

Profile

Televised Instruction for Post-Secondary Education in Quebec

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Abstract: Teaching at a distance in the Province of Quebec is a project shared by various establishments: government agencies, community colleges and universities. Many of these collaborated to create a consortium in order to distribute their televised courses. C.A.N.A.L. has been offering services to its members since 1984 and today represents a unique case of a private corporation financed exclusively by its membership in the world of distance education establishments. The results of its presence on cable distribution can now be assessed with some confidence. Distance education through television appears to be viable if a technologists approach is favored more than if a broadcaster's dream is pursued.

Adult learners in the Province of Quebec have access to televised instruction at all levels through the distribution services provided by CANAL (Corporation pour l'avancement de nouvelles applications des langages/Corporation for the Advancement of New Applications of Languages). CANAL was established in 1982, as a private registered corporation, by Tele-universite, an affiliate of the Universite du Quebec, as a consortium of colleges, universities and public corporations interested in the use of broadcast television for distance education. Since that time membership has grown steadily to include fourteen institutions.

In this article, a short history of the goals and achievements of the corporation over the past five years will be presented.

Historical Background

In 1982, Tele-universite initiated a project to distribute televised courses and lectures in some thirty municipalities serviced by the various campuses of the Universite du Quebec, using the Community channels of the local cable television facilities. This service was initiated by Mr. Pierre Patry, the coordinator of Les Editions Mediatiques at Tele-universite. In parallel to this, a closed-circuit video network was set-up between campuses of the Universite du Quebec, to allow interactive participation in live courses and graduate semi-

nars from the various campuses and even on occasions from students in their homes (Lafrance, 1984).

These early experiments demonstrated both the advantages and the limitations of such a system. It was possible for viewers who subscribed to cable services with channel converters to access some twenty-one hours of educational programming per week on a channel shared with Parliamentary debates and other local community programming. A schedule was provided to students allowing them to tune in at specific times for their courses in much the same way as they would attend live lectures in the classroom. The highlights of this early period included broadcasts of a French version of the *Ascent of Man*, a course on Publicity, (in which the present mayor of Montreal was a guest speaker), one on Human Biology and several other general courses in the Arts and Sciences. These were also broadcast over the networks of Tele-Metropole and Radio-Quebec.

However, it was soon discovered that only about thirty percent of the households owned the cable converters necessary to allow them access to the designated channels and that the cable companies and broadcasters tended to schedule educational programming in early mornings or late evenings. Students found this very inconvenient and did not respond with much enthusiasm. Also, the production, distribution and shipping of large numbers of duplicate copies of video cassettes, and the problem of having to continually re-negotiate agreements with individual cable companies and broadcasters was a poor long-term foundation for the operation of a distance education service.

These early experiments did, however, help to establish the working principles for a multi-member consortium, and demonstrate the technical feasibility of the organization that was later to become CANAL.

It was recognized by the developers of the system that, to maximize learning, televised instruction should ideally be interactive, and to achieve this video conferencing would be necessary. However, it was also realized that this was beyond the current technical limitations of the system and that televised instruction could only be the first step towards a variety of other approaches involving radio, telephone conferencing, computer conferencing, and telematics, all of which would contribute towards the simultaneous exchange of information and feedback.

From 1982 to 1984, Tele-universite supported the growth of the video distribution service by hiring a coordinator and two employees to take charge of the programme schedule, maintain good relations with the cable companies and broadcasters and organize the shipping and receiving of video cassettes. In spite of the risk of direct competition, other educational institutions outside the Universite du Quebec (1984) were invited to join the organization and pool their production capacities in return for access to the network.

Universite de Montreal (November 1982), Universite de Sherbrooke (February 1983), Universite Laval (June 1983) and CEGEP Montmorency (1983) officially joined the fledgling consortium and gave their support to the official application for Letters Patent from the Government of Quebec. They also

agreed to share the financial burden and make contributions to an independent budget for the new corporation. The coordinator and support staff retained their offices in the Tele-universite building in Montreal but were transferred to the new corporation.

In 1984, the corporation submitted applications for licenses to the Canadian Radio-television and Telecommunications Commission and was granted the following:

- 1) a license to operate an experimental broadcast television station on channel 62, later to be upgraded (1985-86) to a medium powered transmitter on channel 29;
- 2) a license to distribute programming to a network of distributors using satellite communications; and
- 3) a license to enlist sponsors and be permitted to mention their support during programmes.

These three licenses established the legal existence of an educational television network dedicated to formal education, as a supplement to the services already offered by Radio-Quebec.

In 1985, three new members, including Hydro-Quebec, Laurentian University of Ontario, and the Direction des cours par correspondance, (the agency responsible for offering correspondence courses in the Quebec Ministry of Education), joined the consortium, followed in 1987 by Concordia University.

In September 1987, a satellite distribution system was established that allowed the educational network to be received in approximately four hundred and eighty-seven municipalities across the Province by viewers with cable feeds and converters. By this time, because of the enhanced services being offered by the cable companies, the number of subscribers with converters had grown to approximately 85 percent of the total.

The "Canal de tele-enseignement" had finally become a reality, making telecourses available at the post-secondary level to the majority of the adult population in the Province of Quebec.

The Incentive to Innovate

The technical advances and development of distribution and communications systems of the past thirty years has made the creation of a new television network in the 1980's a fairly straightforward affair. However, for educational institutions with limited resources and facilities, the production of materials still required much of the pioneering effort of the when television was experimental, black and white and mostly live. With a bleak financial future for education, it took courage and perseverance to convince university administrators that money used for original productions for educational television was wisely spent, and that public response, in the form of enrollment in the formal credit courses, would justify the expense. At that time, the trend was for the established educational television networks to offer high budget, well

polished programme materials, intended for mass audiences.

The major goals of the organization were stated in the Letters Patent (1984):

- 1) (To) "facilitate experimentation, research and development of new communications media, especially cable distribution and other related technologies;" and
- 2) (To) "help its members in preparing a programming schedule of educational content and to ensure the integrity of this schedule."

CANAL had been allowed to grow on the assumption that the greater the number of members producing educational programming, the stronger the argument would be for enlarging the distribution system. The resulting growth had two immediate effects:

First, between 1985 and 1986, the number of programme series broadcast increased from 27 to 50. For the most part, these consisted of 13 titles each with an average duration of one hour. It thus became possible to fill a 24 hours per day, 7 days per week schedule, by repeating each title approximately three to four times per week.

Secondly, the CRTC licenses enabled the corporation to greatly increase its service area. In metropolitan Montreal, the broadcast television transmitter license allowed a greater proportion of the population to receive the station and also enabled six new cable companies to re-distribute the signal on Channel 23. Channel 23 thus gradually became identified as the 'educational television channel.'

The natural outcome of this growth was the creation, in late August of 1987, of a provincial educational network consisting of approximately eighty cable companies who agreed to distribute the enlarged 24 hours per day, 7 day per week programme schedule, available via a satellite channel that had been arranged through an agreement between CANAL and the large Montreal-based cable company, Videotron.

The experimental side of the enterprise also developed quite quickly. Production staff became aware of the potential value of events taking place on campus. Conferences, conventions and learned societies provided a wealth of useful material and efforts were therefore made to record proceedings and conduct interviews with guest speakers for later distribution. In 1985, one of these events was broadcast live over the Parliamentary channels across Canada.

A few courses were also broadcast live over the network to allow immediate feedback from students. One of these was organized by Teleuniversite and offered to workers in the construction industry. On Saturday mornings, a well-known lawyer delivered a series of three hour formal lectures on labour relations to a studio/classroom audience. These were also simultaneously distributed live over the CANAL network. Approximately 1200 viewers participated in the course from their homes and were able to phone in their

questions and comments during the lectures. Union officials, Government representatives and Employers' Association members were also invited to participate in the studio.

Educational institutions also soon became aware of the potential public relations value of using the CANAL network to present information to the general public on academic programmes, research projects, student services and other activities taking place on campus. This type of programming was useful in maintaining a balance between formal courses, intended for specific audiences, and more general programming aimed at the public at large.

One of the major surprises associated with CANAL's expanded operations was the size of the audiences drawn by many of the formal courses. One introductory course in Astronomy, for instance, which had 250 registered students, attracted an estimated audience of 25,000 viewers between the ages of 15 and 45. The promotional value of this phenomenon was soon realized when the number of applications to the academic department giving the course suddenly increased dramatically.

Over the past five years, televised instruction distribution by the new consortium has grown to become an important factor in distance education in the Province of Quebec. However, although the pioneering days are over, the original goals are only just beginning to be realized to their fullest extent.

Distance Education using Video Communications

One of the roles of the college and university professor is that of teacher. There is little questioning of the ability to teach in the classroom setting, but there are severe reservations as to whether this skill can be transferred to the television studio. A good teacher is required to present material clearly and systematically, with enthusiasm and in a convincing manner. Personal interaction between student and teacher is also an important aspect that many feel is missing in the distance education mode. It should, however, be borne in mind that there will be a student audience which will interact through assignments, written questions and the telephone. The other characteristics of the good teacher are equally applicable to the telecourse instructor.

It can in fact be argued that, because more careful preparation is required for the televised version of the course particularly for illustrative materials, the effectiveness of the course may be increased.

One of the strongest arguments against the use of low level production comes from the commercial broadcasters who feel that programming of this type adversely affects their reputations. It can, however, be argued further that the incorporation of high level productions, primarily intended for a general audience, into an academic course can be more distracting than useful if not accompanied by very carefully structured support materials.

Many academics feel apprehensive about participating in the presentation of their course in a distance mode on the grounds that the medium imposes limitations on academic freedom and that they feel more open to criticism. On the other hand, many who have given courses at a distance have found it to be

a very positive experience. The response from students and subsequent contact with students is generally more frequent. Although the risk of criticism is certainly greater, the opportunities for making public statements on important issues are also increased. Academics teaching via television have found that they have become celebrities and are frequently stopped in the street or receive telephone calls from viewers. Many have also found that the experience has become a springboard for career development in the field of post-secondary education.

One factor that has become apparent to producers of educational television is the need to market distance education courses. Even a course given by a teaching expert in the field is not guaranteed an audience. Universities and colleges have learned to advertise their products well in advance through televised promotion, daily newspapers and specialized publications targeted to specific segments of the population.

Various strategies have been adopted to increase the demand for particular courses. Courses have been offered in short intense sessions of six hours per day over a three to four week period. Also, courses have been withheld for a year after the initial offering, in the hope that demand will increase. Another approach has been through direct marketing, involving the instructor traveling across the province to promote the course in person.

One drawback of using a public distribution medium such as broadcast or cable television is the relatively short useful lifespan of a course. Some consider that the average life of a course is from three to four years before major modifications become necessary. There have been exceptions, however, for example, the French version of Dr. Bronowski's "Ascent of Man" series, which has been used as the basis of an introductory course in social science offered by Teleuniversite, for the past ten years.

Over the past five years, the major characteristics of the approach to televised instruction adopted by the consortium have included a utilitarian approach to production methods, the marketing of courses as products, and making use of available talent rather than bringing in professional performers. The consortium has chosen to concentrate on the development of courses that can be easily modified, and are only intended to be offered for a limited time period, rather than sinking large amounts of their resources into productions intended for extended use.

Students and the General Public

From 1986 to 1988, members of the consortium distributed an average of fifty series of thirteen titles per year, consisting of 7000 hours of credit courses and 6000 hours of non-credit programming. These courses covered a number of fields: education, religion, management, pure and applied science, health science, social science and computer science. The costs of production, licensing agreements, contractual arrangements with authors and teachers, collection of student fees and the packaging and marketing of the course materials remained the responsibility of the individual institution.

So far, the response from both students and the general public has been

very encouraging. From January 1986 to December 1987, over 17,000 students registered in seventy nine courses offered by three institutions (Table 1).

Table 1
Student Enrollment for 1986 and 1987

		1986		1987		Total
		Courses	Students	Courses	Students	
Universite	Laval	6	792	13	1,463	2,255
Univ. de	Montreal	12	1,240	14	1,078	2,318
Tele-universite		17	5,505	17	7,145	12,650
TOTALS			7,537		9,686	17,223

The instructional methods used in these courses have been highly varied. Some courses consisted of straightforward sixty minute lectures supplemented by notes; others were essentially print-based courses using the television network for distribution of complementary materials; and others consisted of live lectures, delivered to a small studio audience but allowing interaction from students in their homes, via telephone.

The actual size of the audience, consisting of both students and members of the general public, viewing a particular programme, is very difficult to estimate. As of now, the broadcast survey companies have been unable to produce reliable viewer statistics for the specialized services carried by the cable companies. Apparently, questions such as channel and title of programme watched received too many confusing and contradictory answers to be of much value. The only available data are the Neilson ratings for the programmes from the consortium that are re-broadcast over the Radio-Quebec network. These are summarized in Table 2 (on following page).

Considering that none of these courses had an enrollment of more than three hundred students, the bulk of the audience consisted largely of members of the general public who were apparently interested in the specialized materials being presented.

As a novice broadcaster, the educational network is quite proud of its achievements. The positive public reaction has provided sufficient reason for the network to continue to develop its services and expand its coverage. With this in mind, discussions are being held with universities in other parts of Canada and world, so that expertise and programme materials may be shared and exchanged.

In spite of the fact that it is not yet possible to enrol in courses at a distance

Table 2
Neilson Ratings for 1987-88 as Compiled by Radio Quebec

Programme Title	Rating
<i>Universite Laval</i>	
· Gerer sa foret	11,000
· Formation continue en science de la sanee	4,000
· La mythologie Greco-Romaine	2,000
· L'homme et ses aliments	3,000
· Lecture du Nouveau testament	1,000
· Sante et securite au travail	7,000
· De familles en familles	3,000
· Psychologie de L'apprentissage	6,000
 <i>Universite de Montreal</i>	
· Grands courants de l'art: l'heritage occidental	4,000
· Communication et organization	1,000
· Les prophet d'Israel	3,000
· Andragogie, domaine de pratique sociale	7,000
 <i>Ecole nationale d'administration publique</i>	
· L'ENAP presente	1,000
 <i>University du Quebec a Montreal</i>	
· La gestion au feminin en France	1,000
 <i>Tele-universite</i>	
· Le corps humain	3,000
· Evolution de l'homme	1,000
· Science et cultures	8,000

leading to a full certificate, student enrollment has been quite respectable. However, so far, the venture has not generated very much in the way of revenues. The students' fees and grants only cover the costs of production and support services.

Conclusion

In just five years, the small auxiliary videotape distribution service of Tele-universite has evolved into a consortium of educational institutions, producing materials for distance education, providing liaison with the national broadcast networks, and assisting in the recruiting of thousands of new students.

Distance education through television is now part of Quebec life. From session to session, there have been marked improvements in programme

quality and a gradual diversification of instructional approaches. (Broadcast coverage which was initially restricted to the larger cities, is now available in all communities in Eastern Canada via satellite). The technology is no longer the limiting factor to the availability of systems for the distribution of distance education to the adult population.

The original goal of using interactive communication for distance education has not been achieved and still requires further development. However, experiments currently under way are intended to demonstrate the means by which this objective may be realized in the near future.

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