the accomplishment of the manipulative audiovisual skills.

"Interactive instruction is an essential element of instructional design."

The major hypothesis of this study was that student confidence and attitudes toward the utilization of media would be enhanced by "hands-on", or interactive, instruction.

The subjects for this study were 134 students enrolled in a teacher education program at the Univerity of North Florida. Jacksonville, Florida,

The students were randomly assigned to one of two groups. The control group was instructed using a straight forward lecture demonstration approach. Students took notes and discussed each presentation (piece of equipment or constructed material with the instructor). The experimental group covered the same amount of material but instruction was accomplished by assigning students to a piece of equipment on which they duplicated manipulative action or constructed the presented materials. Both the control and the experimental group were given a step-by-step, logical sequence presentation in how to operate each piece of equipment or how to construct each piece of instructional material. While the classroom control group observed and took notes on the presentation, the laboratory experimental group actually had to operate the equipment or construct the material at the same time the instructor made his presentation.

As stated earlier, this research sought to validate the belief that students who operated equipment or constructed materials in a laboratory using their manipulative skills would possess more positive attitudes toward audiovisual aids in their classroom.

After instruction in the two groups, an 11-item questionnaire designed to measure attitudes toward confidence in the 11 areas

of instruction identified in previous research as being the most utilized/produced audiovisual aids was administered to all 134 students. The questionnaire is reproduced in Figure 1.

The responses of the two groups were analyzed utilizing a T-test and the contention that "hands-on" or interactive instruction would produce more positive affective responses toward utilization of or production of educational media was supported in all

The difference in attitudes toward operation of: 16 mm projectors, filmstrip projectors, 35 mm slide projectors, audiocassette recorders, overhead projectors, videocassette recorders were all significant beyond .0005 in favor of the "hands-on" group.

The difference in attitudes toward production of: overhead transparencies, videocassettes, audiocassettes, dittos, drymount presentations were all significant beyond .0005 for the "hands-on" group.

It thus appears, even though a literature search didn't support the contention, that the prominent instructional design programs cited earlier in this paper are entirely correct. Interactive instruction is an essential element of instructional design.

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Duane B. Starcher is the Director of the Educational Television Centre at Memorial University of Newfoundland.

Do we? We AMTEC members naturally think so, but how about the public? At a dinner party this spring, I was mousetrapped into a discussion with a friend over the relative benefits to the Province of the Newfoundland Symphony Orchestra (NSO). The NSO is an amateur orchestra under a professional conductor, bolstered by three full-time professional players, with another dozen or so under contract on a fee-for-service basis. Still and all, it remains a community orchestra, a collecting point for the student and amateur musicians of the area to display their musical skills and bring some live orchestral repertoire before the public.

My friend found little to praise in the orchestra, especially as it was at that time asking for public support through a fund drive, and he suggested that the best way to improve its quality would be to pay all its members, especially the amateurs, who would thereby practice more diligently and become better players. He felt that amateurs, by definition, brought too little personal incentive to play well and that an infusion of money would somehow improve their musi-

"It has always been difficult to clarify the processes of culture, or even to defend the processes of education, to those who are themselves not inclined to participate."

As our argument progressed, he finally allowed that Newfoundland really didn't need an orchestra anyway. Why did we not import the Toronto Symphony or the Montreal Symphony or the National Arts Centre Orchestra and scrap the whole impossible idea of marshalling an admittedly third- or fourth-rate orchestra far off the beaten cultural track? Whom were we kidding, anyway?

In other words, he became completely enmeshed in the standard confusion of regarding culture as product, as against also accepting culture as a process. Most consumers (and we are all consumers) - most consumers are indeed confused. It has always been difficult to clarify the processes of culture, or even to defend the processes of education, to those who are themselves not inclined to participate. Too much of education has been taken over by the behaviourists, who prescribe simplified, step-by-step procedures, predict standard outcomes and quantify results and who believe that learning does not in fact take place unless it can be so quantified. This narrow definition of educational television is also enshrined in Canada's broadcasting laws, even though we no longer obey most of them.

"If excellence is our criterion, we should be limited only by what we can afford, not by its geographical location."

The public is far less confused about sports. They can tell the difference, and even their governments can tell the difference, between the Stanley Cup and the PARTICI-Paction program. The federal authorities actually make commercials lauding the fact that physical activity can be its own reward and justification. But they are less certain about music and philosophy. And, as the federal government is not officially in the education business, the provinces reign supreme in separate confusion.

Quality in Product

So, if we do actually need a Canadian educational television network, what educational philosophy should it embody? Without sinking to nationalism, chauvinism or isolationism, I would like to parallel my friend's concern for quality in the products of culture. I agree that we should in Newfoundland hear the Toronto Symphony, the Montreal Symphony and the National Arts Centre Orchestra. But if quality of product is our main criterion, why don't we import instead the Philadelphia Orchestra, the London Symphony and the Berlin Philharmonic? They are not only infinitely superior to the Newfoundland Symphony, but are usually adjudged to be well ahead of Toronto, Montreal and Ottawa. If excellence is our criterion, we should be limited only by what we can afford, not by its geographical location. We should all buy Mercedes and

Toyotas instead of Fords and Dodges after the oil begins to flow.

"It is not enough to have culture piped in to us in the same manner as broadcasters pipe in entertainment."

Up until June 12th, 1981 in St. John's and in Corner Brook, the PBS satellite feed was being piped out to cable subscribers. Yes, it was illegal (or, in the current jargon of the CRTC, "unauthorized"). PBS broadcasts many excellent concerts in the performing arts and programmes about nearly every topic of interest to be found in western culture and, by my friend's argument, obviates the need for Canada or Newfoundland to compete in the same product line. Canadian policy in fact permits the overland importation of the best public broadcasting service on the continent, so why would we want to bother with our own poor facsimile? The exisiting local and, by definition, second-rate Canadian services such as Memorial University Television, TVOntario, and ACCESS Alberta, would have no further purpose beyond regional programing specific to their provincial educational and social mandates. To the extent that all of North America partakes of western culture, PBS clearly offers a product both suitable and satisfying to most of our population interested in such topics. Beethoven and Günter Grass, Murray Shaeffer and Margaret Lawrence travel well; they need no borders. As long as we concentrate on the products of culture, we can do no better than buy the best we can afford.

If we extend the product parallel only a little bit farther, it could well be argued that we really don't need Canadian violinists. dancers or actors — we can nicely watch German orchestras, French ballerinas and British comedies — over our American public television channels.

In Opposition

Obviously, I do not favour this future, but I am worried that it is not just a possible future. For many of us, it is the real present.

Whether a Canadian television network, educational or cultural, is created through our efforts, those of the CBC-II staff or through the marketing department of TVOntario, I foresee few differences in the look of it if it is based on the product model rather than on a philosophy of national interconnection and local access. It is not enough to have culture piped in to us in the same manner as broadcasters pipe in entertainment. A society needs access not only to the products of culture and education, but also to the means through which it can participate in the processes of education, culture, politics, sports and all the intellectual pursuits that define a society. If Canadians are also to be hewers of sculptures and drawers of etchings, they must inhabit a social milieu in which such activities are judged important, as against a marketplace in which most cultural products are foreign imports. In Canada, as elsewhere, value is measured in money and even our dollar is quoted daily against the American model.

"There is more to Canada, to culture, to education than the

Nearly all of our standards are comparisons to those held by the United States or to a world standard exemplified by the American

Interconnections

So, perhaps we don't need a Canadian educational television network after all, perhaps we need a world educational television network (English Service). Ultimately, I think this will be the likely direction of the future. But, given time, I could bear witness from my own backyard to the many benefits of having our own Newfoundland educational television network service, that sometimes brings even the imperfect Newfoundland Symphony Orchestra to a wider audience. And, I could also tell you how important it is for us to be ready to plug our germinal Newfoundland ETV network into a larger Canadian enterprise when the time is ripe. It is socially and educationally important for Newfoundland to participate in the building process, rather than import either

PBS or TVOntario's product line wholesale Why even bother with TVOntario if we can have PBS and BBC? Well, if TVOntario is a part of a larger national enterprise built around process instead of product distribution, then hooray for TVO. Otherwise they

in support of one cultural enterprise, the CBC? There is more to Canada, to culture to education than the CBC. In fact, one thing we clearly do not need is a second CBC, bringing us more products from more foreign distributorships. There are many possible models for a network other than iournalism or entertainment. We are actual ly rather well-served by CBC in both journalism and entertainment, especially in radio. Any new enterprise must build upon those agencies now filling the voids left by CBC, from the small fry such as Memorial University Television, through TVO and Radio Quebec, through the flatlands and the hills to the Knowledge Network in the far West. The new service will obviously have to respond to local educational needs, and so must be in part a joint creation of the existing bureaucracies. But after those dues are paid, we need to approach this new creation with an equally new openness and inventive ness. It should itself be an expression of the ideals of participation in educational and cultural pursuits, more a PARTICIPaction than a Stanley Cup. The Stanley Cup has winners and losers. In PARTICIPaction, cooperation, we can all be winners.

a technical contract CBC-II to be the carrier of the imports. But if a network is conceived to be an interconnection of strong, participating regional contributors to educational and rultural programing, engaging local popular ons, yet consistent with stated national purves, then, yes, we need a network, and reded it for a decade.

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is such an enterprise worth in a vat is not lavish in its support of the tecation, a country that expends hirds of its federal cultural to the contract CBC-II to be the continue of the imports. But if a network is conceived to be an interconnection of strong, participating regional contributors to educational and rultural programing, engaging local populations, yet consistent with stated national purves, then, yes, we need a network, and reded it for a decade.

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AMTEC '82 1180 Notre Dame Ave.

Winnipeg, Man. R3E 0P2

Phone (204) 772-2474

Welcome to Winnipeg

Winnipeg, Manitoba, a bustling energetic city with a population of 580,000, is situated at the confluence of the Red and Assiniboine rivers, just 60 miles north of the Canada-United States border and almost mid-way between the Atlantic and Pacific shores. It's at the crossroads of Canada's commerce and travel. And we're waiting to greet

The 1982 conference, June 6-9, will be housed on the University of Manitoba campus in the spacious University Centre. During the regular academic year it accommodates up to 20,000 students comfortably. The park-like campus is peaceful and relaxed, away from the distractions of the downtown environment. University Centre is designed so people can meet, mingle and work in an easy and casual atmosphere. An exciting building, bright and spacious, complemented by excellent university facilities, it's equipped to handle all AMTEC requirements. Plenty of exhibition space is available too. Restful lounges. Conveniently located dining rooms. And never more than a short walk away - two economical and comfortable residences.

Housing

Excellent financial arrangements have been made with the university to use their residence accommodations. Give your pocket book a break. and you'll find them comfortable and convenient.

For those who prefer, Holiday Inn South, Ramada Inn, and Montcalm Hotels are a tenminute drive or bus ride. There are also numerous motels along the Pembina strip. Accommodation in downtown Winnipeg will be booked with two other conferences.

Theme

This year's theme "Resources in Context" is designed to emphasize the human and material resources of media communications. As inflation and cutbacks threaten budgets across the nation, media professionals must examine the various contexts in which materials are produced, acquired, revised, shared, and utilized. Are we really getting greatest efficiency and effectiveness for our time, energy, and money?

Modern communications calls us to take a broad view. Today's communicator orchestrates people, facilities, equipment, programs, and materials to achieve a pre-determined end in a context of many and varied constraints. Today's communicator is not as concerned with hardware

and the other artifacts of technology as with the basic principles of communications, of change in systems, of learning, and of cost-effectiveness.

And still, today's communicator must find the interesting, the intriguing, and the artful way of transferring ideas between persons.

We're planning a program of international personalities to challenge your thinking. We're also trying to focus on what's happening in our own Canadian centres. Let us know if you've got something to share, or if you know of someone who should be asked. This could be the year that AMTEC puts out its first conference proceedings. Wouldn't you like to be included?

Media Festival

The annual Media Festival will again recognize top Canadian educational media programs. The festival will feature all types of recent audiovisual productions: slide - sound, film and video. The programs will be available for viewing continuously throughout the conference.

The latest, up-to-the-minute developments in media technology will be on exhibit with representation from the commercial organizations throughout the four days of the conference.

To help celebrate the 25th anniversary of the founding of the first audiovisual association in Canada, we have a super special planned. A "Folklorama" especially for everyone will start the conference with verve and energy. The momentum will continue through a unique awards evening, and climax with the famous Red River's Paddlewheel Queen cruise. Don't miss this extravaganza. And during the day, the hospitality will be truly western — from the airport, to the Prairie Gophers, to the sessions — until we roll you back on the plane exhausted and ready to go home for a rest.

Yes, we've got something terrific here too. The Winnipeg Royal Canadian Mint has booked a special visual presentation, as have the touring personnel at the famous Museum of Man and Nature. Shopping excursions can be arranged for Old Market Square, Osborne Village, St. Vital Shopping Mall, or some specialty shops. Special historic tours are tentatively scheduled, including the Legislative Buildings, Floral Conservatory, Assiniboine Park Zoo and the Planetarium. For the athletically inclined a special all-inclusive pass can be purchased at the U. of M. Physical Education Complex for swimming, tennis, and other related fitness activities.