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## ABSTRACT

Arguing that the acceptance of educational technology in Quebec is influenced by issues of economic survival and cultural identity, this paper discusses educational technology in terms of three types of media--computers, broadcast media (radio and television), and print media. Selected educational operating systems are also discussed. A search of the ERIC database is cited to show that, of these media, television has received the most attention from Canadian researchers in the past 7 years. It is noted that: (1) political, economic, and cultural considerations have played a role in broadcasting in Canada; (2) the federally sponsored Canadian Broadcasting Corporation has evolved as a two language system on both radio and television; and (3) the Quebec government also supports Radio Quebec on radio and television. It is concluded that educational technology and greater communications among all concerned about education and community development may evolve new paths of education and national identity, building on what is, what was, and what might be. (12 references) (DB)

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Educational Technology and  
Reform in Quebec

A paper presented at the annual meeting of  
the Comparative and International Education Society  
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## Educational Technology and Reform in Quebec

L'homme de l'an 2000 aura assimilé les possibilités et les limites de cette nouvelle technologie et aura développé, chemin faisant, un nouvel humanisme, à la mesure de ce qu'il est et de ce qu'il a été.

Dr. Camille Laurin,  
Quebec Minister of Education  
December 11, 1983

In the two other papers in this season, educational technology, specifically computers, has been viewed as a tool for educational reform throughout the world. This paper examines evidence of how culture influences the applications of these tools. Educational technology in Quebec is defined through a framework proposed of Thomas & Kobayashi (1987) and illustrated by observations from Quebec. This discussion concludes by raising issues about the role of technology in the evolution of education in a society.

### Some Definitions and Clarifications

Thomas (1987: 1) notes that the Association for Educational Communications and Technology defines educational technology as -

a complex, integrated process involving people, procedures, ideas, devices, and organization, for analyzing problems and devising, implementing, evaluating, and managing solutions to those problems, involved in all aspects of learning.

In this discussion, educational technology shall be limited to four varieties of educational technology - computers, broadcast media (television and radio), print media, and selected operating systems. These media were selected due to their potential breadth of impact, popular attention they receive, their recency of innovation, and to provide for technological diversity (Thomas, 1987: 2). This discussion will also examine certain factors - political conditions, economic conditions, cultural suitability, magnitude of change - which may influence the creation, development, and transfer of educational technology (Thomas, 1987: 10-18).

Quebec is viewed here as before a political unit and a culture. As one of the provinces of Canada, Quebec represents the French culture of the bicultural ancestry of a dualistic Canada. As a French-speaking, North American enclave, Quebecois attitudes towards central government influence and to patrimony parallel those of other cultural groups, such as in Catalonia, Northern Ireland, or Biafra, who are part of a nation politically, yet culturally distinct. Added to these potential conflict points on issues of economic survival and cultural identity in an increasingly pluralistic nation (Henchey & Burgess, 1987: 32-40), Quebec also remains part of a Canada faced with similar issues in relation to the United States. Some of these points of conflict may be observed in how educational technology is applied in Quebec.

## Computers in Quebec

The Canadian Education Association (1984: 43) reports plans for the Quebec Ministry of Education to invest \$150 million from 1984-89 to place microcomputers in classrooms and to provide high quality French software. In the mid-1980's, competing economic interests raised issues about the fairness of the selection process for the computer hardware for the schools. The purchase of software also caused a great deal of discussion in the press. Neither the translation of software from the United States nor the importation of "logiciels" from France proved to be successful at meeting the massive needs in the schools.

Henchey & Burgess (1987: 219-220) comment that these computers have been domesticated and absorbed into existing school operating systems without changing the structure of schooling. They also consider the quality of learning technology in schools in Quebec to be lower than the applications on computer games in electronic arcades. Partly this quality issue arises from the cultural and linguistic obstacles in the availability of suitable French programs. Henchey & Burgess suggest the following three possible scenarios for computers in education in Quebec:

that technology will continue to play a minor part in learning services; that a fusion will take place between existing education structures and the new technology-based learning services; or that there will be two competing learning systems,

the formal institution-based and the new technology-based.

They conclude that it "is unlikely that political and economic considerations can permit Quebec to allow the first scenario to unfold and it is unlikely that schools, educators, and school boards would long survive in the third scenario."

Stoloff (1985) noted that computers were being introduced to teachers and schools in a fashion which may reflect cultural considerations. The introductory courses to the use of computers for high school students were called "Une familiarisation aux outils informatiques" (FOI) and "Une initiation aux sciences informatiques" (ISI). "La foi" is faith in French and ISI could be a reference to the Egyptian goddess, Isis giving both names interesting religious significance. The in-service computer program for provincial teachers was called "le project APO. I" (the Apostle Project). The Ministry of Education's research unit for computer applications in education was known as "Centre de recherche sur les applications pedagogiques des ordinateurs" (CRAPO); "un crapaud" is a toad or an term of endearment by used by Quebecois. Electronic mail arrives in a "BAL", a boite aux lettres, a mail-box, but also a ball, carnival. The ideal use of computers in education was termed "utilisation totalement optimisee des possibilites de l'informatique dans un environnement scolaire" or UTOPIES.

Computers in Quebec have yet to reach the magnitude of change which would lead to a restructuring of the educational system or radical modifications in the teaching process. Electronic networking through computers in higher education, the Ministry of Education's coordinated plan for inservice in computer education and their publications on computer use, and the growth of local software developing companies may serve as sign posts to the greater influence of computers on education in Quebec.

#### Broadcast (Television and Radio) and Print Media

Johnson (1968: 123-126) reports that both the federal and provincial governments in Canada have invested in educational broadcasting to safeguard against "the danger posed by American broadcasting to the Canadian cultural identity". School broadcasting by radio began in the 1920's in Quebec and in several other provinces. During the 1940's, the federal government increased its investment in broadcasting to provide equal educational opportunities through radio for every young person in Canada.

Katz (1969: 103-5) continues with an assessment that by 1963, the Canadian Broadcasting Corporation and privately owned television and relay stations could reach about 92 per cent of the population. Canada's radio stations could reach about 98 per cent of the population. Radio and television from the United States were still considered to be political

and cultural threats, but the magnitude of the cross-border broadcasts were lessened by the growth of radio and television in Canada. Katz (1969: 104) also notes that in the 1950's and 1960's closed circuit television and radio broadcasting expanded the number of people possible to benefit from instruction, particularly in postsecondary education.

Political, economic, and cultural considerations played a role in broadcasting in Quebec. The federally sponsored Canadian Broadcasting Corporation evolved as a two language system on both radio and television, with a good deal of political and cultural discussions in its French-language flagship stations in Montreal. The Quebec government also supports Radio Quebec on radio and television. There are also popular privately owned radio and television networks throughout Quebec which compete with the often more "educational" publicly sponsored broadcast.

Stevenson (1970: 496) comments that the slow development of educational television in Canada up to 1970 "illustrated the failure of educators and political representatives to implement efficiently the technologically feasible, particularly since no concrete guide-lines for federal-provincial co-operation had been developed seventeen years after the introduction of commercial television."

In the 1970's and 1980's, the growth of the cable television industry affected the nature of broadcasting in

Quebec. Fraser (1987) describes the political struggles over the control of media between the Anglo establishment and a rising class of French-Canadian or Quebecois entrepreneurs whose financial base is supported by control of the newer communications technologies. Given Quebec's hilly topography, the great distances between urban centers, and the large amount of television viewing by home-bound citizens in winter, over 75% of the homes in Quebec are wired into a cable system.

Since cable companies are usually given a local franchise, public access programming, community events calendars, and discussion shows are supported. Decisions on which satellite-fed channels the community cable company selects and transmits to local homes raise several political and cultural issues. Since south of the border broadcasting is of such a greater magnitude than Canadian or Quebecois television programming, cable systems are often saturated by programs from the United States. These programs provide an evocative view of American life and raise the 70 year old fears of U.S. domination of the political and cultural due to its louder voice.

This fear of cultural hegemony was also manifested over the issue of film and publishing. Katz (1974: 96) notes that calls for reducing the number of American-produced textbooks used in Canadian schools are obviated by the fact

that most Canadian publishing houses have been taken over by American firms.

Greater Canadian control of publishing and films were major issues in the trade negotiation between Canada and the U.S. Perlmutter (1989: 6-11) reports that American companies distributing Hollywood films dominate Canadian movie screens and that Canadian distributors with less than 5% of the Canadian market distribute 95% of the Canadian films. In 1985, attempts were made to establish a policy of the Canadianization of publishing and film distribution in Canada to provide for majority Canadian ownership of new publishing ventures and greater control of distribution. When Quebec established regulations to enforce film distribution laws favorable to Canadian companies, the major Hollywood distributors threatened to pull all their films out of Canada. Subsequently, the U.S. trade ambassador Clayton Yeutter stated that Canada should be willing to risk its culture to establish free trade agreements.

Several related issues are controversial within Canada. When the federal government removed a tax subsidy for film producers, the Quebec government established a similar cost-reducing package. In response, film production has expanded in Quebec and decline in other provinces (Crooks, 1989: 26-28). Related to publishing, Nikiforuk & Struzik (1990: 8-11) report that the control of paper production has led to the leasing of large amounts of forest land in

Quebec and other provinces to foreign companies, raising ecological and political concerns.

Professionals in broadcasting and publishing in Quebec react to perceived external threats from the rest of Canada and the United States, the internal conflicts of maintaining dualistic (French-English) systems in the face of pressures to establish either a monolingual society or a diverse, pluralistic society, and the advent of technologies which threaten the both industries - desk-top publishing, home-video production, inexpensive and increasingly powerful satellite technologies. Although the magnitude of change has been great in the last few decades, one should expect even more dramatic change in the future.

#### Operating Systems

Education in Quebec is primarily a provincially funded system divided by regions and by either language or religion. In the past two years, a shift has taken place between pre-collegiate school commissions defined by confessional affiliation towards schools defined by language use. There has also been a move towards increased local control by school committees.

The politics of education are also influenced by Quebec's status within Canada, which affects the interactions of cultural groups in Quebec. Language policy has affected educational operating systems by creating

"illegal" English language classes for students who by law should be enrolled in French language schools. Reacting to increases in the cost of postsecondary education and a declining base of students interested in English-language education or affiliation with English-language universities, the Jesuit-affiliated Loyola of Montreal and the YMCA-affiliated Sir George Williams reached a concord to merge to form Concordia University. The current constitutional crisis over when Quebec represents a "distinct society within Canada" may either lead to separation from Canada or a new accommodation with the federal government over "opting out", creating a de facto autonomy over government services.

Henchey & Burgess (1987: 207-225) note that the educational operating system has evolved in reaction to major societal trends shaping Quebec:

- \* population growth is slowing and aging;
  - \* the society is undergoing a revolution in communication technology, publishing, and media;
  - \* changing work patterns and environments and leisure;
  - \* government is backing off from control of society's evolution;
  - \* pressures of pluralism with Quebec society;
  - \* economic competition from within and outside Canada;
- and \* with the increasing complexity of society, there is a greater search for individual and societal meaning. These trends are expected to continue into the next century.

## Some Concluding Remarks

Educational technology may be seen as 1) having little impact on operating systems, 2) developing systems of learning parallel or in competition with formal education, or 3) radicalizing society towards an evolutionary state. Stevenson (1970: 493) suggested that "the gap between discovery of proven educational innovations and general implementation in the schools tended to widen while the pressure to bridge it intensified. More than any other single factor, technological advances accounted for the chronic state of the educational crisis." He added that "advanced technology created the need for improved teaching and produced the hardware designed to make it possible... Quietly but surely technology and business assumed large controlling interests in education,... largely because educators were not equipped to judge accurately between technological advances with valid educational usefulness and others advocated by sales pressure... The role of the school and professional educators as agencies for change in society through their control of learning grew to the proportions of a popular myth, as their functions were usurped by corporate applications of technology in education" (Stevenson, 1970: 496-8).

Laurin (1984: 25-29) presents a more optimistic view of the role of technology in education. As suggested by the

opening quote, the infusion of electronic media in education may aid in the development of a new humanism which will build on greater collaboration and cooperation among institutions. Educational technology and greater communications among all concerned about education and community development may evolve new paths of education and national identity, building on what is, what was, and what might be.

In predicting the future, few ideas are certain. One is, in the areas of educational technology and educational reform, Quebec will remain a provocative laboratory for societal change.

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