media message

Summer Edition, 1974 Volume 3, Number 4

L'ASSOCIATION des MEDIA et de la TECHNOLOGIE en EDUCATION au CANADA
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F. JOHNSTON
FACULTY OF EDUCATION
QUEEN'S UNIVERSITY
KINGSTON, ONTARIO

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WIRED CITY SIMULATION LABORATORY

by Joyce McEown

The idea of the "Wired City" is generally understood as the use of telecommunications for access to information systems. The breadth of the concept ranges from McLuhan's "global village" to the many communication services that coaxial cable can carry into the home. The immense problems associated with the storage and retrieval of information on a universal basis by the community at large has led to the concept of the "Wired Scientific City": the provision of telecommunication and terminal facilities particularly designed to achieve an enhancement of successful communications with a restricted, yet diverse technically aware community.

An awareness of the possible problems prompted a study by:

Dr. D.A. George, Dean of the Faculty of Engineering

Dr. B.A. Bowen, Professor of Engineering

and Dr. D.C. Coll, Professor of Engineering

of the Systems Engineering Division of the Faculty of Engineering, Carleton University. The study was contracted by the Department of Communications, Ottawa, with Dr. J.B. de Mercado, Director of Terrestrial Systems and Technology Branch, acting as Project Officer. The statement of service to be performed in the contract was:

> "To conduct a study, on behalf of the Department of Communications, to determine the feasibility of and develop a plan for creating an economical and efficient teaching/research broadband communications network....."

Originally, the network decided upon would have linked Ottawa and Carleton Universities and certain Government and Research establishments in Ottawa. Circumstances, however, prevented the establishment of such a network, and the decision was made to perform the investigation on a simulated network situated in the C.J. MacKenzie Building, Carleton University.

Some research into humanistic factors in teleconferencing and the educational uses of television was carried out in the Systems Engineering Division of Carleton University during 1970 to 1972 with the support of the (then) Department of University Affairs. The research performed and the equipment procured on the DUA grant formed the basis for "Wired City" studies at Carleton University.

The "Wired City Laboratory" is one component of Carleton's program in "wired city" studies. The overall aim of the program is to provide a focus whereby the past expertise and future discoveries of a multidisciplinary group working in communications can be brought to bear on important questions, particularly the use of technology to enhance communications. Whereas the work in the past has been primarily concerned with man/man communications, it is obvious that the "wired city" becomes a reality only as man/machine communications develops. The thrust of the Carleton program is directed towards communications which provides the user with connections to information to which he would not otherwise have access, whether the source of it is human or machine.

During the past two years the Wired City Research Project (under contract with the Department of Communications) has been developing and simulating video communication services to provide laboratory facilities for psychologically and sociologically based experiments to determine the impact of Wired City technology.

The laboratory facilities include four completely interactive video teleconferencing rooms plus a control centre for recording and regulating teleconference experiments (all in the C.J. MacKenzie Building). Some courses have been conducted over the teleconferencing system on a limited basis.

There have been two major reports published about the "Wired City" concept and the Wired City Laboratory. In November 1971 a report containing the results of a feasibility study were released in a publication called "The Wired Scientific City"; in May 1973 a description of the status of a Laboratory for simulation Wired City systems that had been created at Carleton University. The report describes the use of the laboratory and its future development. There are also brief descriptions of the social and technological experiments that have been conducted in the laboratory. In the next year there will be newsletters and interim reports with a major report presented towards the end of the year.

In February 1974 the Wired City Simulation Laboratory was awarded a contract by the Educational Technology Branch, Department of Communications for applied research in the field of educational television. The main purpose of the contract is to

extend the capabilities of the laboratory to combine video and computer technology into an integrated system geared to meet educational needs in the area of individual, classroom and remote instruction.

Usually the applications of television to education have been in the production of video taped material; the Wired City's program will be concerned with the development of "live" uses of video as both a classroom tool and for remote teaching. The prime objective will be to make video technology convenient and easy to use. A grant for this aspect of the Wired City Simulation Laboratory has been made from the Carleton University Instructional Development funds.

The application and adaptation of telecommunications to education uses has been a major concern of the investigators from the initial stages of research. One development in this area was a proposal made in 1972 by Stanford University, Carleton University and NASA Ames Research Center. The proposal is to develop, demonstrate and evaluate university curriculum sharing techniques using an all digital satellite communications system. The communications link technology is being developed by NASA Ames and the teaching experiment will take place in the 1976-77 sessions. During that time the Engineering Departments will teach one graduate engineering course over a video link. The satellite that will be an integral part of the program will be launched in 1975-76 through the joint efforts of the Canadian Department of Communications and the United States Aeronautic and Space Administration.

Joyce McEown is an Administrative Assistant for the Wired City Laboratory.

PUBLIC BROADCASTING and THE CBC

by Graham Spry

All broadcasting is public but the term "public broadcasting", adopted from the American non-commercial programme distribution corporation of that name, the C.P.B., is now part of the Canadian idiom. The more accurate Canadian term is public ownership, a more respected description also covering many Canadian social experiments such as hydro, prairie telephones, Air Canada, the CNR and in every province, aided with federal funds, the hospital and medicare plans.

In broadcasting, the CBC is, of course, the principal publicly-owned broadcasting system. From 1932-33 to 1951-52, including its predecessor The Canadian Radio Broadcasting Commission, this publicly owned service was profitably self-financed by annual license fees of $2 or $2.50 plus limited advertising and over these 20 years received no money from taxation. The CBC to-day could still be a self-financing broadcasting operation if, when television began, the Government of the day, had had the courage and will to raise by stages the subscription fee, to say about half the usual $60. a year now collected by private cable companies.

Instead of a system financed by the audiences, we now have CBC financing some four-fifths by taxes and the rest by advertising, that is by the State and the advertiser. These double and contradictary masters are together just about the worst masters that in tandem a varied and complex art like broadcasting can endure anywhere.

In Canada, there are other complexities. The CBC is itself a mixture - it owned and operated in 1973, 21 television and 41 radio stations and subsidized through free network and free programme or cash payments its affiliates - 41 television and 108 radio stations in private ownership.

The long promised national publicly-owned system was never created. Further ingredients in the mixture of "public broadcasting" are, of course, the American origin of advertisers - some 45, the top 50 in television - and of American programmes by stations, cable, or directly. It is doubtful if any broadcasting in the world operates in a more complicated set of conditions than the CBC.

Maligning the CBC almost ranks among Canadian sports with federal-provincial controversies. Yet, as Mr. Juneau, Chairman of the CRTC said at the gladiatorial exercise on February 18 last, while 304 briefs of many critical points of view were received, not one of them demanded dissolution or execution of the CBC. Many stones, those medieval weapons, were hurled at The Saint not as lapidation - death by stones, but reform and consecration on still nobler heights. Regrettably to all but Toronto, most of these heights were seen to be in Toronto, yet, the heaviest stones were hurled by Toronto residents, more than a few of them present or past CBC artists. Indeed, the CBC French service, secure in its own stone tower in Montreal, was untouched (except by CUPE) and CBC radio in both languages earned what the "Time" report called "boundless applause".

That is, one only of the five CBC national networks attracted the stones, not one of them hurled with murderous intent.

"Public broadcasting", to use the American term, is 42 years old in Canada, and the original and later Acts were usually adopted by unanimous Parliamentary decisions, the present Act in 1968 with small revisions in 1970. What was the purpose of these Acts?

The purpose was to provide in the communication of information what the "National Dream", the CPR, achieved in the transportation of people and goods - a service for Canada from coast to coast. This service, whether operated by public or private owners, uses "radio frequencies that are public property" and as such all Canadian broadcasting constitutes "a single system", must be owned by Canadians, and "safeguard, enrich and strengthen... the fabric of Canada".

In this sense, under the earlier or present statutes, all Canadian broadcasting is "public broadcasting", be they stations or cable systems in public or private ownership. This is important. Both the publicly and privately owned undertaking are equally required by law to provide "varied and comprehensive" programming and to use "predominantly Canadian creative and other resources" in English or French. The words quoted are from Section 3 of the Act and they govern or should govern private no less than CBC owned stations and networks.

The privately owned sector, no less than the CBC, is required to provide programming "of high standard", a "reasonable, balanced opportunity for the expression of differing views on matters of public concern" and "the right to freedom of expression" as well as the "right to receive programmes is unquestioned".

There can be no doubt, then, that all Canadian broadcasting is by law "public broadcasting".

The Act further and in different clauses confirms the existence of a Corporation "established by Parliament" for the purpose of providing "a national broadcasting service that is predominantly Canadian in content and character", "be extended to all parts of Canada", serve "the special needs of geographic regions" and "contribute ... to national unity ... and Canadian identity". In the same Section, the CBC is twice stated to be "the national broadcasting service".

This, "the national service", as a publicly-owned service is, therefore, doubly "public broadcasting" and as a publicly-owned service preceded the American "public broadcasting" by some 30 years.

The test of the extent to which the CBC or the privately-owned sector serves the purposes required and defined by Parliament in successive Acts over the years is briefly twofold-Canadian programming and the administration of income for broadcasting itself.

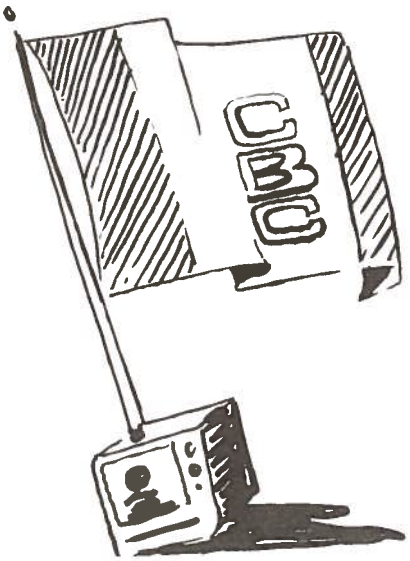
Judged by the necessities of national policy and by the over-arching significance of communications in the life of an autonomous society, the CBC and its operations more largely meet the requirements of the Act of Parliament than any other Canadian Broadcasting service. The CBC alone is nation-wide in its programme distribution over its few owned and more numerous affiliated private stations. It is the sole national corporation that provides both radio and television service in both official languages.

CBC is more "varied and comprehensive" in its programming than any other service. Its Canadian content is and has long been always greater than that of any other major service, its English language programmes in 1973 were in Canadian content for radio 83.8 percent (including regional) and for television 68.7 percent. Its employment of Canadian talent has likewise been greater. Moreover, CBC's "independence from the commercial environment", the words of Mr. Juneau, Chairman of the CRTC, is very much more than that of any other Canadian service. CBC provided 21 national, regional and other networks, along with the international, the Armed Forces, the northern, the emergency, short-wave, satellite broadcasting and other services. Not until the CRBC and CBC was there any large volume of network radio programming and today after 54 years of radio, only the public sector has organized regular nation-wide radio network services.

The total operating expenditures of the CBC and private sector are about equal. There are, it may be observed, two considerations by which the administration of revenues may be judged: (1) the money removed from a service or business as profit: (2) the use of money to meet prescribed purposes. By this test, the total product produced, the CBC more efficiently fulfills its "mandate" and far better than the private sector meets the requirements of the Act of Parliament.

The CBC uses for television and radio programmes some 68 percent of its total expenditure; the private sector only 41 percent: in 1972 $144 millions by the CBC and $87 millions by the private sector. The CBC also spends much less of its total expenditure on "administration and general, and sales and promotion" and the private sector much more. The CBC spent $37.4 millions, the private sector $105.9 millions: that is CBC administration costs were only about one third of private administration costs. Indeed, the private sector's administration costs, as above, exceeded its programme costs by 17 percent - $105.9 millions for administration and sales; $87.9 millions for programmes (Statistics Canada, Cat. 56-204, p.10).

There is also a twofold test of the significance of broadcasting to the individual - the test of the values in the entertainment and information received as one person, or the values received by the individual as one of millions of individuals - that is, as a member of society as a whole. This second is more than mere nationalism: it is a question of what kind of society and what kind of values: that is what kind of human beings broadcasting will shape. This, surely, is the prime issue of broadcasting - what is broadcasting doing to us?



Mr. Spry is Director of the Canadian Broadcasting League.

THE SAME OLD PROBLEM - TERMINOLOGY

by Jean Riddle Weihs

It is past history, but important past history, that the Preliminary Edition of Nonbook Materials: the Organization of Integrated Collections was recommended by the Canadian Library Association Council and the American Library Association, Resources and Technical Services Division, Cataloging and Classification Section Executive Committee as an interim guide for the cataloging of nonbook materials, with the proviso that a permanent ALA/CLA committee be established to work on any necessary revision for a final edition and its supplements. On another continent the Australian School Library Association "formally adopted the standards .... for use in all schools throughout Australia".

The proviso was met by the establishment of a Joint Advisory Committee on Nonbook Materials. It was obvious to all that the advice of audiovisual specialists was needed, and so the original concept of a ALA/CLA committee was expanded to include representatives from EMAC, AECT, and the Canadian Association of Music Libraries. The EMAC representative, Fred Johnston, was an active member of the Committee, supplying needed technical details and the viewpoint of Canadian audiovisual specialists.

In addition to the Committee's formal input, the authors were overwhelmed and delighted to receive over 200 letters and other forms of communication from librarians and media specialists in Canada, the U.S., Australia, Great Britain, Colombia, and Venezuela.

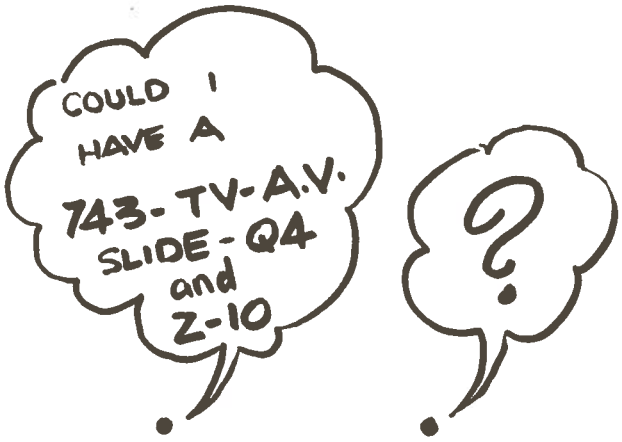
All this flow of ideas and information plus additional research were sorted, sifted, digested, reworked, and considered once more, and from this emerged the 1st edition of Nonbook Materials: the Organization of Integrated Collections published in February 1973 by the Canadian Library Association.

How has this new edition been received? As far as I can judge (and as one of the authors I can certainly be accused of bias), the answer is favourably. In the first six or seven months 10,000 copies had been sold on four continents. The reviews have been commendatory on the whole, and our mail has been questioning rather than critical.

The reviews and the mail reveal that one big problem still remains - terminology. This has always been the biggest headache, the area where there has been least agreement and the most vocal quibbling. The Joint Advisory Committee itself could not agree on terminology and they decided that the only way they could deal with the matter was by majority vote. Indeed, the list of media designations was drawn up in just this manner. I personally believe that when an area is so rent with diverse opinions, the only way to handle it is democratically. Yet some reviews and letters voice disagreement with the Joint Advisory Committee's choice of terms. Is this an insoluble stumbling block to bibliographic control? How are we going to achieve interloan of media if we cannot agree on terminology?

An organization such as EMAC can be very influential in the terminology muddle, probably much more persuasive than the library associations. You have dealt longer with AV producers and you are a large sector of their buying public. EMAC subscribes to the Joint Advisory Committee's choice of terminology. If you personally do not, write to Fred Johnston. If you do or if you do not but nevertheless wish to see bibliographic control and interloan of media realized, then support the Committee's terms by using them yourself and advising producers to label their media properly and to use standard terminology in their catalogues. This would be a large step toward standardization of cataloguing procedures.

I would like to take this opportunity to thank EMAC for the support you have given us, and I particularly want to commend Fred Johnston for his help. The authors welcome any comments or suggestions you care to make. Mail may be addressed to me at the Canadian Library Association, 151 Sparks Street, Ottawa, Ontario. K1P 5E3.



Mrs. Weihs is on the faculty of Seneca Community College and is one of the authors of Non-Book Materials: The Organization of Integrated Collections.

NEW TRENDS IN INTEGRATED SCIENCE TEACHING *

Abook review by John Olson

UNESCO has long been active as a forum for improving the teaching of science. The present volume is the second on integrated science and part of a series on trends in science and mathematics teaching. Nine commissioned articles as well as examples of integrated science projects form the content.

The articles have as their stated starting point a focus on integrated science. This focus, however, is not what is most significant about the articles in this volume, as shall be indicated later.

W.C. Hall of the U.K. and H. Thier of the U.S.A. both argue for including in the curriculum the study of social implication and technological applications of science. Thier calls the outcome of such a study "scientific literacy"; an understanding of the possibilities and limitation of science and the effects it can have. From the point of view of scientific literacy, so they argue, separating science into component disciplines makes little curricular sense. Hence the need for an integrated approach. Other bases for justifying an integrated approach include arguments from the need for environmental "involvement" on the part of students, psychological development theory, the interests of the child and the nature of general education.

Hall elaborates on techniques for curriculum design using the Tyler model. Blum, Dale, Baez and Alles show how integrated science can help to meet the need of society for general education. Thier argues for learning science by doing approach and the need for scientific literacy. Williams reviews a variety of methods for teaching science, particularly activity methods and Warren outlines how to use low cost material. Cerovsky shows how environmental science is already integrated. Cohen reviews methods of evaluating curricula.

A number of points of general significance about international trends in science education emerge from these articles and examples of science programs.

* Richmond, P.E., (Ed.) New Trends in Integrated Science Teaching. UNESCO, Paris, 1973.

1. Science as part of general liberal education, rather than science as part of vocational education is stressed. This can be seen clearly in the African Science Program which focusses on developing problem solving skills. It is interesting that developing countries are considering general education possibilities of science as well as the pre-vocational or vocational education role of science in the curriculum. Careful thought about science as part of a liberal education seems to be the most significant aspect of the book, rather than the focus on integrated science per se.

2. Modern techniques of course development, implementation and evaluation are very much in evidence.

3. Canada does not feature in this international picture. There are no Canadian contributions in the form of articles or examples of curricula. There are very few references to work on curriculum development in Canada. It is interesting to speculate why this is the case.

4. The book contains excellent lists of references to modern literature of science curriculum development. This is most valuable. The book provides fascinating glimpses of what is happening beyond provincial borders. The cosmopolitan nature of the document is both informative and refreshing.

Mr. Olson is an Assistant Professor at the Faculty of Education, Queen's University, at Kingston.

BRITAIN'S OPEN UNIVERSITY

by Arthur Knowles

Last November, I had an opportunity for a visit and close observation of a new institution that demands international attention. Britain's Open University is an experiment in education that has, in less than three full teaching years won the interest and respect of those concerned with higher education.

The Open University is different primarily because it offers university education on a part-time basis to a working population - and because it demands no formal qualifications for entrance.

History of the University

The idea of the Open University was first publicly discussed in Britain by Harold Wilson in 1963, in which he talked about "a university of the air", stressing the use of the broadcasting media as an integral part of the teaching system. So in the Spring of 1969 the Open University came tentatively into being, without a budget or its own premises, and with a staff of four. The choice of Walton Hall, near Bletchley, Buckinghamshire, as a site for the university was made. The university is 50 miles from London, making access to the BBC studios at Alexandra Palace, where the television and radio programmes are recorded, possible by road or by train. It is sited within the area of Milton Keynes, a planned new city for 250,000 people.

Undergraduates System

Because the university demands no academic qualifications from entrants, courses must be written for the student who has had little previous formal education - and yet they must not compromise the academic standing of the university's degree. The university awards a B.A. degree on a credit accumulation system. A student who has six credits receives an ordinary degree, an additional two credits translate this into an honours degree. A credit is awarded to a student for one year of part-time study with the university, on the basis of continual assessment including examinations. Students can take a maximum of two courses each year. A system of credit exemptions operates, allowing students who have completed other forms of study at higher education level to take Open University degree courses more quickly. The Open University year starts in January, and lasts for thirty-four weeks.

The system is designed to give freedom of choice to the students. No student is restricted to one particular course when he enrolls with the Open University. Students may break for as long as they like between years - for instance, married women may wish to postpone their studies for the birth of a baby.

The Instructional System

The most important element is the correspondence package. There are 34 or 36 study units in a full credit course, each representing one week's work. To assist the student there are self-assessment exercises in which the student works out the answers to questions and checks his own success rate. The marks attained in assignments are recorded and are used to give the university a continuous assessment of a student's progress.

Radio and television are important elements in the instructional system, but radio and television in fact occupy only a small amount of the student's time. Essentially, the television and radio programmes supplement the written part of the course. The degree of integration between the printed matter and the broadcasts varies considerably from course to course. The university has thirteen regional offices, and about 300 study centres located in existing educational institutions, and open in the evenings. The counsellors (also part-time) meet students to discuss problems connected with studying with the Open University. Senior Counsellors work full time, and are based at the regional offices.

Summer schools are another essential part of the instructional system. During the summer all foundation course students are required to attend one week residential schools, held on the premises of conventional universities. Courses at higher levels do not always include summer schools. The courses are prepared by course teams. These include all the academics who are involved with the course, producers of the BBC radio and television programmes, a representative from the Institute of Educational Technology, and a course co-ordinator, whose task is to act as a link with other groups in the university, such as the publishing office, the media library, and the graphic designers.

Post Experience and Post Graduate Courses

The Planning Committee originally suggested three areas of work for the university - undergraduates, post-graduate and post-experience. In 1973 the post-experience course started, offering short (generally six months or a year) courses for people with experience in industry, public service and the professions who want to update or refresh their knowledge. In the area of post-graduate studies, the university does not yet offer course work at higher degree level.

The Institute of Educational Technology

The Planning Committee foresaw the importance of educational technology, and in April 1970 an Institute of Educational Technology was established. It is involved not only in course development but in institutional research, through a comprehensive feedback network from the students.

Marketing

Course units are published in bound book form, and are sold to bookshops throughout Great Britain, Sweden, Norway, Australia, Southern Ireland, Canada, the U.S.A. and Latin America. The University also sells films and tapes of its television and radio programmes. A new aspect of the marketing operation is the sale of complete courses to American universities on a trial basis. Three universities - Rutgers, Maryland and Houston have experimented for a year with Open University courses, complete with tapes and films of the programmes. The courses were sold at cost price. The experiment was a success, and the universities will continue and expand their use of Open University material.

Students

The university has about 42,000 students. Approximately 30% of all Open University students are teachers, with professional people, laboratory technicians, scientists, engineers and housewives well represented. The university has disabled students (including blind, deaf and spastics) - for whom special arrangements for summer schools and examinations can be made - and a small number of students in prisons. There is also a special scheme for men serving abroad with the armed forces, and for merchant seamen.

Graduates

Nine hundred students graduated after two years of study with the Open University, all of them students with either two or three credit exemptions. All of them, therefore, were teachers or lecturers, housewives with teaching qualifications, students with degrees from other universities, or people with professional qualifications.

Open University teaching methods - by correspondence material, television and radio programmes - means that the work of the university's academics is open to the public, and to other academics, to scrutinise. This, and the fact that all courses are written by teams, means that the standard of work is consistently high.

Canada will continue to watch the Open University, whose basic motivation and methodology has implications for all post-secondary and continuing education in this country.

PICTUREPHONE AND THE FUTURE

by Arthur Knowles

PICTUREPHONE service was designed by Bell Telephone Laboratories to provide a face-to-face visual adjunct to enhance audio telephony and extend the realism of communication. Commercial service was inaugurated in the U.S.A. by the Bell System in July 1970. By September 1971, when the author examined an operating unit, the service was available in three major cities. However, in 1972, the marketing of the service was actually shelved. Today, to fulfill its potential and gain wide public acceptance, the video telephone may have to be considerably modified, to meet user needs more efficiently.

(In the following article, the author has drawn heavily on an outstanding new publication, The Video Telephone: a New Era in Telecommunications, Cornell University, a report prepared by Edward M. Dickson and Raymond Bowers.)

Picturephone's main problems seem to stem from a design that, although excellent in its own terms, mistakenly assumed that most users would want face-to-face conversation rather than data and text transmission. In a recent Cornell technology assessment report, advocates of the video telephone continue to present cogent arguments on the benefits and promise of such services. They point to potential benefits for the deaf, for medicine, for education, and for our courts as well as for consumers. Let us consider the future potential of these devices.

The video telephone could feature:

- Animated small screen color video with resolution standards similar to today's Picturephone.
- A selectable slower-scan mode with high resolution suitable for transmitting textual or prepared graphical material.
- An optional, electrically connected, high-speed half-tone facsimile unit.
- An optional, electrically-connected, video recording unit capable of recording many minutes' worth of the animated mode or thousands of frames of the slow-scan mode.
- An optional full alphanumeric electronic key-board and character generator, to enable direct input and display of textual material. This would facilitate interaction with a computer.

Video telephones have already been shown to be valuable aids for communication between deaf people. At the National Technical Institute for the Deaf in Rochester, N.Y., deaf faculty members have freely used sign language, via video telephones, to communicate with each other. The super video telephone would enable deaf people to communicate with hearing people by using typed or written messages. This would help to remove obstacles to employment advancement.

Two medical centers in Chicago are currently experimenting with Picturephone services to assess their potential for medical applications. At Bethany Brethren-Garfield Park Community Hospital, Picturephone units provide links to two associated hospitals, three out-patient clinics, and a drug program clinic. Future medical applications might be: remote instructions from physicians to nurses and other medical personnel; remote diagnosis by physicians; access to computer-based medical records and information. These devices might be usefully employed to receive legal testimony from remote locations, to aid libraries in sharing computer-based or microfilmed resources, and to help in spreading various forms of automated educational instruction. An exuberant study, sponsored by AT&T and performed by the Institute of the Future, predicted that there will be 200 million Picturephones in the United States by 1985. The fact is that these hopes have not yet been borne out by customer response to offers of Picturephone services. The new service just hasn't gotten off the ground. Customers are reluctant to subscribe when there is hardly anyone else to call.

Picturephone was designed for desk top use with a "head and shoulders" display that incorporates many excellent human-factors features, all based on the assumption that face-to-face conversation would be the predominant use for the service. It appears that data, text, and graphic material, rather than faces, are what potential video telephone customers want most urgently. Unfortunately, the effective Picturephone field of vision for written or printed materials is about 6 X 6½ inches, not much more than half of a standard 8½ X 11 sheet of paper. Worse yet, the resolution of the image is inadequate to read standard typewriter copy without added magnification.

Video telephones under development in other countries are based on strikingly different design assumptions. L.M. Ericsson Co. of Stockholm, Sweden, for instance, designed its own system in the belief that video telephones would be used primarily to promote office efficiency.

Similarly, key personnel at Nippon Electric Co. in Japan believe that their video telephone - now under development - will be used mainly for text and graphics.

The Bell System now plans extensive modifications, and a new assistant vice-president of AT&T, Edward Goldstein, sees the basic problem for Picturephone services as a design that has been optimized for face-to-face communication and under his direction a variety of function-broadening options are being planned.

A key issue being considered is the possibility of increasing the Picturephone camera resolution to the TV standard of 525 lines This would open the door to use of conventional closed-circuit TV cameras and, perhaps more important, to use of commercial TV receivers.

A key point made in the Cornell report was that many new products are based on intuitive and superficial assessment of human needs, in contrast to very sophisticated consideration of technological and economic feasibility. The ordinary telephone is a potent means for invading human privacy. The telephone rings to interrupt a conversation, an evening meal, a bath, a train of thought, or a moment of affection. Fortunately, from the standpoint of privacy, the ordinary telephone is blind and users are free to read, write, doodle, gesture, grimace, roll their eyes, or even yawn while calling. It is true that, after 100 years of public use, attitudes toward ordinary telephones have changed. Similarly, over time, video telephone users may feel quite at ease with these new devices. But a desk-top video telephone with optimum viewing at about three feet, places the face-to-face user in a personal-distance situation regardless of whether he is talking to a close friend or to a public official. For many users, this could give rise to feelings of being uncomfortably close. When using video telephones, both parties tend to feel they are being stared at for abnormally long periods of time. Some Picturephone users have been observed to face away from the unit to avoid the unpleasant feelings of excessive eye contact.

In the business world, if executives adopt the video telephone, it will probably be seen as a substitute for some inconvenient travel, and as a means to exert personal control at a distance. As a result of interactions between executives of different organizations, it is easy to imagine demand for video telephones being stimulated by competition in the acquisition of status symbols.

However, if adoption begins with staff members as a means to expedite or alter the nature of their work, the device will need to pass a much more rigorous test for economic justification. Versatility, resolution, and ancillary services such as hard copy and computer graphics, will become the dominant considerations. The device will be considered as a work tool, like a desk calculator, more than as an item of prestige.

It has been observed that adopters of technological innovations seem to have certain common characteristics. They are generally young, high-risk takers, financially well off, respected, and social leaders with interactions beyond their immediate environment. Although executives often fit part of this description, they are seldom young and tend to be conservative. There is some risk that executive authority will be compromised by video telephones if they are used in the face-to-face mode. Consequently, executives may not be eager to adopt video telephones.

The Cornell report estimates that well over 2500 professional man-years of R&D effort had been poured into Picturephone-related work by 1973. The cumulative investment in Picturephone services may now be as much as $500 million. Looking toward 1984, the report projects that a successful video telephone system - with about two million video telephones installed - would call for an investment of roughly $20 billion. That amount represents a substantial part of the resources expected to be available to the U.S.A. for investment in new ventures, and invites, comparison with other ventures competing for the same investment resources.

By 1980, for example it is estimated that pollution abatement will have taken a total investment of about $93 billion. The closest competitor to the video telephone for future communications - cable television (CATV) with two-way transmission capability - is said to require a total of about $10 billion in investments by 1981. It is by no means clear that the video telephone qualifies for major capital investment.

It has been estimated that two-way CATV service in a medium-density urban location would cost about one seventh as much to install as a local Picturephone network. The difference stems mainly from the fact that the telephone system supplies a network of private lines with a separate pair of wires allotted to each customer, while CATV subscribers share a single coaxial cable in party-line fashion. Although the two-way CATV concept usually includes video to the subscriber with only audio and digital signals from the subscriber, even this limited capability allows many of the services envisioned for the video telephone. The home market might be better served by two-way CATV than by the video telephone.

L.M. Ericsson Company in Sweden sees its commercial clients making heavy investments in closed-circuit TV and video recording systems that use broadcast television standards. Perhaps these plans foreshadow a future in which the TV set and the telephone will work together to provide new forms of communication.

Mr. Knowles is presently on sabbatical and is studying at the Ontario Institute for Studies in Education.

NEW MEDIA SYSTEMS IN EUROPE

by Neil McLean

When the editors of the Media Message asked me to write an article on new media systems in Europe, my first reaction was one of confidence - after all, several visits to European projects, along with work for Ontario's Wright Commission, seemed to provide a very useful background.

Second thoughts, however, destroyed any feelings of confidence. However much a visitor to Europe may be able to see, however closely a person may study new developments, there are just too many variables for anyone to pretend to be an expert in the whole field. Consider the circumstances. Each nation in western Europe has a clearly discernible political-educational climate - in France, the distinctly unnerving recovery from the events of May 1968; in Germany, the struggle for 'democratization' and 'participation'; in Great Britain, the extension of education in a class-conscious society waiting for manna from the North Sea. And while the influence of American educational theory and jargon permeates much of the thinking relating to education, a not inconsiderable portion of the student generation looks to Eastern Europe for its models and ideals. Within the wide range of political and social situations, there has been extensive utilization of the 'new media', particularly radio and television, in a variety of forms and combinations. To speak, therefore, of new media systems in Europe is to open a treasure chest (or Pandora's box!) of individual projects and experiments.

Since this is the case, the best one can hope to do in a relatively short article is to indicate some of the projects which appear particularly instructive. Naturally, the criteria for selection are subjective, but the choice of material may prove useful nevertheless.

The descriptions which follow are restricted to four developments or projects:

1. The German Institute for Remote Studies
2. English local radio
3. the BBC Further Education series, "The Raising of the School Leaving Age and After," and subsequent series, and
4. Funkkolleg, the German radio continuing education project.

A glaring omission from this list is Britain's Open University. This correspondence university for adult part-time students has broken much new ground, and has occasioned a great deal of interest throughout the world. But any attempt to describe it here would fail, so the best course is probably to suggest two addresses to those who might be interested. The first is that of the University's recently opened North American office:

The Open University,
888 Seventh Avenue,
New York, New York 10019.

A second useful source of information would be the OU's newsletter:

'Openline',
c/o Information Services,
The Open University,
Walton Hall,
Milton Keynes MK7 6AA,
England.

The first project on the list is actually an Institute supported by the Volkswagen Foundation and associated with the University of Tubingen. The Deutsches Institut fur Fernstudien - the German Institute for Remote Studies - has for several years undertaken coordinating and research activities in the field of remote studies. Since "Remote" in this context refers to a wide range of learning activities which are mediated by other than human or personal means, the work of the Institute has included participation in activities ranging from the development and assessment of small-group technology to involvement in projects of the widest scope. The language barrier in this era of English may be intimidating, but the work of the Institute in research, development and publication makes further contact worthwhile. Its address is

Deutsches Institut fur Fernstudien
an der Universitat Tubingen,
Tubingen 7400
Wohrdstrasse 8
West Germany.

One of the most interesting Institute publications is a catalogue entitled Fernstudium im Medienverbund: Projektbeschreibungen 1972, (Multimedia Remote Studies: Project Descriptions 1972). With an impressive thoroughness, it provides in point form essential information concerning approximately 110 projects in a wide range of disciplines, in a number of German post-secondary institutions, along with descriptions of about 25 of the DIFF's own cooperative or internally developed projects. It is probably fair to assume that a 1973 edition of the catalogue has been prepared, so the following address would be useful as a source for the publication:

Deutsches Institut fur Fernstudien
an der Universitat Tubingen (DIFF),
- Koordinierungsgruppe -
Tubingen 7400
Neckarhalde 55.

SATURDAY NIGHT MOVIES ON CHANNEL 19

by Elwy Yost

(NOTE: Elwy Yost is a Producer for The Ontario Educational Communications Authority (OECA) whose chief outlet is Channel 19 in Toronto. He is a former High School Teacher and Television panelist, and is a well known movie buff.)

The OECA is doing something brand new with feature movies on television, not the least of which is showing them uncut and uninterrupted in prime time slots on that most movie-oriented night of the week, Saturday. But this is only the beginning.

The OECA is concerned about reaching audiences who have never bothered to taste the goodies and delights of ETV before. Such audiences are part of that vast public "open sector" ranging from housewife to salesman, from bricklayer to banker, from carpenter to airline captain, from student to retired hardware merchant. And as such, these audiences more than likely want "entertainment" when they go for their TV dials after a busy day.

"Movies" are one of the key, tried and true pathways to entertainment as networks have been discovering ever since Hopalong Cassidy first rode his horse across the cathode ray tubes of the late forties. And so OECA decided to invest in feature films, but by a brand new method that would not only give audiences entertainment but a great deal more besides.

That "great deal" is what OECA is all about: such gorgeously lofty things as learning, education, skills, attitudes, enlightenment, information, and hopefully, ultimately, wisdom. And all through television.

The "brand new method" is the brainchild of the chief architect of OECA's Education Media Division - General Manager, Jim Hanley. It goes as follows: (1) select a theme or subject or topic that large segments of the open sector have a demonstrated interest in pursuing (2) pick good movies, say a mini series of three or four, that illustrate and develop that theme or topic (3) engage informed guests who can bring insight and interest to the "theme" and the "movies" (4) film these guests a) in interesting locations that are conducive to the "themes" and b) by camera and editing techniques that interpretively probe the subject at hand (5) provide a congenial host with whom audiences can identify (6) secure maximum publicity and promotion so that the public may be alerted (7) develop "utilization" measures that motivate more effective uses of the telecasts and also provide audience feedback (8) incorporate "audience surveys" to determine "who" is watching and "why".

Under the overall aegis of Jim Hanley, yours truly, the writer of this article, was brought aboard to conceive a whole string of "themes" and "topics" that would lend to mini-series production, and to produce, host, co-write the programs, and select the feature films that would be used. His department was to be called "Special Features Unit".

Bruce Pittman, only 24 but already the director of a number of Canadian films, was hired to direct and edit the productions, to work with the producer on "themes" and "film selections" and to co-write the scripts with him.

Cheryl Simard, fresh from OECA's "TRUE NORTH" series, joined the new unit as Production Assistant in which capacity she works with Pittman on all phases of production and handles the packaging and assembly of the specially filmed OECA components and the feature films.

Michael Browne, OECA Unit Manager, looked after the budgets.

This spring, 1974, from March 30th until June 29th, running every Saturday evening from 8:00 till approximately 10:30, the "Special Features Unit" produced 5 mini-series, 14 programs in all, devoted to "themes" and "feature films".

The first was "Three Films In Search of God", a series that showed three Ingmar Bergman films ("Through A Glass Darkly", "Winter Light", and "The Silence") to three different Church congregations (Roman Catholic, Anglican, and Jewish), then filmed discussions with these congregations on man's relationship with God. Paul Marquardt, OECA staff member, actually directed these three, immediately prior to Pittman's arrival.

Following this series came a nostalgic journey into the 30's and 40's called "Saturday Afternoon At The Movies On Saturday Night". The first program was a 4-hour blockbuster containing a newsreel, cartoon, a chapter from a serial ("The Mysterious Dr. Satan") and Laurel and Hardy and W.C. Fields features. Parts Two and Three of this series presented all 15 episodes of "Dr. Satan" while

the specially filmed OECA components - 30 minutes per program - visited an old time cinema in Toronto where our host plus movie-buff guests examined the vanished tribal ritual of matinee movie-going.

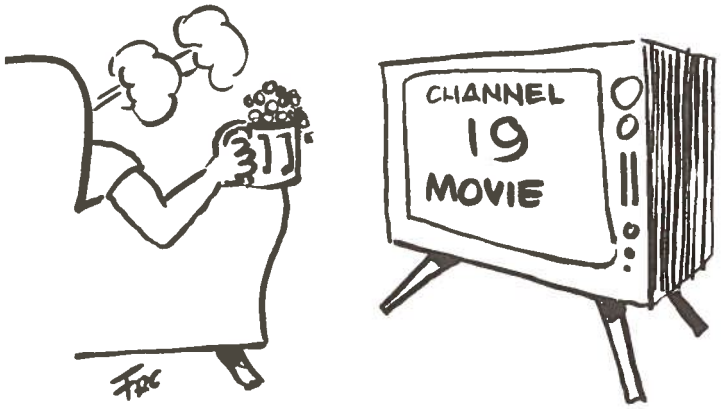
Next in line came "Great Beats of The Imagination" - an exploration of the horror films ("King Kong", 'The Bride of Frankenstein", and "Dr. Cyclops") in which a psychiatrist, a nun, a sociologist and an educator tried to find "the monster in all of us".

Following this there was a look at legal ethics and mankind under the title "They Took The Law Into Their Own Hands" with films such as "The Ox-Bow Incident", 'The Four Just Men" and "Abandon Ship", and guests including a judge, a lawyer, a priest, a rabbi, and a deputy chief of police.

And lastly, "In Pursuit Of Utopia", contained a search for the possibilities of Shangri-La in everyday life and featured "Lost Horizon" and "Meet John Doe", two visionary films by Frank Capra. Guests on this program included a nun, two educators, and a university environmentalist.

By the time the end of June arrives, Messrs. Hanley, Pittman and yours truly will sit down together and assess all aspects of their 14 weeks film-cum-enquiry series. Based on reactions from the public and a number of other sources of input - including audience research studies - decisions on whether to proceed with another series next fall will be made.

At the very least, then, the OECA spring series is an experiment and one which we hope will not only be continued but which will open up whole new avenues in the educational use of feature motion pictures on television.



Mr. Yost is a Producer for the Ontario Educational Television Authority's Channel 19.

HELPS - HIGHER EDUCATION LEARNING PROGRAM SURVEY

by G.A.B. Moore

Background

The use of non print media in Canadian higher education has had something of a chequered past from the founding of the first university film library in 1917 at the University of Alberta. After a slow and frequently disappointing growth[1] non print media in Canadian universities expanded rapidly in the latter part of the decade of the sixties with extensive television establishments. The paucity of output of these centres in terms of materials usable across the country has been decried by many commentators.

Teachers in Canadian universities, without fanfare and frequently without recognition, continued a constant search for appropriate learning materials in non print forms. This may be seen in the use of National Film Board materials in colleges and universities which grew from 5,960 booking loans in 1963-64 to 33,824 in 1972-73 or more than a five fold increase. Sales to universities and colleges of NFB materials have become substantial and are contributing to the building of local collections of non print materials.

Several attempts to identify inter-institution use of self produced materials have generally resulted in the conclusion that very little material exists which could be exchanged between universities and colleges. The reasons are numerous; no catalogue of materials exists, distribution mechanisms are non-existent, ambiguity of ownership and lack of copyright agreements with faculty members make exchange legally dangerous.

Not to be deterred by the apparent lack of progress in this area, and encouraged by the HELPIS project in the United Kingdom to identify exchangeable materials, the Media Directors of Ontario Universities undertook a study among their membership during the winter of 1973-74. The study was conducted by the author at the University of Guelph, under the project title Higher Education Learning Program Survey (HELPS). The Ontario Educational Communications Authority expressed interest in the outcome of the survey as a possible source of materials for its VIPS program.[2]

[1]Between 1948 and 1952 the National Conference of Canadian Universities received annual requests to establish a Universities' Film Council to provide information on films and visual aids for use in universities and to facilitate the acquisition and distribution of highly technical films. In 1952 the Universities' Film Council was established and in that year Norman Barton, University of British Columbia, compiled a catalogue of film sources. However, the Council was short lived and within several years activities had been suspended through lack of interest. Eleanor Barteaux Haddow "Audio Visual Centres at several colleges and universities in the United States and recent audio-visual developments at colleges and universities in Canada" A Report to the Canada Council, 1959. (Mimeographed)

[2]VIPS is a videotape program service of the Ontario Educational Communications Authority which provides videotape copies of its own productions and other acquisitions at low cost to educational institutions within Ontario. OECA, Canada Square, 2180 Yonge St. Toronto, Ontario.

HELPS - The Objectives

The survey undertook to answer the question, how much, if any, non print material institutionally produced in Ontario universities is available for exchange and under what general conditions?

The Survey

Letters were sent to Media Directors in the fifteen Ontario universities and they were invited to respond on a specially prepared survey form. The form provided for three general areas of response:

1. No materials to exchange.
2. Materials available for limited exchange but no general publicity.
3. Materials available for exchange and for which the University holds or can obtain distribution rights.

Where materials existed in categories 2 and 3, respondents were asked to identify each item by program title and media class, i.e. videotape, film or tape slide. Since the purpose of the survey was to identify the existence of material available for exchange, more complete information as to author, subject area, content summary, running time, etc. was left for subsequent elaboration.

The survey did not presume any distribution or clearinghouse role. This function, from the standpoint of the survey, was left to direct negotiation by the interested user and the producing university.

The Findings

Fifteen universities in Ontario were sent the survey questionnaire. Three universities did not respond prior to the February 1, 1974 deadline and three replied stating no materials were available for exchange in either the limited or general distribution categories. Nine universities reported a total of 602 programs available for exchange of which 271 or 44% are available for general distribution with the university holding or able to obtain distribution rights. The majority of the materials, 331 items, were reported to be in a restricted distribution class. Approximately three quarters of the materials are in videotape form but with substantial holdings in both film and tape slide. Four universities account for 82% of the materials available for exchange.

The following table shows the exchange materials reported by media type, availability and producing institution.

Institutionally produced media materials available for exchange from Ontario universities

University and Media Source

Queen's U., Kingston
Queen's Television

York U., Downsview
Dept. Instructional Aid Resources

U. of Toronto, Toronto
Instructional Media Centre

McMaster U., Hamilton
Audio Visual Services

Carleton U., Ottawa
Media Services Department

U. of Guelph, Guelph
Office of Audio Visual Services

Brock U., St. Catharines
Media Centre

U. of Waterloo, Waterloo
Audio Visual Centre

Wilfrid Laurier U., Waterloo
Media Centre

Media Type

Film	Tape slide	Video tape	Other
66	8	181	
1		97	
5	1	86	
	47	16	1
		46	
8	1	28	
	2	2	
		4	
2			
TOTAL 82	59	460	1

Availability

Restricted Distribution	General Distribution
221	34
38	60
10	82
11	53
18	28
25	12
4	
4	
	2
TOTAL 331	271

Summary

The survey results exceeded the expectations of the investigator by revealing a substantial quantity of material available for exchange which has clarified distribution status. At the same time the survey reveals a considerable amount of material with unclear distribution status and suggests the urgency of ensuring that all future productions are clear as to distribution rights when these programs are in an area of potential interest beyond the producing institution.

The Ontario Educational Communications Authority has been advised of the programs available and is giving consideration to those which it might acquire for its VIPS project.

The next requirement is to transfer the findings of HELPS into a usable catalogue form with descriptive information and provision for a regular update. The survey results are of limited value at present and suggest the desirability of a Canada wide catalogue of exchangeable institutionally produced media materials.

Dr. Moore is Director of Audio-Visual Services at Guelph University.

A COMPUTERIZED BIBLIOGRAPHIC NETWORK FOR CANADA

by Helen Rogers

ERIC, an acronym for the Education Resources Information Center, is the nationwide information system designed and supported by the U.S. Office of Education. Among the services offered by ERIC are magnetic tape copies of its files. The ERIC files represent virtually complete coverage of current significant developments in educational research in North America, and with some coverage of foreign literature. These files have been assembled by a unique network of co-operating activities, including: 18 subject-specialized clearinghouses operated by universities and professional organizations, the U.S. Office of Education, and several private contractors.

The ERIC data base consists of the following two files:

Report Resumes. This file consists principally of resumes of research reports filed by contractors and grantees on the results of funded educational research. All ED numbered documents announced in Research in Education (RIE) and other ERIC publications will be found on the file. Each resume includes full descriptive cataloguing, indexing and an abstract - all of the most useful information found in entries in RIE. There are now over 40,000 report resumes on file, and it is estimated that the file is growing at the rate of approximately 2,700 per quarter.

The National Library has acquired the entire back file on magnetic tape of report resumes, covering the period from November 1966 to the present, and has a subscription for the quarterly updates.

Journal Article Resumes. This file consists of resumes of journal articles, dealing with education, selected from over 500 education and education-related journals. All EJ numbered accessions announced in Current Index to Journals in Education (CIJE) are found on this file. These resumes are in the same format as the report resumes, except that the abstract is replaced by an annotation when the title does not clearly indicate the subject matter of the article. There are now over 30,000 journal article resumes on the file, growing at a rate of approximately 7,500 per quarter.

The National Library has acquired the entire back file on magnetic tape of journal article resumes, from January 1969 to the present, and also subscribes to the quarterly updates.

The principle subject field of ERIC is education and, in addition, the files contain much useful information in such subject areas as administration, psychology and the social sciences.

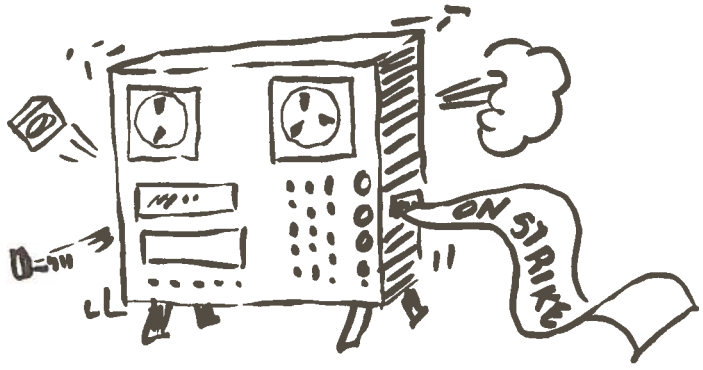
There are two types of service available for those wishing to use the ERIC tapes:

Current awareness subscription - where a quarterly tape is processed against a user's interest profile and the user receives a printout of the matching records, i.e., a computerized bibliography. This service costs $46 per year.

Retrospective searches - where the user's interest profile is processed against the cumulated ERIC data base in a one-time search and the user receives a printout. These retrospective searches cost $30 each.

This bibliographic retrieval system is being made available through a network known as CAN/SDI (CANadian/Selective Dissemination of Information). The National Library is the CAN/SDI centre for the social sciences and the humanities.

For further information please write to the SDI Division of the National Library or telephone (613) 992-0474 or 992-5190.



Helen Rogers is Chief, SDI Division, National Library, Ottawa, Ontario.

NEWS CLIPS

ASSOCIATE COMMITTEE ON INSTRUCTIONAL TECHNOLOGY (NATIONAL RESEARCH COUNCIL)

The recent issue of the A.C.I.T. newsletter reports on two important preliminary studies in progress. One which many people are familiar with involves the identification of priorities for research and development involving the computer. This report is expected in late 1974. A second project has been initiated and deals with those aspects of instructional technology which do not concern the computer.

A.M.T.E.C. REPRESENTATIVE ON THE JOINT ADVISORY COMMITTEE ON NON-BOOK MATERIALS.: PROF. L. MOORE, QUEEN'S UNIVERSITY

Over two years ago a joint U.S.-Canadian committee was formed to advise the authors of Non-book Materials: The Organization of Integrated Collections, Jean Riddle Weihs, Shirley Lewis and Janet Macdonald. E.M.A.C.'s representative was originally Fred Johnston who served until the book was published in 1973. The authors and the committee under the chair - person, Dr. Margaret Chisholm, Dean, School of Library and Information, University of Maryland have decided to retain the committee and work towards a revision of the standards at a future date.

Fred Johnston has therefore resigned from the committee and A.M.T.E.C. is pleased to announce that Prof. Larry Moore, Assistant Professor of School Librarianship, Faculty of Education, Queen's University has taken over as A.M.T.E.C. representative on that committee. Those of you who know Larry can attest to the fact that A.M.T.E.C. will be well-represented.

BE LOOKING FOR AN A.M.T.E.C. PUBLICATION IN EARLY JUNE ON COURSE OFFERINGS IN MEDIA & TECHNOLOGY IN CANADIAN COLLEGES AND UNIVERSITIES

A.M.T.E.C. in cooperation with the audio-visual education faculty at Memorial University is financing this informative study. The material is being collected and assembled by Joseph M. Barre and Gar Fizzard at the Centre for A.V. Education, at Memorial University. It is hoped that this study can become an annual A.M.T.E.C. project.

TECHNOLOGICAL APPLICATIONS PROJECT
P.O. Box 1028, Corvallis, Oregon, 97330.

The T.A.P., originally funded by the U.S. office of Education is now "on its own" and relies on the sale of Instructional System Technical Description (I.S.T.D.) for its continuation. The technical descriptions cover instructional development projects at all grade levels from elementary school to university and sell for 1.00 ea. A catalogue of descriptions is available from the address above As the brochure reads, "why invent the wheel", build on the efforts of other people.

CANADIAN FEDERATION OF FILM SOCIETIES

Our last issue of Media Message identified Canadian organizations operating in the media and technology field. We have found another. The C.F.F.S. is an organization of sixty groups, comprising film societies, a-v departments, and distributors. The centre serves as a clearing house for information on film, and holds an annual general meeting where films are viewed. Interested parties should contact:

N. Richards,
McGill Film Society
3480 McTavish
Montreal, Que.

COMMING EVENTS

JUNE 17-19

CANADIAN EDUCATIONAL COMMUNICATIONS CONFERENCE, Brock University, St.Catherines, Ont. Sponsored by the Association For Media and Technology in Education in Canada.

OCT 14-16

COMPUTER-ASSISTED TEST CONSTRUCTION CONFERENCE, San Diego, California, Co-sponsored by San Diego State University, Educational Testing Service and I.B.M. For information write:

C.A.T.C. Conference
Educational Testing Service
1947 Center St.
Berkeley, California 94704

OCT 21-24

INTERNATIONAL SCIENCE CONFERENCE, Brussels.

The International Science Film Association's contribution to the Brussel's conference will centre on two general topics: visualization of scientific problems and integration of film and t.v. in science-t.v. programmes and popularization programmes. For information write:

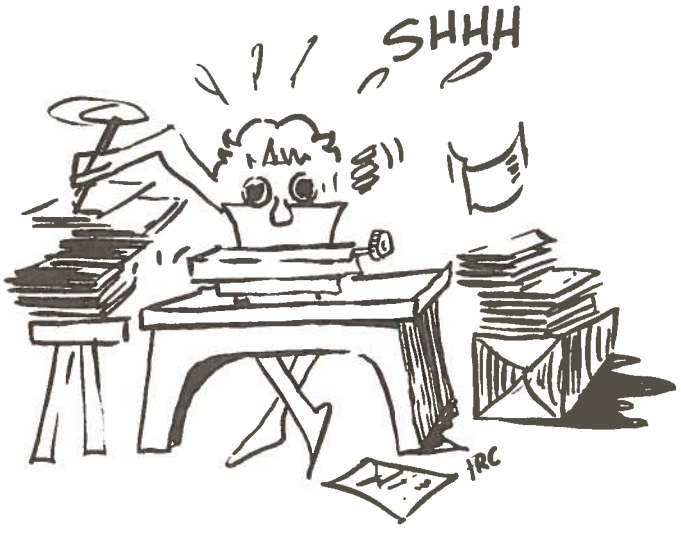
International Scientific Film Library,
Rue Vautier 31,
Bruxelles, Belgium B-1040

FROM THE SECRETARY

Hi! It hasn't been so long since I wrote the last "message" in the spring Media Message. However, that month in between has been very busy - in fact, I've been working full-time instead of part-time. I've been taking memberships, writing receipts, depositing cheques, etc., typing agenda for the Conference, counting ballots, and on and on.

I've been very pleased with the number of memberships renewals we've received - I have had 120 at the office and I understand that there are 40-50 more in St.Catharines. However, I have been very disappointed in the number of ballots that have been returned - about 70 out of the 350 we sent out, in other words, only 1 out of 5 of you have bothered to vote! I feel that that's a very poor showing, considering the excellent slate we offered you. I also feel that those of us who have worked so hard on developing AMTEC have really been let down. I guess the "idealist" in me expected a mandate - a vote of confidence - or at least some show of interest from all the membership, not just those 70 or 80 people who have always been interested and worked along with us.

I would like to close by thanking Mr. Art Knowles, without whose suggestions for articles (and the names of people to write them) this volume of Media Message would be much thinner. Thank you, Art!



NEW RESOURCES

HUMAN RELATIONS DEVELOPMENT: A MANUAL FOR EDUCATORS

George M. Gazda et al. Allyn and Bacon, Inc. 1973.

TOWARDS THE LEARNING COMMUNITY:

Working Paper on The Community College in British Columbia, Department of Education, Marc, 1974.

OFFICE DU FILM DU QUEBEC: CATALOGUE 1973

The Quebec Department of Cultural Affairs has published a listing of films produced and distributed by the Office du Film du Quebec. The catalogue, available in French or English, is available for 75¢ from Quebec Official Publisher, 310 West, St.Catherine St., Montreal, Que.

SYNECTICS IN EDUCATION

A number of educators are using the synectics approach to creative problem-solving at various grade levels and in virtually all subject areas. If you have interest in kindling creative learning, you should know about the materials put out by Synectics Education Systems, 121 Brattle St., Cambridge, Mass. 02138. Along with literature and games, this firm provides workshops in synectics in education.

THE TENTH DECADE: 1957-67

The well-known C.B.C. production covering the years 1957-67 is now available for purchase in the 16.m.m. format from Visual Education Centre, 115 Berkeley St., Toronto M5A 2W8.

BEHAVIORAL OBJECTIVES AND EVALUATION MEASURES: SCIENCE AND MATHEMATICS

by Robert J.Sud, Charles E. Merrill Pub. Co. 1972. Softbound 2.95

THE POWER TO CHANGE: ISSUES FOR THE INNOVATIVE EDUCATOR

eds.Carmen M. Culver & Gary J. Hoban, McGraw-Hill Book Co., 1973.

LEARNING SYSTEM DESIGN: AN APPROACH TO THE IMPROVEMENT OF INSTRUCTION

Robert H. Davis et al. McGraw-Hill Book Co., 1974.

Being one of the first text-treatments of the emerging area of instructional development, the publication of this book has to be a significant event. A review of this publication will appear in a future issue of Media Message.

EVALUATING EDUCATIONAL PERFORMANCE: A SOURCE BOOK OF METHODS, INSTRUMENTS AND EXAMPLES.

ed. Herbert J. Walberg, McCutchan Publishing Co., 2526 Grove St., Berkeley, Cal. 94704., 1974.

INSTRUCTIONAL TECHNOLOGY : ITS NATURE AND USE (5th edition)

Walter A. Wittich and Charles F. Schuller., Harper and Row Publishers, 1973.

This is a completely revised re-issuing of a standard text widely used in a-v education. The former title: Audiovisual Materials: Their Nature and Use has of course been changed, and this is perhaps unfortunate. The addition of one or two chapters does not necessarily convert an "A.V." book into one which covers "instructional technology".

A SYSTEMS APPROACH TO COMMUNITY COLLEGE EDUCATION

David Barbee, Auerbach, Publishers, 1972.

OBJECTIVES FOR INSTRUCTION AND EVALUATION

R.J. Kibler et al., Allyn and Bacon, Inc., 1974.

Send me your

Articles, pictures and
book reviews,
technical and research
reports.
Your letter to the editor
or
a report on the
local scene.
Your gripes.
your concerns.
a theme.
your dream.

Up Editor