

# FROM E-LEARNING TO E-LIVING

BY DR. KEN STEVENS

*Newfoundland and Labrador is a global leader when it comes to delivering quality education to remote schools. Using a state-of-the-art electronic highway, a teacher in a small rural school can now reach students in other schools across the province. And a student in a small rural school can now participate in “virtual classrooms” with other students from across the province. Can this electronic highway now be expanded to reach outside the school system to deliver literacy, business or other courses? And can Newfoundlanders and Labradorians export this innovative teaching model to the rest of the world?*

Rural life has always featured prominently in the culture of Newfoundland and Labrador, so it is not surprising that the province has developed some creative solutions to provide educational opportunities to its young people who attend school in outport communities. E-learning in this province has addressed the issue facing governments everywhere, of providing young people who live beyond major centres of population with educational opportunities that are comparable to those available to their peers who attend urban schools. E-learning here is a success story – a model of how to apply information technologies to extend teaching and learning, enhance the capacities of small, geographically-isolated schools and, ultimately, I believe, sustain the communities in which they are located.

The development of e-learning in and between Newfoundland and Labrador’s rural communities now provides the province with an enhanced educational system which is a model for the rest of the world. Our provincial success in extending educational opportunities for young people provides a model for other societies, particularly those with large rural populations.

## **E-Learning in Newfoundland and Labrador**

Schools have traditionally had their own teachers, appointed exclusively to them, and their own students. They are autonomous institutions that provide education within their local communities. Everyone will be familiar with this way of providing education because it is the way

things have been done for a very long time. Individual schools, however, duplicate what other schools teach. In a country as large as Canada, there is massive duplication by schools every day. But in Newfoundland and Labrador, this traditional model of educational provision has had to be reconsidered because of changing circumstances.

The central role of schools in outport communities and the future of many of them was challenged by the demise of the cod fishery. Small schools in many outports became smaller as families moved away, and some of the schools were closed permanently. The end of denominational schooling in the last decade also brought changes to education in rural Newfoundland and Labrador.

At the same time that rural education in the province was being challenged by a changing economy and demography, technology provided a partial solution: the internet, and with it e-learning, became available. These technologies have been the basis of further changes to teaching, learning and the organization of many Newfoundland and Labrador schools. One of the most significant changes that the internet made possible was the electronic linking of dispersed schools into networks that became known as intranets. The space between a growing number of rural schools became, in effect, educational space, as teaching and learning took place within it.

For example, a small high school with a specialist teacher was able to make his or her expertise available to other small schools online,

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terms of their on-site enrolments became larger schools in terms of the extended curriculum they could provide for students.

A decade ago, these ideas were explored through the creation of what became known as the Vista School District Digital Intranet. (The Vista School District operated the schools on the Bonavista Peninsula prior to the recent amalgamation of school boards.) The creation of the first school district intranet was an attempt to use information and communication technologies to provide geographically-isolated students with extended educational and, indirectly, vocational opportunities. In eight schools within this rural school district, 55 students were enrolled in Advanced Placement (AP) Biology, Chemistry, Mathematics and Physics courses. This school district initiative challenged the notion that senior students in small schools had to leave home to complete their education in urban centres. By participating in open classes in real time, combined with a measure of independent learning, senior students were able to interact with one another through audio, video and electronic whiteboards.

The experimental work undertaken in the Vista School District was the first time that AP courses were taught on-line and, more significantly, the first time courses at this level had been made available to students in small rural schools like Little Heart's Ease, Southern Harbour and Swift

often in real time. Small schools were able to extend the curriculum they could offer by including teachers from other schools. In many cases, schools that accessed teaching from a neighbouring school were, in turn, able to provide instruction for students in other rural communities from their own, on-site resources. Schools that were physically small in

Current. In educational terms, this was revolutionary. Senior students in rural schools were for the first time given the same learning opportunities that had previously only been available to their peers in larger urban schools in traditional face-to-face classrooms.

Today, many rural Newfoundland and Labrador schools are electronically linked with one another (enhanced with satellite dishes for fast communication) and have become, in effect, sites within a provincial educational network, within which teachers are shared and collaboration between students has become possible. The internet has changed education in Newfoundland and Labrador. Since the introduction of the Centre for Distance Learning and Innovation (CDLI) to manage and expand e-learning throughout the province, there has been rapid development of internet-based education. Obstacles of small school size and remote location have been largely overcome.

Many people in the province will be aware of the work of CDLI but may not realize that Newfoundland and Labrador can now provide a model for other places in the efficient use of new technologies to enhance educational opportunities for small schools in rural communities. Newfoundland and Labrador can provide other places with a working example of an efficient, high-technology society where e-learning has been used to improve people's lives and extend their opportunities.

The initial educational opportunities that were provided for senior high school students in Newfoundland and Labrador by the Vista School District Intranet have been considerably expanded by CDLI. There is now widespread integration of teaching and learning between schools in the province through the work of this centre. Schools are, to an increasing extent, linked with one another and a growing range of learning opportunities is provided for rural high schools in this province. It is useful to think of this development as "horizontal integration". The academic and administrative integration of many rural schools in Newfoundland and Labrador provide horizontal pathways between them. Horizontal integration is now well-established in the education system of Newfoundland and Labrador, and it is time to consider the possibility

of “vertical integration” to extend e-learning to e-living.

### **From e-Learning to e-Living**

The success experienced in the education sector by the horizontal integration of small rural schools has not yet reached other parts of rural society, where unemployment among the adult population remains problematic. It is now time to acknowledge the success of horizontal integration in the provincial education system and to consider the development of new relationships, based on vertical integration this time, between technologically-enhanced rural schools on one side and homes, community organizations and the business community on the other. In other words, we are now in a position to look at this state-of-the-art infrastructure to see how it can contribute to the sustainable development of the communities in which these schools are located.

The advanced technological beacons that many rural Newfoundland and Labrador schools have become are inherently catalysts of opportunity for their communities. We can now move beyond e-learning to e-living, and extend the opportunities that have been provided for our rural students to their parents and families. E-learning success at the school level can now be matched by advances in other aspects of provincial life. And the province’s entrepreneurial flair in designing new educational structures such as intranets to support declining small schools can now be replicated at the community level so that job opportunities can be created. Of particular interest are the needs of rural adult learners and those who seek a second chance to complete their schooling.

Another important economic factor arising from our success in this area is that Newfoundland and Labrador now can export its expertise in advanced technologies to develop rural school e-learning to other parts of the world, particularly the developing world. People in Newfoundland and Labrador have applied their knowledge, skills and ingenuity to overcome problems of size and isolation by enhancing their provincial education system with e-learning; there are many places in the world in which the e-learning successes of this province could be shared by being replicated in culturally-appropriate ways.

### **Newfoundland and Labrador as a Model for e-Learning**

One of the distinguishing features of e-learning is its collaborative nature. Computers and the internet enable people to communicate in new ways. The intranets that were established in this province a decade ago enabled rural classes to communicate with one another from a range of sites, challenging the traditional model of the school as an autonomous institution that was closed to those not enrolled in it. Our model of rural e-learning has a lot to offer the global rural community because it is simple, it works and it is built on the idea of enhancing capacity in existing schools. It is an attractive model because it demonstrates that size and location need not be significant in educational terms, as long as appropriate structures and processes are developed to encourage sharing and collaboration. A question now facing us is how we can make our model of e-learning and e-living available to other, less developed societies so that they can adapt it to their own cultures and national aspirations. There is considerable e-teaching and technical expertise in Newfoundland and Labrador that is part of the wealth of this province.

Newfoundland and Labrador has found a creative way of accommodating and engaging rural students using e-learning. It is possible, considering the global nature of the educational problem that has been successfully addressed in rural Newfoundland and Labrador, for the province to become a global model of educational and, indirectly, economic development based on digital structures and processes. Through further integration – of a vertical nature – the benefits of e-learning now provided for rural high school students can be extended to more citizens so that they can engage these electronic structures in e-living. When this has been achieved, Newfoundland and Labrador will be a global model of e-living based on the application of technologies that enhance people’s lives. ☒

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