The Last Word: From "Audiovisual Education" to "Information Technology"

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In honour of 25 years of AMTEC, former CJEC editors have been asked to comment on their "era" within the field of educational technology in Canada. I was editor for three years, from 1983 to 1985. I shall concentrate on only one aspect of my twelve issues. On the back cover of ten of those twelve issues appeared a feature titled "The Last Word". The intent of this wrap-up of each issue was to present relevant, thoughtful and significant comments from the field, presented without further elaboration, as a kind of Bartlett's Familiar Quotations for educational technologists. It is appropriate to look back at these quotations as indicators of past thinking and finally, now over a decade later, to provide some commentary, especially in light of current developments in our field. We turn to the Canadian Journal of Educational Communication, volume 12, #1, from Autumn of 1982. The very first quotation which inaugurated "The Last Word" page set the mood for what was to come: a definition of educational technology couched in a warning. The original statement was dated 1971, yet is remarkably current for 1996, some 25 years later:

"There is no technological miracle in education. Neither the hidden camera, nor the computer, norprogrammed learning can provide "instant" education. Educational technology is not a bag of mechanical tricks, but the organized design and implementation of learning systems, taking advantage of but not expecting miracles from modern communications methods, visual aids. classroom organization and teaching methods." (JR. Gass, director, Center for Educational Research and Innovation, 1971.)

It is particularly interesting to read in this "definition" the now unpopular phrase "visual aids" paired with contemporary technologies represented by the "computer." Indeed, in 1995, one may speculate that the "visual aids" component of educational technology has been almost totally lost. When we talk about educational technology today, we seem to more often mean "information" technology. Multi-media no longer means using a variety of media, but a technological convergence of media into one computer-based delivery system. It is as if we are putting "all our eggs in one basket." We know that educational technologies have had only limited success in the classrooms of the past, yet if we persist in extravagant claims that this next medium is to be the master medium we may be in for a rude awakening. The history of technology is not a clear linear

and unexpected factors. Is their still room in educational technology for film, television, overhead projector-n use, slides, still pictures, and the chalkboard? Or have all of these now been digitized?

All of this leads us into the "Last Word" from Winter of 1983:

"No other generation has been made so poignantly conscious of the perils of doing good We know that to set out to do good is to run the gauntlet of baffling, grotesque side effects." (Eric Hoffer, Last things, First things, 1971).

This CJEC volume I2 #3 quotation was a warning about technological side effects. In a time before Internet, society was well aware that technology could do strange things. It is not enough to want to "do good". It is not enough to be convinced that "information technology" will transform education for the better. Indeed it might, but the future technological classroom is not automatically so, just because it is a wonderful idea. Hoffer's statement is a warning, one which is still relevant.

"For the most part, teachers who do use educational technology are the ones who feel comfortable in handling media. Their attraction to non-print resources, then, is not based upon a revolutionary concept of education, but on sheer utility." (To Know Ourselves, 1978).

Volume I2 #4 quoted the important 1978 document titled To Know Ourselves. The argument of this government paper was that Canadian culture is at risk, and that it is imperative that as Canadians we begin "to know ourselves." Significantly, one section of this far ranging document dealt explicitly with teachers and educational media. Teachers must be comfortable in using the media, or else they will ignore it. Today the phrase "computer literacy" captures the same phenomenon.

Volume 13 #1 of the Canadian Journal of Educational Communication came out in January 1984. Surely the most appropriate quotation would come from George Orwell's futuristic novel titled 1984. He wrote it in 1949, and now, 1984 was here. From that novel, we discovered this dark prediction:

With the development of television, and the technical advance which made it possible to receive and transmit simultaneously on the same instrument, private life came to an end.

In summer 1994, the AMTEC conference was held in southern Ontario. One of the conference events was an evening at the famed Stratford festival theatre to see a performance of Shakespeare's Love's Labour Lost. It has been said that Shakespeare had an answer to everything, so the challenge was to find a quote within the play relevant to education, teaching or learning. In act 4, sc. 3 line 3 12 we found

"Learning is but an adjunct to yourself"

Some 300 years later we think we have invented "constructivist" philosophy which argues that it is not enough to think that knowledge is merely given to the

progression of progress, but rather an evolutionary development based on disparate learner, but that it is also created by the learner. Knowledge is not independent, but is an adjunct to our own culture, knowledge and interests. Apparently, Shakespeare knew that, too.

Time Magazine on May 3, 1982 featured an article on computers with the thoughtful statement that

"The only difference between a machine and us is that a machine is an answer and we are a question."

That statement became "the last word" for Volume 13, #3.

The Volume 14 # 1 "last word" came from a 1993 speech by Arthur C Clarke. He was commenting on how difficult it is to predict the potential of communications devices, even for enthusiasts.

"There is always something new to be learned from the past... The mayor of a certain American city was wildly enthusiastic. He thought that the telephone was a marvellous device and ventured this stunning prediction. "I can see the time," he said solemnly, "when every city will have one."

The Volume 14 #2 quotation is one of the most famous non-statements every made about the non-impact of educational technology. It is meant to be the summary of a noted research study. Written in flowing, informed and confident language, nevertheless the astute reader quickly realizes that what the glowing lines really say is "we don't know anything about the effects of television". Here they are:

"No informed person can say simply that television is bad or that it is good for children. For some children, under some conditions, some television is harmful. For other children under the same conditions, or for the same children under other conditions, it may be beneficial. For most children, under most conditions, most television is probably neither particularly harmful norparticularly beneficial," (Schramm, W. Television In the Lives of our Children.)

Yet, in a way, this seeming non-statement is indeed critically important. Research has shown that we can substitute the word "film" for television, or "programmed learning" or any other technology. Including computers. Even the Internet. So why is education spending more money than ever in a time of retrenchment? This is not to say that money shouldn't be spent, but rather that we need to think clearly what we really are doing, what our goals are and where we think we are headed. It is a salutary and cleansing experience to stop and think, at least once in a while.

Shramm's statement is important because he is right.

P. Hosford (1973) looked at the methodological side of instructional research and issued a warning with respect to quantitative measurement techniques in education:

"It is necessarily impossible to determine the absolute value of any instructional procedure by any experiment whatsoever."

Finally, the last quotation to appear under the heading "the last word" in the Canadian Journal of Educational Communication focuses on issues of plurality, multi-culturalism, and a shift away from a "one best way" towards multiple ways of viewing the world. And yet this postmodernist quotation is 200 years old, and comes from Benjamin Franklin:

At the treaty of Lancaster, in Pennsylvania, anno 1744, between the government of Virginia and the Six Nations, the commissioners from Virginia acquainted the Indians, by a speech, that there was at Williamsburg a college with a fund for educating Indian youth and that if the chiefs of the Six Nations would send down half a dozen of their sons to that college, the government would take care that they be well provided for and instructed all the learning of the white people. The Indian's spokesman replied. We that you mean to do us good by your proposal, and we are convinced thank you heartily. But, you, who are wise, must know that different nations have different conceptions of things, and you will not therefore take it amiss if our ideas of this kind of education happen not to be the same with yours, We have had some experience of it,. Several of our people were formerly brought up at the colleges of the northern provinces. They were instructed in all your sciences. But, when they came back to us, they were bad runners; ignorant of every means of living in the woods; unable to bear either cold or hunger, ; knew neither how to build a cabin, take a deer, nor kill an enemy; spoke our language imperfectly, were therefore neither fit for hunters, warriors, nor counsellors; they were totally good for nothing. We are, however, not the less obligated by your kind offer, though we decline accepting it, and to show our grateful sense of it, if the gentlemen of Virginia will send us a dozen of their sons, we will take care of their education instruct them in all we know, and make men of them.

So, what does all of this say? Our quotations have focused on multiple voicing, alternative genealogies, critical analyses, cultural criticism, hopeful predictions. All of this was pre-1985.

Then it happened. Concepts like postmodernism, deconstruction which had been stirring in the background, suddenly hit full force. Feminist literary theory took one particular perspective, while cultural studies focused differently. Derrida, Foucault, Eco, and Lyotard became household names.

Educational technology became enmeshed in a philosophic and ethical dilemma. On the one hand, Educational technology products and programs presented a single best way. Film, television and computers were supposed to be a better way to learn. Content presented via these media were not normally the concern of instructional designers, but of subject matter experts. On the other hand,

new technologies such as the Internet became a proving ground of postmodern philosophies. Good and bad, naive and sophisticated, racist and neutral, beautiful and ugly, useful and useless. All kinds of content began to appear on listservers, on discussion groups, and on Web pages. "Every hue of every view" can now be found in a postmodern jungle of data and information. Today we are trying to hack our way through this verbiage. Most educational technologists believe that these technologies have the potential to change education for the better. But we are forewarned that the path is neither easy nor obvious. The quotations which appeared in CJEC under the heading "The Last Word" point to our awareness of the aspirations and the contradictions which occur in our search for a better way.

The Canadian Journal for Educational Communication should not be a search for the ultimate best way to teach and to learn. Rather, CJEC should become a chronicle of the ways we have tried to present technological approaches to learning over 25 years. To go back over 25 years of the issues of CJEC will provide a historical continuity which can shed much light on what we do today.

It seems then, that "The Last Word" is yet to come, and indeed, in a true postmodern sense, what we have learned is that there cannot be and should not be ever a "last word."

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