks of life —— business, industry, labor, education and the arts. They're appointed for a three-year term and can be reappointed.

The concept of a broadcasting service sensitive to the needs of all of Ontario's 8 million population was reinforced by the creation of five regional councils whose members represent a cross-section of their communities. These councils act as a sounding board for OECA board and staff —— identifying educational needs in their areas and explaining the OECA to the public.

How effective have they been? The councils fully backed OECA plans for expansion and were instrumental in getting ETV programs to remote communities through free videotape packages carried by 15 cable stations. They also pressed successfully for close liaison between councils and board. There has been friction between councils and administration, mainly over the tendency of some council members to assume the role of administrator rather than advisor. But both sides realize that a certain degree of tension between them can be healthy and creative.

OECA began all-day broadcasts on its UHF station on September 27, 1970. The Channel 19 signal currently reaches about four million people within a 35-mile radius of Toronto. This will increase to a 55-mile radius when the station's transmitter is placed in the new CN Tower later this year. This fall, expansion of the signal area will be completed by transmitters in the Ottawa, Kitchener, London, Chatham and Windsor areas. The next phase of expansion will bring in viewers in Sudbury, Thunder Bay, Dryden, North Bay, Peterborough, Brockville, Kenora, Kirkland Lake, Sault Ste Marie, Belleville, Fort Frances, Timmins and Kingston. These two phases have been allocated about $12 million (1974 dollars) by the government. OECA has been studying the idea of renting satellite time to beam programs into very remote areas in the province. These areas are currently serviced by videotape packages which have to be flown in and sometimes picked up by a dog-and-sled team. An increasing number of schools in the far north are being equipped with videotape playback equipment.

In the meantime, schools outside of the Channel 19 broadcast area are not being neglected. OECA schools programs are carried by CBC and CTV affiliates and by cable companies. To augment the system, the Authority created VIPS —— Videotape Information Program Service. Schools and adult groups with an educational function can order VIPS packages from an enormous catalogue of 3,000 programs —— everything from the Cuban revolution to how to repair your car —— either free of charge or at a nominal fee. An efficient dubbing service can supply copies of the master tapes in all small formats —— cartridges, cassette or reel-to-reel. In 1974, for example, some 30,000 programs were distributed through VIPS. In addition, OECA's network operations unit is co-operating with library boards to set up videotape services in public libraries. "At the moment, we're in the Stone Age as far as such a service is concerned. There are limitless possibilities," says Kevin Holen, head of the network unit.

OECA was confronted at the outset with the technical problem of bringing ETV not merely to schools, but to the rest of the population as well. Another problem was the production of programs for the wide spectrum of the viewing audience and to hold that audience in the face of the stiffest commercial TV competition in the world. It also meant a marrying of bureaucrats, educators, producers, writers and technical crew: a union whose products would come under the cold, critical eye of the teaching community, the public, government and media critics. After initial setbacks, the union has proved a successful one. OECA's divisions are headed up by former educators with some audio-visual experience or by professional broadcasters with teaching experience. And their products have been receiving more and more critical acclaim, both in Canada and abroad. OECA's programs, in fact, have won dozens of prestigious TV awards, including an Emmy.

The creation and production of programs is the responsibility of the Educational Media Division. It's broken down into three units: (1) Open Sector —— handles programs for the general public and the college-university-adult audience connected with organized education. It produced the award-winning True North series, a witty, irreverent look at Canada and its people; The Education of Mike McManus talk show; Media Circus, OECA's sometime savage look at TV; and Nightmusic, a music-talk show which is drawing a whole new audience to Channel 19. Open Sector programming also includes foreign series such as the BBC's War and Peace plus a whole series of adult-education programs ranging from psychology, chemistry and small business management to health care, literature and native studies.

(2) Schools Programs —— Its primary role is to produce, acquire and encourage the utilization of programs and projects for school audiences from kindergarten through to Grade 13. Recent surveys show that its output is being used by about 73 percent of elementary schools, 82 percent of secondary schools and 91 percent of Ontario's French-language schools. Branch responsibility also includes programs for pre-schoolers such as Polka Dot Door, Sesame Street and Mister Rogers' Neighborhood; and teacher education projects. OECA has, for example, created a Professional Development Materials Bank of film strips, video and audiotapes, slides and publications for use in teachers' staff meetings, workshops and conferences. These are designed to encourage discussion about new trends and alternatives in education and teacher-learning.

(3) French Programming —— About 10 percent of OECA's 5,475 hours of broadcasting are in French to serve the province's 500,000 francophones. The branch has a staff of 20, including four producer-educator production teams. Branch planners have identified pre-schoolers as their major target audience in the next five years. "If they lose their French at that tender age, that's it, they're gone," explains branch director, Leo Lacroix.

About half of OECA's programs are produced by its staff productions teams —— educators, producers, writers and technicians —— and the remainder by freelancers. There is a two-camera (RCA TK44) presentation studio in OECA headquarters on Toronto's Yonge Street and a three-camera mobile production unit. What isn't produced in the studio is done at independent facilities elsewhere in Toronto. Master tapes are brought back to the in-house Ampex/RCA videotape complex for post-production work.

One of the most worrisome areas for the OECA people has been the Open Sector programming —— practically terra incognita for ETV in Canada. But the OECA formula has been paying off, according to Jim Hanley, the Educational Media Division chief and a former teacher and television producer. Surveys show that audience for prime-time evening shows such as Nightmusic, The Education of Mike McManus and the movie-discussion show series Magic Shadows have doubled in recent months. Part of this trend may be due to program quality and part to public revulsion against commercials and the increasing crassness of commercial TV.

A major tenet of OECA philosophy is participation by the public in the operation. As Chairman Ran Ide puts it: "We think the audience should be able to talk back to the television set if they want to." To achieve the two-way TV concept OECA created its Utilization and Project Materials Branch, which operates an in-house TV workshop equipped with portapak cameras, switchers and monitors. The complete workshop package is duplicated in a mobile studio housed in a large van. Branch staffers tour the province with the mission of bringing "media literacy" to students, teachers, education boards and adult groups through the use of mobile studio conferences, workshops, seminars and a vast bulk of printed material.

o.e.c.a. II: educational radio & television when you want it

by Gregory Sass, Manager, VIPS

"I would like to receive a catalogue of OECA's video programs. My particular interest is in the kind of thing I happened to see on Channel 19 in late spring/early summer: it was a well-done and funny dramatization about J.J. Rousseau." This request from a philosophy instructor at the University of Waterloo is typical of the eighty to one hundred letters and telephone calls received daily by OECA's Video/Audio tape Program Service.

"But there is still a hell of a lot to do here," says executive director David Walker, who wants to see a major expansion in the utilization of Open Sector programming. "Volunteerism isn't dead in this country. The motivation to learn is strong. One in three adults is involved in formal learning or wants to be. We have just scratched the surface so far."

OECA has launched a major survey on this subject among Ontario adults and the results will be released soon. The object is to determine what people want from Open Sector programs and what they're prepared to pay for in terms of an increased OECA budget.

Possibly the best tribute paid to OECA's work is the number of programs it has sold to broadcasting agencies in the U.S., Britain, Sweden, Denmark, Italy, Ireland and Brazil –– about $500,000 worth in 1974. It also sells its programs to ETV agencies in Alberta, Quebec, Newfoundland, Saskatchewan, British Columbia and Manitoba.

For the future, OECA will continue to improve program quality and, of course, press ahead with technical expansion. Plans are afoot for co-productions with the BBC and with other members of ATEC (Agency for Tele-Education in Canada, a consortium of provincial ETV agencies). OECA's technical wizards are working on Operation Access, a system which would allow teachers, students, librarians, consultants, producers and the general public to search OECA's complete videotape library by computer and within minutes isolate programs or specific program segments. In short: a determined and comprehensive effort to fulfill OECA's mandate to use every audio-visual technique in bringing quality ETV to all the people of Ontario.

Along the busy corridors of OECA's headquarters there is a high optimism these days, a quiet conviction that they're making history in the field of educational television. There is, too, a serious dedication to the proposition that if TV in Canada is to survive as a major communicator of knowledge and humanistic values, then the OECA is the means by which it will remain alive and healthy.

An elementary school teacher from Mount Forest wants an audio tape on white ants; Alexander Henry High School in Sault Ste. Marie asks for a video tape on checking in hockey; Loyalist College in Belleville orders two programs on Canadian labour history; the Southwestern Regional Library System in Windsor requests a broadcast on herb gardens; the Ministry of Correctional Services requisitions the series, This is Psychiatry; and the director of the Joseph Brant Museum is interested in knowing what programs OECA has to offer on video tape for small museums.

These are only a few areas of special interest that are served through the audio and video tapes produced by the OECA. The Authority is unique in that it uses all three methods of television program distribution – on-air, cable, and tape – and was probably the first major educational television facility in North America to create a department specifically for the non-broadcast distribution of its programming.

VIPS, an acronym for Video Tape Program Service, commenced operations in the spring of 1972 with the publication of its first catalogue, VIPS 1, listing 457 programs. The service was made available to all publicly-supported educational institutions in Ontario, including elementary and secondary schools, community colleges, universities, and schools of nursing.

The aims were simple and demanding. The service was to be fast, inexpensive, of good technical quality, and efficient in terms of recovering most of its own costs. Since it was user-oriented, it allowed for the recyling of customer-supplied tape and was available on any format then in use. This last requirement meant serving thirteen formats of playback equipment produced by ten manufactuers. In short, the service was and still is a custom-dubbing operation.

The response from the schools was immediate and gratifying. The Learning Resources Centre of the Northumberland Board of Education reported to its trustees, "It is the opinion of the learning resources centre that television utilization will increase from the use of VIPS. This service enables teachers to use a program when they wish to use it, and they have control over how it will be used and whether the tape will be kept."

In September of 1972, T.R. Ide, OECA's Chairman, noted with satisfaction that VIPS was "the most significant thing we have done so far." (The Toronto Sun, September 15, 1972).

The time had come to expand. A marketing group was, therefore, established in 1973. Its functions are three-fold.

Most importantly, the group maintains face-to-face contacts with existing and potential users. This is done by means of meetings with teachers, principals, and audio-visual co-ordinators of the Ontario school boards, the faculty and media directors of the Ontario community colleges and universities, and the directors of the regional library systems. Such meetings take the form of informal exchanges of information, identification of programs suited to specific audiences, pre-view sessions of OECA programs, and participation in media workshops sponsored by the Utilization section of OECA.

A second function of the group is the provision of a continuous flow of information to clients about new, acquired, renewed, and expired programs. To consolidate the information, video and audio program catalogues are published annually. These are supplemented by periodic selected program lists. It is of interest to note that, in 1972, every video catalogue mailed resulted in one program request. By 1974, for every video catalogue mailed eight programs were ordered. The symbol used to identify both catalogues and lists is attractive enough to have won an award from the Art Directors' Club of Toronto in 1974.

Lastly, the group acquires programs for non-broadcast distribution. In 1974-75, 241 video programs were acquired free of charge or on a paid basis from sources as varied as The National Film Board of Canada, The University of Toronto, York University, The University of Windsor, Carleton University, the Japan Information Centre, Penguin Books Canada, Rogers Cable TV, The Ontario Law Reform Commission, the Manitoba Department of Agriculture, CFTO-TV, Inco, the International Wool Secretariat, Imperial Oil, OISE, Wilfred Laurier University, and Canadian National Railways.

With two exceptions, the client profile for the service has not changed materially since 1972.

School boards now account for fifty per cent of the orders from the service and their number has increased from 38 in 1972-73 to 61 in 1974-75. By comparison, the number of individual elementary and secondary school clients has remained stable. This means that more and more school boards are establishing master libraries of audio and video programs and prefer to service their own schools by either lending or copying program masters. An example of regional co-operation and dedication to service is provided by the Leeds, Lanark and Grenville County Boards of Education which established a common media centre and switched over to colour equipment in 1974. A year later, the Smith Falls media centre is re-distributing 800 video dubs monthly to one hundred schools. Harry Johnston, a Learning Materials Consultant involved, reports that, "video utilization in our three Boards, and especially the use of OECA video tapes, has skyrocketed."

As well, the demand for video software by public libraries jumped dramatically in 1974-75. Two factors account for this. A number of pilot projects to test in-library and home use of video tape conducted by OECA Utilization and VIPS in the Ottawa, Belleville, Windsor, and Brampton public library systems convinced librarians that television programs should become available through local public libraries. "We think video tape could be a very effective way of learning at one's own speed in one's own home, and be more effective than watching tape or film at the library," said Mrs. Anne Bibby, audio-visual co-ordinator for the Brampton Public Library System, at the conclusion of that experiment. (March – April, 1974, Ontario Education).

Consequently, in 1974, the provincial government through its Outreach Ontario grants enabled each of the thirteen regional library systems to acquire ¾" playback units and video tapes to a value of $10,000. VIPS co-operated with these library systems by making available to them selected packages of English, French, and the OECA-produced Outreach programs on various aspects of Ontario culture. In acknowledging the help of the VIPS service, W.A. Roedde, Director, Provincial Library Service, wrote, "Many thanks for the offer of VIPS programming for the Regional Library Systems. This looks like an excellent program and I very much appreciate your initiative here. We have been trying to stimulate library development in the French-speaking and bilingual communities of the province, and your programs will be very useful."

The number of orders received by the service has increased dramatically by 250 per cent every year since 1972. In 1974-75, over 26,000 copies of video programs and 11,000 copies of audio programs were delivered. At the same time, lead times for delivery have improved considerably every year, and the percentage of faulty dubs remains at a low 1.2 per cent.

The type of video programming ordered, reflects the distribution of the approximately 2,000 VTR's used for learning purposes in Ontario.

The titles most frequently ordered from the VIPS service are, therefore, secondary school, youth, or adult programs. It should be remembered though that ETV programs are received by users in a variety of ways: broadcast, cable, off-air recording, and VIPS.

1974-75 was a year of transition for the Ontario School Radio Broadcasts, as the Ministry of Education transferred responsibility for the co-ordination of production and supervision of distribution to OECA. Both functions were performed by the VIPS service.

Distribution reached a new high of 11,000 copies of programs sent out to schools and school boards. Forty of the latter, received their programs automatically by subscribing to the service on an annual basis. For the first time in many years, too, a catalogue of audio programs was published. Several learning materials co-ordinators periodically take the trouble to express their appreciation for the service in writing.

Jack Whyte, Stormont, Dundas and Glengarry County Board of Education, says of the subscription service, "We find this an excellent way of receiving high-quality dubs of all programs." And Donald Mattison, Kent County Board of Education, adds, "I believe the

concept of the subscription service is excellent. As well, the new schedule with the descriptions it includes is very good."

Obviously, program information is as important as the programs themselves in encouraging utilization. "We have made as many as 8,000 copies of a year's programs," writes Mrs. Carl Morin, cataloguer for the North York Board of Education. "We find that there is a direct relationship between the tapes ordered and the tapes which appear, with descriptive information, in our catalogue. There would also appear to be a relationship between the tapes most frequently ordered and the tapes for which ample information was supplied in past years."

Some suggestions for improvements, emerge from these interchanges, as well. "Looking to the future," Dr. Neil Nelson of the Etobicoke Board of Education comments, "I would like to see radio program tapes produced in stereo, even if the broadcast is monaural." And Don Mattison of the Kent County Board of Education notes, "There appear to be more programs definitely related to Canadian topics this year. This is one area that definitely needs all the resources it can find. If the School Radio Broadcasts devotes a large percentage of its efforts to Canadian topics, you may really have made a significant contribution."

Gene Lawrence, production director of the B.C. Provincial Educational Media Centre, visited VIPS recently. He marvelled – and so do we still – at the ability of OECA's technical staff to custom-dub as many as 4,000 video programs and 2,000 audio programs a month. Considering that the customer decides the format, the number and kind of programs he wants on tape which he may supply himself, and that no high-speed duplicating equipment or even very many heavy-duty VTRs are used, the quality and rate of output are exceptional.

And yet, the potential uses and markets for these non-broadcast media have hardly been tapped. Commenting on two OECA programs, which he recently viewed on video tape, Dr. P.D. McTaggart – Cowan, Executive Director, Science Council of Canada, said, "It (video) is certainly the mode of the future for much of our television viewing. I look forward to the day when tapes can be borrowed or rented for a modest fee for home viewing."

PRINCE EDWARD ISLAND

Lorne R. Moase, Deputy Minister of Education for the Province of Prince Edward Island, comments on the unique situation in that province.

"The prime responsibility of communications development, regulation and promotion in Prince Edward Island is borne by the Department of Industry. The Department of Education limits itself to concerns of educational programming and broadcasting and it has not been very active in this field. Our activity has been limited to participation in co-produced and co-sponsored series such as the Atlantic School Broadcasts and through the Council of Ministers of Education in the Canadian School Telecasts.

One reason for the low level of activity in this area has been lack of access to facilities which would give total coverage of the province. It is only since mid-1973 that the local CBC station has expanded its broadcast pattern to cover the entire province. Time available on this facility is taken up by the Canadian School Telecasts and also the Nova Scotia School Telecasts which are broadcast in this province.

The appearance of cable television on the horizon is giving impetus toward further activity in educational broadcasting. It is probable that cable distribution will be limited to a few larger centers; however, cable, in combination with video tape duplication and distribution service, may give us the capability of province-wide distribution at reasonable cost. We are now at a point where we must take a closer look at the possibilities offered by educational television.

It would be premature to discuss plans for the future as we have hardly reached the planning stage. It is, however, safe to say that the province, unilaterally, will probably never develop services such as O.E.C.A. or the Alberta Communication Authority offer. The expense involved and our limited population make such an undertaking highly unlikely.

The province is now having discussions with the Educational Technology branch of the Federal Department of Communications. These discussions should lead to a study enabling us to better assess our needs, to relate these to the available technology and help formulate plans in the area of educational communication."

SASKATCHEWAN saskmedia corporation:

SASKATCHEWAN EDUCATIONAL COMMUNICATIONS CORPORATION

However current a report on events in Saskatchewan purports to be, the formative activity taking place there renders any print coverage, outdated, according to a recent report from Mr. Larry Shorter, Executive Director of the Corporation (Saskmedia's operational structure). Larry indicates that the Authority – the policy-making body – is operational, as is the Program Policy Advisory Committee. A Board of Directors of the Corporation is functional and in the process of hiring a General Manager who should be on the job by the time this issue goes to press. Most of the staff will be on the job by September and "some useful output" will be obtained by January, 1976. The Editor.

INTRODUCTION

Communications technology, particularly television and radio, dominates the leisure time activities of Canadians. Five million Canadians watch television more than 15 hours a week and two million watch television more than 30 hours a week. Canadians have made more use of communications than any other nation. In business communications, in domestic cable systems, in satellite television we are among the world leaders.

But in the use of communications technology to meet the educational needs of society we have been less successful.

Part of the problem has been a constitutional one. The federal government claims jurisdiction over broadcasting including cable. The provincial governments have clear responsibility for education. With the federal government's direction to the CRTC in July, 1972 which made it possible for broadcast licenses to be held by independent provincial corporations provided their programming was educational the situation was modified. However, jurisdiction over other aspects of communications, including cable, is still to be clarified.

The formation of the Saskatchewan Educational Communications Corporation in May 1974 is, in part at least, a response to the federal direction of a year ago. But it is also a recognition of the importance of communications as an instrument in public education in all its aspects. The Corporation provides a framework within which communications technology can be directly employed to meet needs and to solve problems in the General field of education.

ASSUMPTIONS

In establishing the Saskatchewan Educational Communications Corporation the Government of Saskatchewan is providing a permanent framework within which certain activities can be carried on. These activities are all within the general context of education. Some of these activities which have been carried out under various auspices will be brought together within the general framework provided by the Corporation. These include:

a. radio production and broadcasting now being carried out by the Department of Education Instructional Resources Area.
b. television production which has been carried on by the Department of Education Instructional Resources Area.
c. audio and video tape duplication facilities now operated by the Department of Education Instructional Resources Area.
d. the film and tape library holdings of the Department of Education and Instructional Resources Area.

PURPOSE

The purpose of the Corporation, in broad terms, is to use various means of communication for educational ends. It is assumed that initially the Corporation will make the fullest use possible of existing communication facilities but as time goes on will explore newer technologies as these are developed and become available.

The role of the Corporation is essentially one of service to existing educational agencies, institutions and personnel. It is not intended, for example, that the Corporation on its own initiative, develop courses or materials that are primarily the responsibility of existing departments, agencies, institutions and associations.

CUSTOMERS

The clientele of the Corporation are people of all ages wherever they live in Saskatchewan. While it is impossible to do everything for everybody in any given time period it is assumed that the Corporation has a mandate to assist in meeting the needs of education in its broadest sense. The Corporation will be concerned with helping early childhood education, instruction in schools, post-secondary institutions, community colleges and further education, both formal and informal.

The existing departments, agencies, etc. can come to the Corporation as "customers". They will present their needs in the form of program proposals and it is assumed will pay for the direct costs of the programs as these are completed.

It is assumed that the Corporation will be concerned with both the medium and the message if one assumes the "message" to be in the programs themselves and the "medium" the means of bringing the program to the clientele.

MATERIALS

The programs can be produced by the Corporation in one of a number of forms – radio, television, film, etc. – or they can be obtained from a wide variety of sources both inside and outside of Canada. Where good programs suitable for Saskatchewan are available from other agencies there is no point in the Corporation producing programs on the same subject.

While audiotapes and videotapes will be the major media in which the Corporation is expected to work it is assumed that the other media including film, filmstrips, print, etc. may be employed for certain programs.

COSTS

It is assumed in the above arrangement that Corporation funds pay for the staff and facilities necessary to operate the production centres – radio or television, print, audiotape, videotape, film. These are sometimes referred to as indirect costs or basic costs without which there would be no staff or facilities to do any production work at all. "Direct" costs are deemed to be those which are required to produce the program or series of programs over and above the cost of the staff and facilities. These include cost of writing scripts, the cost of performers, the cost of film, graphics, sets, the cost of necessary travel, telephone calls or any other cost which are incurred because of the production of that particular program or series of programs.

This direct cost/indirect cost arrangement is one of the most fundamental assumptions.

saskmedia authority:

SASKATCHEWAN EDUCATIONAL COMMUNICATIONS AUTHORITY

The Saskatchewan Educational Communications Corporation Act sets up two entities – an Authority (Section 3) and a Corporation (Section 4). Under the Act the Minister of Continuing Education was designated chairman and the member of the Executive Council to whom for the time being Saskatchewan Telecommunications is responsible was designated vice-chairman.

According to the Act the S.E.C. Authority has the following responsibilities:

AUTHORITY RESPONSIBILITIES

Section 3(2)	shall determine all matters of policy in respect of educational communications within which the Corporation shall operate in the exercise of the powers conferred on it by this Act.
Section 10(1)b	establish policy guidelines for the Corporation with respect to the production, acquisition, selling, leasing, distribution, exhibition, etc. of programs and materials of an education nature.
Section 13	approve budget.
Section 21(1)	receive annual report of the Corporation.
Section 22	receive audit (from the Provincial Auditor).

To fulfill these responsibilities on behalf of the S.E.C. Authority a small staff of an Executive Director, an Assistant and two Stenographers will be assembled. The Act also provides for "one or more advisory committees for any purpose in connection with this Act".

A Program Policy Advisory Committee will be established. (PPAC) Its role may be stated as follows:

a. Translate educational needs and priorities as expressed by the official educational community as well as the public at large, into a set of policy guidelines which the S.E.C. Authority would provide for the Corporation.

b. Recommend acceptable interpretation of the federal-provincial definition of "educational programming" for the guidance of the Corporation.
c. Recommend means by which "the acquisition or improvement of knowledge or the enlargement of understanding" by members of the audience listening to or watching programs broadcast by the Corporation can be supervised or assessed.

The Program Policy Advisory Committee may also be consulted with respect to program proposals from a variety of sources both inside and outside of official educational institutions, particularly those which may request funds to meet all or part of direct costs.

The S.E.C. Authority Program Policy Advisory Committee will include the following representatives:

(1) S.T.F. (nominated by the provincial organization).
(1) S.S.T.A. (nominated by the provincial organization).
(1) Home and School (nominated by the provincial organization).
(2) Department of Education (nominated by Department officers).
(2) Department of Continuing Education (nominated by Department officers).
(1) Department of Northern Services.
(1) Department of Culture and Youth.
(1) Department of Agriculture.
(1) Department of Public Health.
(1) Provincial Library Development Board.
(1) A Community College Board.
(1) General public.
(1) University Board of Governors. (Regina)
(1) University Board of Governors. (Saskatoon)
(1) Cable Co-operatives.

OTHER COMMITTEES

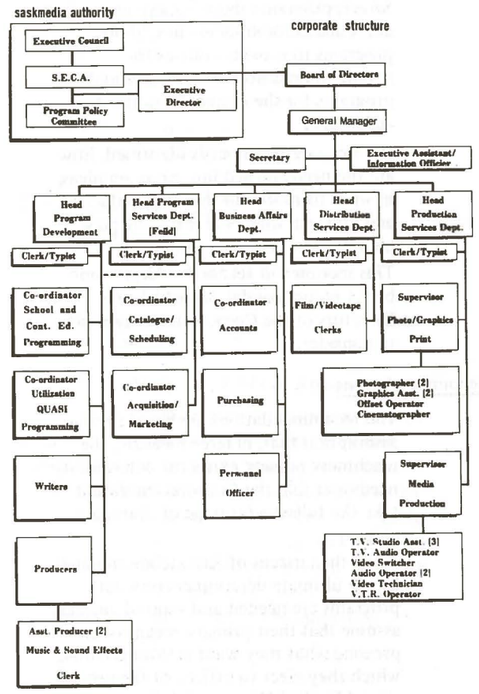
Other advisory committees may be established to deal with specific problems in educational communications as they may directly affect institutions over which both department of education have jurisdiction or problems in educational communicatons having interprovincial implications.

16. The approval of the by-laws and the annual budget are matters which will be referred directly to the Authority in the persons of the Minister of Continuing Education and the member of the Executive Council to whom for the time being Saskatchewan Telecommunications is responsible.

The following is a tentative schematic design for the Corporate structure.

BOARD OF DIRECTORS

The Directors, nine to fifteen in number are appointed by the Lieutenant Governor in Council (Section 6 of the Saskatchewan Educational Communications Corporation Act).



SaskMedia

DETERMINATION OF HOUSING, FURNISHINGS, FACILITIES AND EQUIPMENT

A research study will be launched to itemize an inventory of existing space, facilities and equipment which may be of use to the Saskatchewan Educational Communication Corporation for permanent occupancy and use or as potential contracting agencies. This study will also document the initial equipment required by the Divisions.

FUTURE – WHAT PROGRAMS

USER NEEDS

Determining needs – principles

- While it is easy to say that the programs which are acquired and produced by the Corporation for use of Saskatchewan people should be related to meeting needs, the determination of those needs is not so simple.
- Some needs may be fairly obvious – programs for pre-schoolers like Sesame Street, programs about Saskatchewan and Canada for students in schools, programs to provide courses for people in their homes, programs and programs for the disabled and the disadvantaged.
- But how are these needs identified, how are the needs turned into program ideas, in what form should they be produced and how can they best reach the people for whom they are intended.
- This section will set forth a large number of recommendations which the Directors of the Corporation may wish to consider.

Recommendations

- The recommendations are based on the assumption that, in large measure, the machinery already exists for determining needs and that the Corporation should take the fullest advantage of that machinery.
- While the citizens of Saskatchewan must be the ultimate determiners of what programs are needed and wanted one can assume that their primary means of expressing what they want is through those which they elect to office. At the provincial level of Minister of Education and a Minister of Continuing Education have been given responsibility of reflecting the wishes of the people. At the local level members of school boards have been elected by the public to positions of leadership in their respective communities. Within the political structures are administrative and professional structures which are designed to translate policy into practice.
- It is intended (see section 8 and 9) that the Corporation's programs will reflect educational needs as expressed through existing authorities and institutions.

AUTHORITY ROLE

- One of the roles of the Authority will be to articulate those needs in the form of guidelines to the Corporation.
- The Authority should find ways of securing information and ideas from the public-at-large and using that information in its determination of what programs it should be producing or procuring.
- Many government departments outside of the two departments which have direct responsibility for education will reflect needs of people in other areas – Agriculture, Culture and Youth, Environment and Public Health, etc.

NON-GOVERNMENT ORGANIZATIONS

- Outside of government or government sponsored agencies are hundreds of organizations which represent many facets of public interest. Many of these have valid educational purpose – e.g. ethnic societies, sports and athletic associations, cultural societies in the field of fine arts, etc. These organizations can be a valuable source of information in determining program needs – as well as sources of talent and expertise when programs are being planned and produced.

– Determining needs – more specific

PROGRAMMING

General educational

- All radio and television broadcasts must meet the definition of "educational programming".
- The definition according to the Federal Directive to the CRTC reads as follows:

"(a) programming designed to be presented in such a context as to provide a continuity of learning opportunity aimed at the acquisition or improvement of knowledge or the enlargement of understanding of members of the audience to whom such programming is directed and under circumstances such that the acquisition or improvement of such knowledge or the enlargement of such understanding is subject to supervision or assessment by a provincial authority by any appropriate means; and

(b) programming providing information on the available courses of instruction or involving the broadcasting of special education events within the educational system,

which programming, taken as a whole, shall be designed to furnish educational opportunities and shall be distinctly different from general broadcasting available on the national broadcasting service or on privately owned broadcasting undertakings;

"provincial authority" means such person, body or authority as may be designated by the Lieutenant Governor in Council of a province as the provincial authority for that province for the purposes of this Direction."

INTERPRETATION

- It is assumed that any interpretation of the definition should be done by the Authority which represents those elected by the people of the province who have constitutional responsibility for education.
- To advise on matters related specifically to the above concerns as it affects "educational" radio and television programs it is proposed that an advisory committee be set up under the Authority to recommend guidelines related to the programs produced and broadcast.

TIME LINES FOR SASKATCHEWAN EDUCATIONAL COMMUNICATION CORPORATION IMPLEMENTATION

April 20 – June 30 (1974) Research Study

- Space, facility and equipment inventory of:
  a. existing educational institution radio and television studios.
  b. existing provincial government radio and television studios.
  c. existing Department of Education Film Branch.
- Space, facilities and equipment inventory needs for SaskMedia for:
  a. Central Office of Corporation
  b. Radio-Audio Division
  c. Television-Video Division

Sept 15 (1974) – Establishment of the Authority

- Hiring of Executive Director and Support Staff.
- Development of Corporation Guidelines.
- Obtaining "Authority" Space and Facilities.
- Determination of Educational Cablevision Policy.

March 1 (1975) – Establishment of Corporation

- Appointment of Board of Directors of the Corporation.
- Development of executive staff requirements and position descriptions.
- Select and employ of General Manager.
- Lease of facilities of Central Office of Corporation.
- Develop working procedures for the interim period.

June 1 (1975) – Establishment of Central Office of Corporation

- Development of Services and Divisional staff requirements and position descriptions.
- Advertisement and employment of Services and Divisional staff.
- Lease of facilities Divisions
- Ordering of required equipment.

January 1 (1976) – Transfer of Selected Areas of Department Education Film Branch to SaskMedia

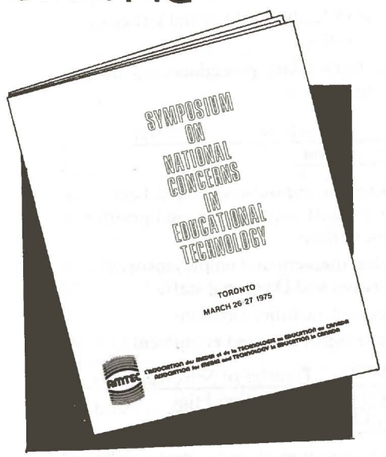
- Inauguration of media service delivery system.
- Full operation of Corporation.

CORPORATION – CABLEVISION RELATIONSHIP

Cablevision distribution is economic only in centres with a potential of about 800 subscribers. This situation is discriminatory for approximately 45 per cent of Saskatchewan's population —— plus, of course, all those unable to afford cablevision. Further, since cable systems are not interconnected, the delivery of program to individual systems is both very costly and logistically difficult —— unless these programs can be delivered through the air on existing broadcasting systems.

The Corporation should not directly program cable channels. Rather, it should make its programs available (freely, or for a nominal dubbing charge, depending on the status of the programmer) to those who wish to program such channels. Since cablevision is a local rather than a provincial service school boards should be encouraged to operate the channel which educational authorities are entitled to on each cable system.

a report on the



Fred Johnston, Associate Professor,
Educational Technology,
Queen's University

More than one observer has drawn attention to the problems associated with expanding technology. Inherent in technology is a problem/progress syndrome which John Kenneth Galbraith identifies in his book, The New Industrial State. Technology has, he writes, "an initiative of it's own. Technology not only causes change, it is a response to change. Though it forces specialization, it is also the result of specialization. Though it requires extensive organization, it is also the result of organization."[1] We have become victims of a force which is not understood and over which we have little control. That we must try to understand and control it is a critical goal, and the time is past when we can pursue that goal half-heartedly.

In education, technology can be defined in two ways. In a familiar and common sense, it is frequently meant to identify media which can be used for instructional purposes alongside the teacher, the blackboard and the textbook. Another definition espoused by a growing number of people takes an altogether different view of technology. Galbraith again provides a definition: "technology is .... the systematic application of scientific or other organized knowledge to practical task."[2]

This definition plays down the hardware aspect of technology to emphasize the total system in which learning is to take place, and the manner in which practical knowledge can be brought to bear on the components that make up the system. In line with this process view of technology, the Definition and Terminology Committee of the Association for Educational Communications and Technology in the United States developed this comprehensive, functional definition: "Educational Technology is a field involved in the facilitation of human learning through the systematic identification, development, organization and utilization of a full range of resources, and through the management of these resources. It includes and is not limited to, the development of instructional systems, the identification of existing resources, the delivery of resources to learners and the management of the processes in the people who perform them."[3] Because of the commitment of time, money, the demand for specialized people and resources and the need for organization and planning associated with this second definition of technology, it is incumbent upon us to analyze the direction in which technology is taking us, and to formulate a policy that goes beyond economic and technical considerations to concerns about the kind of society in which we want to live. This valuing process should receive the considered attention of all interest groups within the public domain.

Attempting to resolve the problems of educational technology is a difficult task in Canada because of the complicatons arising out of our federal system of government. Educational technology requires planning and organization which can only take place at a national level with the co-operation of provincial governments. This is the case in the formal educational system. However, we also have demands placed upon educational technology with the expansion of instruction taking place in business, industry, and government. The growth in these areas might result in decisions being made at a national level which will apply de facto to education unless educators make a concerted effort to make their priorities and desires known. It is recognized therefore, that the problems of educational technology are political and constitutional on the one hand, – and it would be naive to downgrade this fact – yet, on the other hand they affect the formal and the informal educational/instructional systems, whether we make conscious policy decisions or not.

The Educational Technology Branch of the Department of Communications was set up to recommend to Cabinet how a technology program might operate at the federal level. Provincial ministries of education have had the opportunity to make use of the services offered by the Branch and will have a significant input into the policy-making deliberations. Beyond the formal educational community, however, there is that loosely organized public sector which must have an input into a developing educational technology program. The Association for Media and Technology in Education in Canada is a national association drawing it's support from people from all geographical parts of the country, from all levels of education, – elementary schools to universities – and from many job areas, – repair and maintenance, production, teaching, research etc. AMTEC is an association with a broad base from which to consider the issues associated with educational technology in Canada. It is imperative that this Association provide an input to the Educational Technology Branch.

With this purpose in mind, the association approached the Branch for assistance to bring together a representative group of people who would meet and discuss what they considered to be the vital concerns in the area of educational technology. Support was forthcoming and a symposium was scheduled for Toronto on March 26 and 27, 1975. The purpose of this symposium was to:

1. identify national needs and concerns in this area as perceived by AMTEC representatives in relation to various levels and categories in training programs of Canadian education;
2. consider if and how, these requirements might be met more effectively by a federal support program designed to work in collaboration with the appropriate education and training authorities;
3. submit a report of conclusions from the symposium to the Federal Working Committee on Audio Visual Systems in Education of the Educational Technology Branch, Department of Communications.

Twenty people were contacted and asked if they would participate in the symposium on the dates indicated. Prior to attending the symposium, the participants were asked to indicate the problem areas which they considered to be most vital to the educational technology community in Canada. The conference convenor, Mr. Fred Johnston, grouped these concerns under six broad categories, namely, hardware, information dissemination, information storage and retrieval, instructional resources, organization and personnel; the document provided a focus for the symposium's discussions.

For two days the participants reviewed the comments, debated different points of view, and attempted to come up with some recommendations. It was obvious from the beginning that with the available time, participants would not be able to go into as much detail as many of the concerns warranted. The participants, who were well informed and experienced educators, administrators, businessmen, were well aware of the need in many cases for more extensive information to either confirm or adequately diagnose problems and solutions. Aware of the probable weaknesses in the deliberations but because of exigencies of time it was decided that the report should go forward to the Educational Technology Branch for their consideration when formulating recommendations to the federal cabinet.

Space does not allow for a full treatment of the discussion associated with each area of concern, however the recommendation are listed for your consideration.*

1. That the Educational Technology Branch Testing Program establish and distribute the standards by which the equipment is to be tested. (p. 10)
2. That the Educational Technology Branch be informed of the Association's interest in providing an input to the development of these standards. (p. 10)
3. That the commendation of the Association be extended to the Educational Technology Branch for initiating the Equipment Testing Program – a much-needed service. (p. 12)
4. That the Association recommend to the Educational Technology Branch the following changes in the Equipment Testing Program:
   a) the addition to the reporting program of comparative performance, specifications and test data so that reports will be useful to technical personnel;
   b) the addition of a system to collect, process and disseminate user feedback on equipment field use;
   c) a more efficient and much wider distribution of the reports be made than is now the case;
   d) direct access to the reports on the part of every Canadian. (p.12)

5. That the Equipment Testing Program solicit user concerns for inclusion into the testing and reporting systems. (p. 12)

6. That the Federal Government, in its 1975 review of the fiscal transfer program in higher education, establish some form of subscription grants for the purchase of instructional hardware. (p. 13)

7. That in setting up a grant structure for hardware, special consideration be given to those parts of Canada in the deprived category. (p. 13)

8. That the Federal Government look into the feasibility of providing subsidization to those provinces in the "have-not" category for the purchase of instructional hardware so as to equalize the availability of instructional hardware to Canadian children at the elementary and secondary levels. (p.13)

9. That a national clearinghouse for information on educational technology be established and if feasible, the National Library be approached to undertake and perform this service. (p. 14)

10. That a study be conducted by AMTEC (with sponsorship from federal and/or provincial governmental sources) to determine the existing information collecting, disseminating and generating agencies in the field of educational technology in Canada with a view to recommending future information dissemination needs and directions. (p. 14)

11. That a survey be made to determine the location and number of computerized data banks which provide information on instructional and educational resources. (p. 19)

12. That in cooperation with the public and private agencies, the Educational Technology Branch develop recommended standards for the development of educational resources data banks, and that, when standards are developed, they be compatible with existing internationally accepted standards following the Library of Congress format. (p.19)

13. That federal funding be made available for a project that would develop a data bank of Canadian produced instructional and educational resources. (p. 19)

14. That AMTEC explore with the Media Research Division of the N.F.B. of Canada, some kind of on-going relationship. (p.20)

15. That existing holdings of the C.B.C. be made as readily available as possible to the public sector. (p. 21)

16. That a study be made of the type and quantity of C.B.C. material which can be made available to the public by either immediate or delayed videotape recording. (p. 21)

17. That the human and technical resources of the C.B.C. and N.F.B. be brought to bear on the production of educational/instructional resources. (p.22)

18. That AMTEC recommends a free-flow policy for provincially and federally produced educational resources, to ensure the availability of these resources to those parts of the country where "local" production is financially not feasible. (p.23)

19. That AMTEC prepare a position paper on the proposed copyright legislation when that document is circulated. (p.23)

20. That AMTEC approve in principle the formation of a national council comprised of representatives from the various interest groups in educational technology in Canada, which would act in an advisory capacity to the appropriate national agencies. (p.26)

21. Whereas such input can be of considerable importance to the development of good policies, it is recommended that the federal government give careful consideration to ways and means of assisting organizations such as AMTEC to influence governmental policies relating to the development of educational technology in Canada. (p. 27)

22. Whereas this Association is concerned with the confusion which exists in the terminology used to identify technical and professional personnel within the educational technology field, it is recommended that the Educational Technology Branch be made aware of the AMTEC task force working in this area, and of its willingness to co-operate with other agencies and organizations in developing useful guidelines. (p.29)

23. That financial assistance be made available to develop and disseminate a national media literacy programme to be used for the training of people, and that these materials be made available in both official languages. (p.30)

24. Whereas there is need for standardized terminology in the educational technology field in Canada, this association is prepared to co-operate with other organizations/institutions/agencies to develop the required standards manual. (p.30)

At the annual conference in Calgary a group of symposium participants met to review the report and to prioritize the concerns. A report on these discussions was passed on to the new board of A.M.T.E.C. for its consideration. Only time will tell if the symposium was a useful exercise.

FOOTNOTES

1. John Kenneth Galbraith, The New Industrial State, (Boston: Houghton Mifflin Co., 1967), p. 20.

2. Galbraith, The New Industrial State, p. 12.

3. Association for Educational Communications and Technology, A Handbook of Standard Terminology and a Guide for Recording and Reporting Information About Educational Technology, (Washington, D.C.: U.S. Office of Education, August, 1974), p. 12.

* Copies of the report are available to members for $1.00 (for postage and handling). Prepaid requests should be directed to Mrs. L. Hines, Secretary, Association for Media and Technology in Education in Canada., c/o Faculty of Education, Duncan McArthur Hall, Queen's University. (For non-members the cost is $4.00)

NEW BRUNSWICK

Mr. G. Ray Steeves, Acting Director of Audio Visual Services for the Department of Education made these comments about the situation that exists in New Brunswick.

"While the teachers here have been enthusiastic borrowers of films, filmstrips, and similar media for many years, there has been little interest in broadcast programming. We have had radio broadcasts for many years but they are not widely used. There is no provincially funded E.T.V. programming in New Brunswick, but most schools have access to the Nova Scotia E.T.V. programmes and – or P.B.S. programming from the University of Maine: however, there seems to be little usage of this programming as well.

I believe there is some work being done on the E.T.V. network in the northeastern sector of the province but this is largely federally funded. Also the University of New Brunswick here in Fredericton is considering some E.T.V. programming via the local cable system. The provincial Department of Education is not directly involved in either of these projects.

I am aware of the work being done by OECA and have had some contact with them. However their programming seems to have little to offer for New Brunswick and in any case it is prohibitively expensive.

It seems that our teachers prefer to use films etc. as noted above rather than trying to fit their teaching into a broadcast schedule. Thus I would anticipate that the usage of films will continue to increase, but there would be little more activity in the broadcast media than there is at present."

the VIDEO DISC looks ready for the consumer

All the important technical problems have been solved, leaving the two main developers, RCA and Philips/MCA, one big problem to solve before the disc can really take off: which of these two incompatible systems will be the standard?

Since BM/E's last report on the video disc (March, 1974), the sweepstakes have narrowed to a two-entry race: RCA, and a combine of Philips with the American entertainment conglomerate, MCA.

In demonstrations in New York just before this report was written (attended by BM/E), both showed systems with technology firmed up, with excellent picture quality, and with every indication of readiness to move into the home entertainment arena. Both contenders, however, plan on the fall of 1976 as the time for market introduction—Philips/MCA made a definite commitment, RCA said they would be "ready" then but would decide later whether or not to go.

The TED system, product of TelDec, the combine of German Telefunken and English Decca, actually went on the market in Germany on March 17th. But TelDec has set no date for entry into this country, and the shorter playing time of the disc—10 minutes against the half-hour or more of the RCA and Philips/MCA system suggest that TED will not have large impact on the American market, if it ever comes here.

RCA gave the first reasonably detailed public account of their technology; this is summarized, along with the Philips/MCA technology, on following pages of this report. It is more certain than ever that the video disc has far-reaching implications, not only in entertainment but in a wide spectrum of information storage and retrieval applications.

Both contenders also described their programming plans, and this information will allow the broadcaster to make a first tentative assessment of the impact of the video disc on the television viewer. Program plans are also summarized below.

The pricing plans of the two outfits, as announced at the demonstrations, also fit into the picture of two systems ready to battle for consumer dollars. The players will sell for "about $400" (RCA); and $500 (Philips/MCA). The programs—and incidentally, both firms indicated they would price *by the program,* not by the number of discs—will be priced from $2 to $10 (Philips/MCA); about $12 "and down" (RCA). The industry has thoroughly absorbed the lesson of the magnetic tape cassette. Programming at $30 and up for a half-hour is now universally acknowledged to be far overpriced for the consumer market.

Picture quality—"best television"

BM/E found the picture quality of both systems very good and about equal. It is at a level we can call "best television." This is what the television viewer would see with a top-grade receiver in good adjustment, with a signal totally free of snow and ghosts, with technically top-grade program material at the broadcast end, properly put on the air. It is a quality that a lot of television viewers miss, too much of the time. The disc can bring many such viewers a quality boost.

This means that the quality available in the video disc system is already as good as, or better than, that of the receiver through which the disc signal will be displayed. The disc designers obviously have no incentive to go beyond that as long as the disc is tied to television broadcast standards through use of the TV receiver for display.

However, the basic technology breakthroughs of the video disc give it a long-range potential to go beyond television broadcast quality. After the industry is fully established, some outfit might try for a "high resolution" system. This would have to mesh in some way with the "standard" system and there would be many problems, but it does not seem impossible. The huge store of skills in the electronics industry make it a fair bet for the long future—assuming some marketing need can be ascertained, and this, of course, will be a totally unknown factor for quite a while.

The programs—"special interest"

The programs planned by the two contenders are not directly competitive with the main body of television programming. Both outfits have evidently been guided by the premises expressed recently by programming experts in various areas: most standard TV programming, no matter how popular on the air, has low "reseeability"; moreover, even at less than $10 apiece, recorded versions of such programs could not compete on the market with the steady flow of free programming.

Will a Broadcast Video Disc Player Evolve? If the consumer video disc player becomes a reality, could a professional version be far behind? "Probably not," says John Auld, president of the Broadcast Equipment Div. of Philips Audio Video Systems Corp., and he envisions a deck of low-cost video disc players that would replace existing video cartridge or video cassette players in TV stations. Of course, a master recorder to produce the video disc would have to be located at each station but the cost of such a machine might not be more than that of TR-100s or ACR-25s. Alternatively, teleproduction houses could own such master recorders and send out commercials to stations in video disc form.

Thus the videodisc planning embraces mainly "special interest" material, intepreting that phrase very broadly, and the disc appears to be mainly competitive with *pay cable*. In one area, all three media have heavy emphasis—movies, which are very big in the video disc planning of both RCA and Phillips/MCA. In current sports, the disc will *not* offer an alternative, according to present planning.

Beyond that, both disc developers will do every variety of music, from symphony to rock to pops; ballet, and opera, both of which gain tremendously from vizualization; an extremely wide spectrum of informational and "how to" material, including instruction in many topics; training in repair and service; hobbies, sports, cooking, and a score more; children's programs.

Both plan to come on the market with a large quantity of ready material. RCA says they will kick off with about 500 titles, and Philips/MCA promises a similar initial catalog of general interest material, plus an immense one in movies. MCA's control of Universal Pictures, one of the largest Hollywood movie factories, gives them a huge backlog and an ongoing stream of new pictures. Their backlog, from more than 40 years of production, is said to include some 11,000 films. MCA has issued an initial catalog of some of these films, and it includes many classics, starting with Chaplin and W.C. Fields, and coming on down to Alfred Hitchcock, Clint Eastwood, and many more.

At their demonstration, Philips/MCA showed playback of excerpts from video disc versions of a number of current "hit" films—"Earthquake," "The Sting," "The Towering Inferno," "The Great Waldo Pepper." The quality was fine—broadcasters must be prepared for the fact that movies on video discs may look considerably better than they do over the air. Aside from the simple pre-emption of viewing time, it may be that the disc will have its greatest effect on the television audience with its super-rich movie offering. It is, of course, not only quality but access to top-run movies that will give the disc drawing power.

RCA, as already noted, is also planning a heavy movie catalog, and reports numerous negotiations with leading movie producers for rights to films. But both outfits admit they are sailing into largely uncharted waters with their video disc programming. They will be watching early sales like hawks to learn what the video disc buyer wants.

The economics of the video disc relieves them, however, of the necessity of having a big "hit" with every disc. An RCA spokesman indicates that the break-even point for a disc is somewhere in the 10,000-20,000 sales range for many programs, and this total can be accumulated over a period of time. Thus a lot of specialized material may be kept in the catalog. Both say that the disc must appeal to a very wide spectrum of tastes if it is to succeed at all.

Technology—the enormous packing density of the disc

The diagrams and descriptions on the accompanying pages give a summary of the techniques used in the two video disc systems. It can be seen that both make use of the enormous packing density available with optical and pseudo-optical systems. These outdo magnetic tape by a factor of a couple of thousand, at least. The two systems do not push this to the limit by any means: this is one big reason for believing that the disc is open to large future progress.

The difference between tape and the disc systems can be seen in a simple comparison. A half-hour program on 2-inch tape, at the new "slow" 7½ ips, takes nearly two hundred square feet of tape. The same program takes less than one-half of one square foot on the disc. The comparison is fair in the sense that the tape and the disc have approximately the same bandwidth, of 8 to 10 megahertz, with about 3 megahertz coming through the coding as the luminance bandwidth. Professional recordings on two-inch tape are of course superior in quality to what the disc is doing right now, probably most noticeably in the handling of color. But the disc is close; and it has room to move ahead.

The disc, of course, can't replace professional tape because it does not provide easy recording and immediate playback, or the making of a few copies on the spot, or ready editing, etc. Master discs have to be made on expensive machinery in central plants, and further central-plant processing is needed before playable copies emerge.

By the same token, though, the very fast duplication on presses almost exactly like phono record presses provides a main reason for the cheapness of the disc. Philips says a single press will turn out a copy every four seconds, and that the total production cost of a finished copy (leaving out the cost of the program material) will be about 40 cents.

The importance of the extremely high packing density of the disc systems is really that all the information in a program is on a single small surface, with practically instant accessibility. Both systems make use of this accessibility. Philips has "freeze-frame" capability, (see technical description), and allows for a fast, or slow, run through the disc to find any frame wanted; maximum access time is ten seconds or less. Each frame can carry a numerical index, and a push-button accessory gives automatic search, very fast, to any wanted frame. Slow motion play is also available.

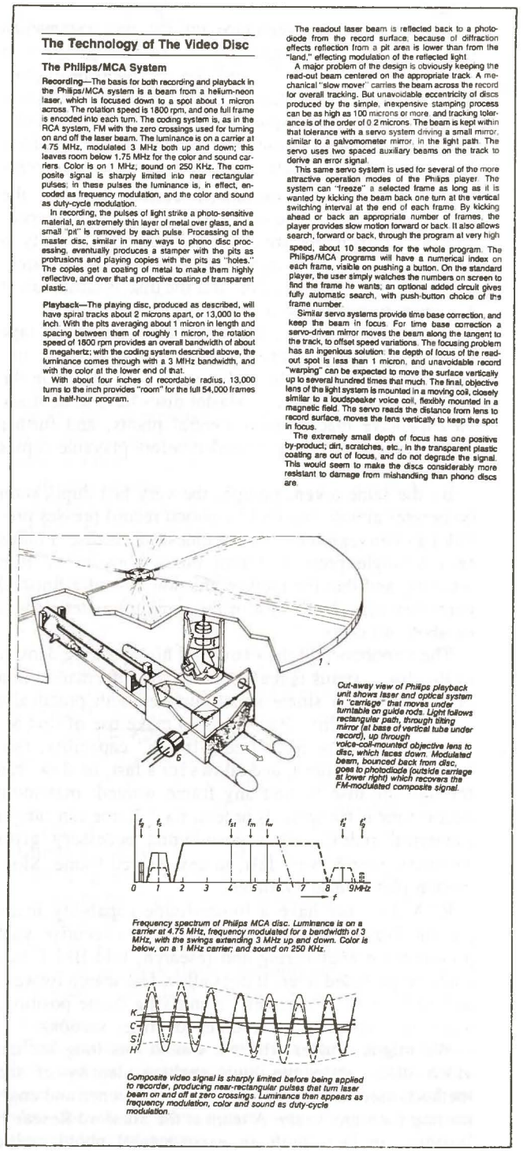
RCA does not have a freeze-frame capability in its present form—Dr. James Hillier, RCA executive vice president for engineering and research, told BM/E this could be provided later. It does allow fast search forward and back, with a "counter" identifying frame position, much as a tape recorder counter identifies sections.

We might wonder why we waited this long for the video disc, when the high packing density of the methods used has been a known fact in science and engineering for many years. A team at the Stanford Research Institute, in fact, built an experimental photographic

video disc system as far back as 1961, explicitly trying to use the advantage of film over magnetic tape. Dr. Albert Macovski, a member of that team, told BM/E that they needed an inexpensive laser, not then available, to make it work well enough for the consumer market.

Mr. Robert T. Cavanagh, vice president of North American Philips, main spokesman for the Philips enterprise in this country, told BM/E that similar thinking led workers in the Philips lab in Holland over ten years or more, to look for ways of using the high packing density of optical recording. They did finally get the laser, recognized early as essential, and other breakthroughs helped open the way.

Now that the way is open, we can expect video disc technology to become an enterprise of numerous electronic firms in this country and abroad. Other playback systems will be viable as long as they are compatible with the coming "dominant" system, whatever that may be.



The Technology of The Video Disc

The Philips/MCA System

Recording—The basis for both recording and playback in the Philips/MCA system is a beam from a helium-neon laser, which is focused down to a spot about 1 micron across. The rotation speed is 1800 rpm, and one full frame is encoded into each turn. The coding system is, as in the RCA system, FM with the zero crossings used for turning on and off the laser beam. The luminance is on a carrier at 4.75 MHz, modulated 3 MHz both up and down; this leaves room below 1.75 MHz for the color and sound carriers. Color is on 1 MHz, sound on 250 KHz. The composite signal is sharply limited into near rectangular pulses. In these pulses the luminance is, in effect, encoded as frequency modulation, and the color and sound as duty-cycle modulation.

In recording, the pulses of light strike a photo-sensitive material, an extremely thin layer of metal over glass, and a small "pit" is removed by each pulse. Processing of the master disc, similar in many ways to phono disc processing, eventually produces a stamper with the pits as protrusions and playing copies with the pits as "holes." The copies get a coating of metal to make them highly reflective, and over that a protective coating of transparent plastic.

Playback—The playing disc, produced as described, will have spiral tracks about 2 microns apart, or 13,000 to the inch. With the pits averaging about 1 micron in length and spacing between them of roughly 1 micron, the rotation speed of 1800 rpm provides an overall bandwidth of about 8 megahertz; with the coding system described above, the luminance comes through with a 3 MHz bandwidth, and with the color at the lower end of that.

With about four inches of recordable radius, 13,000 turns to the inch provides "room" for the full 54,000 frames in a half-hour program.

The readout laser beam is reflected back to a photodiode from the record surface, because of diffraction effects reflection from a pit area is lower than from the "land," effecting modulation of the reflected light.

A major problem of the design is obviously keeping the read-out beam centered on the appropriate track. A mechanical "slow mover" carries the beam across the record for overall tracking. But unavoidable eccentricity of discs produced by the simple, inexpensive stamping process can be as high as 100 microns or more, and tracking tolerance is of the order of 0.2 microns. The beam is kept within that tolerance with a servo system driving a small mirror, similar to a galvomometer mirror, in the light path. The servo uses two spaced auxiliary beams on the track to derive an error signal.

This same servo system is used for several of the more attractive operation modes of the Philips player. The system can "freeze" a selected frame as long as it is wanted by kicking the beam back one turn at the vertical switching interval at the end of each frame. By kicking ahead or back an appropriate number of frames, the player provides slow motion forward or back. It also allows search, forward or back, through the program at very high speed, about 10 seconds for the whole program. The Philips/MCA programs will have a numerical index on each frame, visible on pushing a button. On the standard player, the user simply watches the numbers on screen to find the frame he wants, an optional added circuit gives fully automatic search, with push-button choice of the frame number.

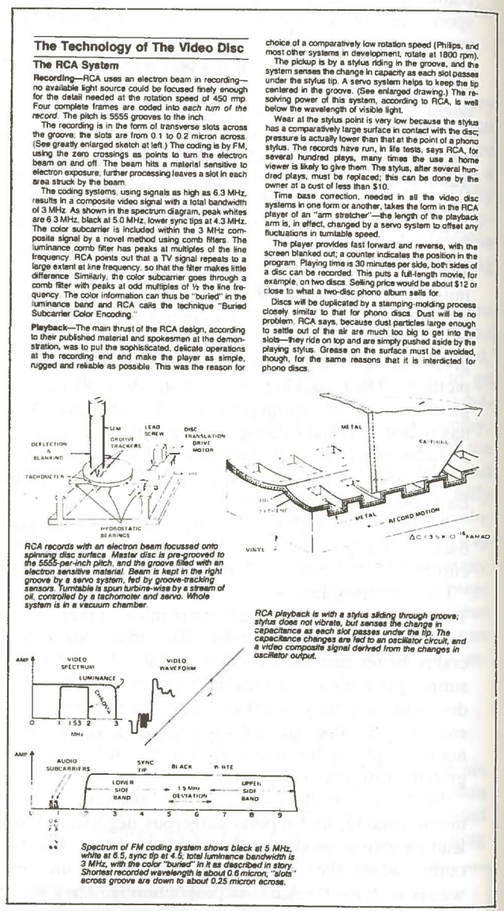
Similar servo systems provide time base correction, and keep the beam in focus. For time base correction a servo-driven mirror moves the beam along the tangent to the track, to offset speed variations. The focusing problem has an ingenious solution: the depth of focus of the readout spot is less than 1 micron, and unavoidable record "warping" can be expected to move the surface vertically up to several hundred times that much. The final, objective lens of the light system is mounted in a moving coil, closely similar to a loudspeaker voice coil, flexibly mounted in a magnetic field. The servo reads the distance from lens to record surface, moves the lens vertically to keep the spot in focus.

The extremely small depth of focus has one positive by-product; dirt, scratches, etc., in the transparent plastic coating are out of focus, and do not degrade the signal. This would seem to make the discs considerably more resistant to damage from mishandling than phono discs are.

Cut-away view of Philips playback unit shows laser and optical system in "carriage" that moves under turntable on guide rods. Light follows rectangular path, through tilting mirror (at base of vertical tube under record), up through voice-coil-mounted objective lens to disc, which faces down. Modulated beam, bounced back from disc, goes to photodiode (outside carriage at lower right) which recovers the FM-modulated composite signal.

Frequency spectrum of Philips MCA disc. Luminance is on a carrier at 4.75 MHz, frequency modulated for a bandwidth of 3 MHz, with the swings extending 3 MHz up and down. Color is below, on a 1 MHz carrier; and sound on 250 KHz.

Composite video signal is sharply limited before being applied to recorder, producing near-rectangular pulses that turn laser beam on and off at zero crossings. Luminance then appears as frequency modulation, color and sound as duty-cycle modulation.



The Technology of The Video Disc

The RCA System

Recording—RCA uses an electron beam in recording—no available light source could be focused finely enough for the detail needed at the rotation speed of 450 rmp. Four complete frames are coded into *each turn of the record*. The pitch is 5555 grooves to the inch.

The recording is in the form of transverse slots across the groove, the slots are from 0.1 to 0.2 micron across. (See greatly enlarged sketch at left.) The coding is by FM, using the zero crossings as points to turn the electron beam on and off. The beam hits a material sensitive to electron exposure; further processing leaves a slot in each area struck by the beam.

The coding systems, using signals as high as 6.3 MHz, results in a composite video signal with a total bandwidth of 3 MHz. As shown in the spectrum diagram, peak whites are 6.3 MHz, black at 5.0 MHz, lower sync tips at 4.3 MHz. The color subcarrier is included within the 3 MHz composite signal by a novel method using comb filters. The luminance comb filter has peaks at multiples of the line frequency. RCA points out that a TV signal repeats to a large extent at line frequency, so that the filter makes little difference. Similarly, the color subcarrier goes through a comb filter with peaks at odd multiples of ½ the line frequency. The color information can thus be "buried" in the luminance band and RCA calls the technique "Buried Subcarrier Color Encoding."

Playback—The main thrust of the RCA design, according to their published material and spokesmen at the demonstration, was to put the sophisticated, delicate operations at the recording end and make the player as simple, rugged and reliable as possible. This was the reason for choice of a comparatively low rotation speed (Philips, and most other systems in development, rotate at 1800 rpm).

The pickup is by a stylus riding in the groove, and the system senses the change in capacity as each slot passes under the stylus tip. A servo system helps to keep the tip centered in the groove. (See enlarged drawing.) The resolving power of this system, according to RCA, is well below the wavelength of visible light.

Wear at the stylus point is very low because the stylus has a comparatively large surface in contact with the disc; pressure is actually lower than that at the point of a phono stylus. The records have run, in life tests, says RCA, for several hundred plays, many times the use a home viewer is likely to give them. The stylus, after several hundred plays, must be replaced; this can be done by the owner at a cost of less than $10.

Time base correction, needed in all the video disc systems in one form or another, takes the form in the RCA player of an "arm stretcher"—the length of the playback arm is, in effect, changed by a servo system to offset any fluctuations in turntable speed.

The player provides fast forward and reverse, with the screen blanked out; a counter indicates the position in the program. Playing time is 30 minutes per side, both sides of a disc can be recorded. This puts a full-length movie, for example, on two discs. Selling price would be about $12 or close to what a two-disc phono album sells for.

Discs will be duplicated by a stamping-molding process closely similar to that for phono discs. Dust will be no problem, RCA says, because dust particles large enough to settle out of the air are much too big to get into the slots—they ride on top and are simply pushed aside by the playing stylus. Grease on the surface must be avoided, though, for the same reasons that it is interdicted for phono discs.

RCA records with an electron beam focussed onto spinning disc surface. Master disc is pre-grooved to the 5555-per-inch pitch, and the groove filled with an electron sensitive material. Beam is kept in the right groove by a servo system, fed by groove-tracking sensors. Turntable is spun turbine-wise by a stream of oil, controlled by a tachometer and servo. Whole system is in a vacuum chamber.

RCA playback is with a stylus sliding through groove; stylus does not vibrate, but senses the change in capacitance as each slot passes under the tip. The capacitance changes are fed to an oscillator circuit, and a video composite signal derived from the changes in oscillator output.

Spectrum of FM coding system shows black at 5 MHz, white at 6.5, sync tip at 4.5; total luminance bandwidth is 3 MHz, with the color "buried" in it as described in story. Shortest recorded wavelength is about 0.6 micron; "slots" across groove are down to about 0.25 micron across.

For those who want a more technical treatment of the videodisc revolution than was presented in the Spring Issue, Media Message is indebted to B.M.E./Broadcast Management Engineering for permission to re-publish this article from its May issue.

sound in the classroom

by Ms. Sonny Lewis*

Staring out at the grey rain of another Vancouver morning and listening to my seven year old son playing with the family tape recorder, I am reminded all over again what it is that fascinates me about teaching with record players and tape recorders. Perhaps it started during my own school days when our choir director opened a new world of music for us by playing records of some of the great chorales, and then worked with us until we were ready to go into the studio to make a recording ourselves. My interest grew in my college classes as instructors played records and tapes of poets and essayists reading their works, making them come alive. With the completion of my B.A. in English I taught school for a year and then made my way into the world of journalism writing articles and columns for various Canadian publications. At the same time I continued to play music working both on tape and in live performance. When the chance came to do a story for CBC Radio, I was eager to take it. It turned out to be the first interview in a two and a half year association with CBC during which time I have spoken with businessmen, politicians, activists, poets, musicians and children on the air. As I worked at recording conversations and music on tape I became even more vividly aware of how important it is to teach communications arts to young people and how valuable tape recorders and record players can be in a school situation.

Let's imagine you're a language arts teacher whose lesson plan on advertising involves having grade five students tape their own radio commercials. How do you cope when the school's only two tape recorders are already booked by someone else?

Or supposing your class of seventeen emotionally disturbed students are all at seventeen different learning levels. How do you apportion your time so that each student receives help at the appropriate level? These are only two of the teaching problems which were resolved for one Vancouver elementary school when a manufacturer of audio equipment decided to initiate an in-school evaluation of its audio teaching aids. They approached a local school board seeking their assistance. The board was very interested and specifically chose a school that was underpriveleged in its equipment resources. They too were curious to see what happens to the teachers, the students and the whole learning atmosphere when you provide a school with a set of facilities which has been almost completely lacking.

In November of 1973 the chosen elementary school was entirely equipped with the latest auditory classroom aids. Every piece of equipment in the manufacturer's line was represented from a public address system for the auditorium to small cassette players for individual use. Fifteen tape recorders of various types both cassette and reel to reel were provided and fifteen record players were made available as well. The addition of ten listening posts extended the range of each machine to as many as eight students at a time. Seventy-five pairs of headsets were supplied so that at any given time seventy-five pairs of ears within the school could be listening and learning.

During the school year of 1973-74 the teachers became familiar with the equipment and learned to incorporate it into their teaching methods. In October of 1974 I was given the opportunity to spend some time in the school evaluating this experiment. I was interested not only in the performance of the equipment but also in the extent to which teachers and students found it useful and exciting.

As I moved around in the school observing classes and talking to students and teachers I became aware that this particular school has a high proportion of special needs classes. It is located in an area of the city which has been settled by many new Canadian families, and several children at each grade level are learning English as a second language for the first time this year. Most of these students have been placed in a class solely for new Canadians. The teacher for this class has found the new equipment valuable for auditory discrimination exercises. She will say a sentence which the student repeats onto the tape.

Then the students listens to what he or she has just taped. This is a quick method of correcting inaccuracies of accent or understanding which might slip by many times in an ordinary classroom drill. Later on in the day a prepared tape may be played during which the students repeat a series of words with the same vowel sound. This allows for the repetitive practice so essential to mastering a new language.

Most schools have a certain percentage of students

* This story was submitted by Miss Betty Nicholson, of Calefone Industries Limited.

who have learning disabilities of one kind or another and this school is no exception. Room 114 is the place where students who need special help can go for part of the day before rejoining their regular classes whether they have perceptual problems, motor difficulties or memory blocks. Here the tape recorders are in constant use. Prepared tapes for use with worksheets help the pupils improve their auditory memory and discrimination. A typical exercise might be, "Put a circle around the picture of the word I said second. Flower, dog, car." The students continue in this way until their worksheets are completed. Meanwhile the teacher is over in another corner of the room helping a single boy who has a severe perceptual difficulty until it's time to correct the worksheets. When the bell rings these six or seven children go back to their classes better able to handle the regular work at their grade level, and a new group takes their places around the tape machine.

Another type of special needs class is for those students who are emotionally disturbed to the point where it is not possible for them to cope with the restrictions of an ordinary classroom situation. These people are at many different learning levels, some are very bright and others much slower. The teacher in this class has found the new tape recorders in her room most useful in conserving her time and energy. When the quicker ones are finished with their work they can listen to pretaped stories, or perhaps they will choose to invent stories of their own and tape them for the others in the class to listen to later. The record player is in use here too to furnish spirited songs that enliven the day or soothing background music.

The special needs classes are certainly not the only places in which the new tape recorders and record players have been put to use. A language arts teacher at the higher grade levels was most enthusiastic about the possibilities opened up with access to these machines both for the students and for herself.

She told me that the kids are endlessly intrigued with the curiosity and thrill of hearing their own voices. They love pretending to be somebody else, and are readily encouraged to tape their own stories and plays complete with sound effects. Later these are played for the whole class. This teacher pointed out that the machines develop independence, the kids are good at operating them, and she doesn't want them to feel that they always need an adult around to hold their hands. She gets some students to read project cards onto tape for others to do. This is valuable in teaching them how to follow oral instruction and turns listening into an active process.

The same teacher also teaches physical education and again the new equipment is in constant use. A record player provides the music for teaching creative movement and rhythmic dance. As part of a nutrition lesson the students created cartoon characters representing the different foods, Mr. Milk, Miss Cheese, etc. and gave each one a voice. A taped dialogue was prepared for use with the cartoon drawings and a show will be given in the cafeteria to brighten up some wet winter lunch hour.

In the library a record player fills the room with the background music so helpful to quiet study. The librarian uses a tape player and listening post for stories. She finds that this method builds interest in literature and increases motivation for some of the students who are slow to take an interest in reading. She likes the cassettes because they store easily and take only a little precious shelf space.

The grades two and three are grouped together in one room in accordance with a recent trend in primary education, and the kids are encouraged to progress at their own respectives rates. The teacher in this room also finds that the new tape recorders save her time and energy. Feeling that learning to follow directions is an important part of education she puts the arithmetic instructions on tape and the resulting worksheets show how the students follow instruction as well as how much arithmetic they know. The tape recorders are used for individual language help for many of her students in addition to the learning assistance time in Room 114. She tapes stories and questions so that groups of eight can take their places around the listening post, put on their headphones, listen, and answer the questions. The kids make up commercials and tape them. The record player is used for pleasure to increase music appreciation and to teach songs. Finally a tape player is used in conjunction with the DUSO Kit, Develop Understanding of Self and Others. DUSO the dolphin and his friends tell stories putting children in moral situations. Posters and puppets as well as the tapes interest the kids in discussion of their feelings about the stories which help them to shape their own moral values.

Even with the youngest learners this equipment has proved valuable. In the kindergarten class the tape recorder is set up and eager faces press around begging for a turn. The headsets allow a small group to work without distraction on auditory memory tapes while the rest play quite as noisily as ever all around them. This teacher feels that concentration can be taught and attention span extended with taped lessons, and that learning to listen is the prerequisite for learning to read and write which can be taught at this level. She uses the record player for teaching songs and for games such as musical chairs. At the kindergarten level the children often want to hear a favorite story many times in a row. With the tape recorder this is possible without taking the teacher away from the others who need a different type of help.

Every piece of equipment has been designed with the idea that it is the students themselves who are going to be using it. The teachers looked for features which would ensure safe, convenient functioning for children. The tape recorders have two finger operation for the record mode so that kids can't erase tapes and tough, durable casings which won't shatter when they are dropped. Antijam keyboards are featured on the cassette machines as well as speaker coverings made of rigid material so that pencils cannot be poked through to the delicate works inside. Quarter inch phono jacks are standard on all equipment. The tape recorders not only have speaker output jacks for use with a larger speaker but also an input jack to record material from another tape recorder or record player. The tone arms on the record players are furnished with gram weight adjustment settings and a small light in the tone arm with which the operator can pick out any track in a darkened room. This is particularly useful for showing filmstrips. The speakers in the record players have been mounted facing to the rear or canted to reach the students sitting at the back of the room. And finally the record players have "jiggle-feet", spring loaded feet so that kids can't bounce them off a table. Instructions are clear and complete pasted right into the lid of the machines.

In general, the more individualized instruction it is necessary to provide, the more useful this equipment has been to the teachers in varying their lesson plans and conserving their energy. Ultimately, everyone has been happy with the results of this experiment. The manufacturers have been happy to receive the kind of information they need in their constant effort to upgrade their equipment as both teachers and students grow more sophisticated in their use of audio classroom aids. The board of education has been happy with the knowledge gained by supplying a whole school in this way. And best of all the kids have been happy as their eager faces testify at the chance to increase their skills through the use of these machines has turned many a routine day into an adventure in learning.

NEWS CLIPS

COMMENTS SOUGHT CONCERNING INFORMATION RETRIEVAL

The American Library Association Cataloging and Classification Section has established the Ad Hoc Subcommittee on the Subject Analysis of Audiovisual Materials to investigate problems relating to information retrieval from media. The inquiry is directed toward the integrated, multimedia catalogue. The committee is anxious to hear the views of Canadian media specialists. If you have problems concerning, or opinions about, subject headings, classification, and/or coding for nonbook materials, please send your comments to the Committee's Canadian representative, Jean Weihs, Course Director, Library Techniques, Seneca College of Applied Arts and Technology, 1750 Finch Ave. East, Willowdale, Ontario M2N 5T7

N.A.V.A. FORMS PERFORMANCE CHARACTERISTICS AND STANDARDS TEST METHODS COMMITTEE (U.S.A.)

The National Audio-Visual Association has announced the formation of a committee – the Performance Characteristics and Standard Test Methods Committee with the purpose of preparing a standards list of all significant specifications and performance characteristics and a set of uniform test procedures for the various kinds of audio-visual equipment. For information write:

A. Schollnick
Singer Educational Systems,
3750 Monroe Avenue,
Rochester, N.Y. 14603

O.E.C.A. – ACCESS WIN NAPANEE T.V. AWARDS

At the 10th Japan Prize International Educational Program Contest, held March 19 to April 1 in Tokyo, the Ontario Educational Communications Authority and the Alberta Educational School Broadcasts won major awards.

O.E.C.A. cooped one of the top awards – the Maeda Prize – for its entry – From SCHERAZADE TO SELIMA, while honourable mention was given to the Alberta entry – FATHER LACOMBE.

NFB WINS FIVE AWARDS AT AMERICAN FILM FESTIVAL

The National Film Board has won five awards at the 17th Annual American Film Festival held in New York City. Three first prizes are among the accolades.

Three blue ribbons went to the films TOUR EN L'AIR, a portrait of the famous Canadian husband-wife ballet team, Anna-Marie and David Holmes; IN SEARCH OF THE BOWHEAD WHALE, a documentary on a fascinating expedition to photograph this rare creature – and HUNGER, a computer-assisted animated short, which won the SPECIAL JURY PRIZE at the 1974 Cannes Festival.

HE'S NOT THE WALKING KIND, the story of a young handicapped man who is determined to succeed in life and ACCIDENT, about a man who survives a plane crash to relate his experiences – took red ribbons.

E.P.I.E. PRODUCT REPORT: ELECTRICAL SAFETY IN SCHOOLS: LESSONS ON HAZARDS AND THEIR PREVENTION (Number 67, April 1975)

Another very useful publication from E.P.I.E. the Educational Consumers "protection agency." Recommended for all school administrators/media co-ordinators. Write E.P.I.E., 463 West Street, New York, N.Y. 10014.

BETAMAX: NEW VIDEO RECORDING SYSTEM FOR THE HOME

In June, at the C.E.S. show in Chicago, Sony unveiled Betamax, Model LV-1901, its new color videocassette system for the consumer. The system includes a videocassette recorder, two television tuners, a timer, and a Sony Trinitrom^{tm} receiver, housed in a handsome cabinet and carrying a price tag of $2,295.

The new thing about Betamax is its ability to record more program on less tape because of technological advances in both the recording system and the tape stock. Although the new system will be marketed strictly to the home user, it is inevitable that discussions of Betamax will compare it to Sony's ¾ U-Matic videocassette system which has gained such wide acceptance in the educational, industrial, and other institutional markets.

In Betamax, Sony has developed the first of the high-packing-density videotape recorders. In other helical-scan recorders, one track is separated from the next by a narrow guard band. These blank spaces take up horizontal room on the tape and increase the footage necessary to record any given program. Sony had developed a more sophisticated recording head which uses shorter wavelengths and not only can lay down the information in narrower tracks, but also eliminates the guard band between tracks. Whereas the combined width of track and guard band in the U-Matic recorders is 100 microns, one track in the Betamax system is only 58 microns. Thus Betamax can record almost two times as much information on the same length of tape. Reversing the color phase polarity in every other track minimizes track interference.

As if this were not enough, Betamax also uses a much slower tape speed than the ¾U system. The tape in the U-Matic recorders moves at 3.75 inches per second, but in Betamax, the tape speed has been cut to 1.57 inches per second, an over 50% reduction, Betamax can put three-and-one-half times as much program on the same length of tape.

For the user, the system permits recording off air on one channel, while viewing another; built-in timer for unattended recording of a program; playback of pre-recorded programs through the 79" colour receiver. System will be marketed in three large metropolitan areas this fall.

This development along with the development of the videodisc, further frees the viewer from the tyranny of the broadcast or t.v. schedule.
(From Educational and Industrial Television, July 1975)

AMTEC EDUCATIONAL MEDIA AWARDS, 1975

The impact of the national educational media competition held in conjunction with the AMTEC '75 conference (June 15-18) in Calgary was two-fold, according to Dave Cormack, chairman of the awards committee.

Not only did AMTEC (the Association for Media and Technology in Education in Canada) recognize 12 outstanding Canadian-produced instructional media projects, it also gave conference delegates from all segments of the educational media field an opportunity to find out about exciting, innovative materials being produced and used by their colleagues across the country.

"Few members of the public realize the volume or quality of Canadian educational productions at all levels," says Cormack, adding that even those in the field are not always sufficiently aware of the accomplishments of others in the country.

"A quality competition, enthusiastically supported and well publicized, can assist us not only with our own professional growth but also with the public image of Canadian educational media productions," he said.

A total of 120 entries from across Canada were judged by a representative national committee in accordance with the category of submission and the type of educational institution which produced them.

The committee gave special attention to the educational value of each presentation and its success in meeting its objectives. Other deciding factors were originality, imaginative or appropriate use of specific media, skillful use of equipment and production techniques and the skill of writers, performers, musicians and narrators. All entries competed according to both division and class.

Knowlton Nash, director of information programs for CBC Television (English network), presented awards to the following winners at the conference closing banquet:

Division I (print)

"Wild Oats –– the Great Grain Robber", an information workbook for the Canadian prairie grain farmer, produced by the University of Saskatchewan extension division.

Honorable Mention –– "Le Club des Jeunes Jongleurs", a Grade 4 to 6 series which attempts to foster better understanding of math by making it a "select club", produced by the Ontario Educational Communications Authority (OECA);

Division II (audio tape)

"Like I Mean. . . A Rose by Any Other Name", a program designed to make semantics and its problems come alive for Grades 9 to 12, by Alberta School Broadcasts, audio visual services branch of the department of education;

Division III (tape/slide)

"Change From the Sea: Newfoundland's Outports", a program on developing landscape design through a study of cultural values, produced for post-secondary students by students in the University of Guelph school of landscape architecture;

Honorable Mention –– "Motivation", for students in educational communications, by the University of Saskatchewan educational communications department;

Division IV (video tape)

"Western Bush Pilot", a general interest program on early aviation in Alberta, part of a series entitled "Into the North", ACCESS Television North;

Honorable Mentions –– "Viaggio a Scoperta Dell' Universita", geared to the 350,000–strong Italian-speaking community of Toronto, by the University of Toronto media centre; "Law of Torts", one episode from a series entitled "Our Rights––Their Rights" to accompany Alberta Grade 11 law courses, ACCESS Television South;

Division V (film)

"Explorations in the Novel: A Portrait of the Artist", a secondary school program to stimulate interest in the novel, produced by OECA, which TIED for the award with "Les Tacots", a short dramatic film to involve Grade 3 to 9 students in the French Canadian language, produced by the National Film Board of Canada;

Division VI (media kits)

"The Africa Box", designed to infuse a sense of reality into classroom study of Africa for kindergarten-age children to adults, by the Medicine Hat Public School System.

Honorable Mention –– "The People Called Hutterites", prepared for junior and senior high students by the Calgary Board of Education;

Class I (individual schools)

"The Wood Lathe: Turning a Small Bowl", a super–8 color film produced by Dr. W. Harley of Lorne Haselton School, Saskatoon, for Grade 7, 8 and 9 industrial arts students;

Class II (school systems)

"The Africa Box", which also won the Division VI award;

Class III (post-secondary institutions)

"Wild Oats –– the Great Grain Robber", which also received the award for Division I;

Class IV (provincially funded media agencies)

"Explorations in the Novel: A Portrait of the Artist", winner of the Division V award;

Class V (commercial)

"Les Tacots", winner of the Division V award.

Honorable Mention — "Carnivorous Plants", an informational film for junior high to adult audiences, produced by the National Geographic Educational Services, Rexdale, Ontario.

For further information contact:

Print Media – Miss Maura Kadustki
284–6747
Radio & Television – Mrs. Carol Cashion
284–6748
Public Relations Office
219 Social Sciences Building
The University of Calgary

NEW RESOURCES

SOFTWARE

1975 DIRECTORY OF DISTRICT SCHOOL LIBRARY SUPERVISORS – C.S.L.A. PRELIMINARY EDITION.

The final version of this publication is due late 1975, early 1976.

VIDEOSOCIOLOGY is a periodical devoted to news relevant to research and experience in visual sociology and especially to the use of non-print media. All inquiries should be addressed to the Editor, Dr. Alexander D. Blumenstiel, 10 Alden St., Newton Centre, Mass. 02159. Individual subscriptions are $7.00 for one year (plus $1.15 surcharge for Canadian and foreign mailing).

TIMES FIVE: Publication of the ATLANTIC INSTITUTE OF EDUCATION

Times 5 reports on the first five years in the history of the Atlantic Institute of Education.
Write:
A.I. of E., 1975
5244 South St.,
Halifax, N.S.
B3J 1A4

COMING EVENTS

JUNE 21–23 Second Canadian Symposium on Instructional Technology
The Second Canadian Symposium on Instructional Technology will be held 21–23 June 1976 at Universite Laval, Quebec. This Symposium is sponsored by NRC's Associate Committee on Instructional Technology and hosted by Universite Laval. Following a format similar to the successful and well-received First Canadian Symposium on Instructional Technology, held 24–26 May 1972 at the University of Calgary, attendance at the Second Symposium will be limited. If you are interested in receiving detailed information, contact the Conference Co-ordinator as soon as possible:

Mr. C.D. Doucet,
Conference Coordinator,
Associate Committee on Instructional Technology,
National Research Council of Canada,
Ottawa, Ontario, Canada K1A 0R6

The theme of the Second Symposium will be "Technology in the Individualization of Instruction". Topics will include all of the general areas that make up instructional technology: television, films, overhead projectors, computers, and the various related support materials, programs, and documentation (hardware, software and courseware). Within these general areas, consideration might be given to such aspects as design, training, use, implementation, evaluation, and support systems for the individualization of instruction.

Papers related to the theme of the conference are invited. Authors wishing to submit papers should send an abstract (about 200 words) to the Conference Coordinator before December 15, 1975. Authors will be notified of acceptance by 20 January 1976. The complete paper will be due 31 March 1976. The final draft will be published in the Symposium Proceedings and should be in a form suitable for reproduction.

SEPTEMBER 1–5 Computers in Education, Marseilles, France
Contact: G.C. Bonham, Rm 1721, Mowat Block, Queen's Park, Toronto, Ontario

SEPTEMBER 16–21 Audio Visual Communication in the Life Sciences, University of Warwick, U.K.
Contact: Institute of Medical and Biological Illustration, 27 Craven St., London, England WC2N 5NX

SEPTEMBER 24–26 Canadian Educational Association Convention, Four Season's–Sheraton Hotel, Toronto.
For information:
Canadian Education Association,
252 Bloor St. W.,
Toronto, Ont. M5S 1V5.

SEPTEMBER 26 – Canadian Film and Television Association Awards 1975
Edmonton, Alberta (Edmonton Plaza Hotel).
Deadline: July 14, 1975.
Categories: 1. Public relations. 2. Sales promotion, 3. Travel & recreation, 4. Nature & wildlife, 5. Sports. 6. Educational & instructional, 7. TV information – public affairs, 8. sponsored theatrical short. CRAFT AWARDS: Direction, Cinematography, Script, Editing, Sound, Music score. Format: 16mm or 35mm, optical sound; or ¾ inch Sony U-Matic Video cassette tape.
Inquire: CFTA Awards, 1975
c/o Dale Phillips,
Filmwest Associates Ltd.,
10816A– 82 Avenue,
Edmonton, Alberta. T6E 2B3.
Entry forms available from Pulse.

CONFERENCE

OCTOBER 16–18 Management for Motivation Conference. Seventh Western Canada Educational Administrators Conference, Sponsored by the Council on School Administration of the Alberta Teachers' Association, Banff, Alberta.
For Information write:

W.T. Brownlee, Director,
Seventh Western Canada Educational Administrators' Conference
c/o Lindsay Thurber Comprehensive High School
Red Deer, Alberta

NOVEMBER 13–15 Ontario Association for Curriculum Development conference, Holiday Inn, London, Ont.
Details:
Dina Nicholson, Administrative Secretary,
Ontario Association for Curriculum Development,
1260 Bay St.,
Toronto M5R 2B5, Ontario.

NOVEMBER 18–20 Cine Golden Eagle Awards
Washington, D.C.
Deadline: (1) Feb. 1, 1975; (2) August 15, 1975.
Categories: Animation, Arts & Crafts, Agriculture, Education, Entertainment, Experimental, Environment, History, Religion, Science, Documentary, Sports, Travel, Drugs, Amateur (students).
Format: Amateur films; 8mm, 16mm, 35mm; professional films: 16mm, 35mm.
Inquire: Mr. Shreeniwas R. Tamhane, CINE,
CINE,
1201 – 16th St.,
N.W., Washington, D.C.
20036, U.S.A.

NOVEMBER 20 – 1st Annual Canadian Awards for Young Filmmakers
Deadline: November 20, 1975.
Sponsors: Motion Magazine & Kodak Canada.
Categories: wide open.
Format: 8mm, Super-8, 16mm.
Inquire: Motion, Box 5558,
Stn. A, Toronto, M5W 1N7.

MARCH 2–4, 1976 Canadian Education Showplace Moves to New Times and Place
Toronto — Canadian Education Showplace (CES), Canada's annual national exhibition of resources and communications for education and industry, will move to a new time and place in spring 1976, Lloyd Haines, show manager, has announced.

New dates are March 2, 3 and 4, 1976, and the site will be the Automotive Building, Exhibition Place, Toronto.
For more information contact:

Lloyd Haines, Manager,
Canadian Education Showplace,
481 University Avenue,
Toronto M5W 1A7, Canada

editorial 2

This is the last issue of Media Message that I am responsible for. Knowing that the end is in sight does not seem to speed up the process, indeed the end seems to drag on interminably (you will note that your summer issue is arriving a bit late).

My experience with Media Message, first as a monthly newsletter, and lately as a quarterly magazine, has been a rewarding experience that is difficult to separate from my general involvement with A.M.T.E.C. Everything seemed so interrelated I never knew at times whether I was operating as editor, past President, a committee chairman, or just plain member. Feelings of confusion and frustration arising out of such involvement were so often mitigated by individuals who willingly responded to a call for assistance. That observation is the most satisfying one I have made over the past three years. So many people were willing to help – if only they were asked. Fortunate is the person who is called upon to serve; how unfortunate that I was unable to call upon more of you. To those who did respond my sincerest thanks.

Closer to home, I must thank Lorra Hines, A.M.T.E.C.'s secretary, and Frank Cerisano, the graphic artist at the Faculty of Education. Without them I suspect Media Message would have keen visually unattractive – and liberally sprinkled with errors of every type and description.

To my wife, Joyce, goes considerable credit for much that I have been able to do for without her patience and understanding it could not have been possible.

I am pleased with Media Message as I hand it over to the new editor, Mr. Lou Wise, Co-ordinator of Audiovisual Services of the Toronto Board of Education, and his able regional assistants Larry Burt, Nova Scotia, Bob Miller, Alberta and Gilles Carrier, Quebec. With a larger more national editorial staff the publication should reflect more of a national image than has been the case under my editorship. With your co-operation Media Message will continue to improve and develop into a national publication that we, in A.M.T.E.C., can be proud of.

After this issue, Media Message moves to Toronto.