

## Chapter 6.8

# The Management of Virtual Classes in School District Digital Intranets

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### **ABSTRACT**

As rural communities and schools decline in size educational policy makers often question their viability. In the Canadian province of Newfoundland and Labrador and in New Zealand, new educational structures based on digital networking, using the Internet, have been developed for the delivery of education to rural schools. Within these electronic educational structures senior students in rural high schools have been provided with extended curriculum choice through a combination of on-site and online instruction. This has led to three challenges: the administration of electronically inter-connected rural schools, the integration of physical and virtual classes, and the need to find pedagogy that is appropriate for e-teaching and e-learning. The new educational structures in rural Newfoundland and New Zealand have

extended traditional classrooms in terms of time, space, organisation and capacity.

### **THE MANAGEMENT OF VIRTUAL CLASSES IN SCHOOL DISTRICT DIGITAL INTRANETS**

As rural communities decline in size, educational policy makers often question the viability of the small schools located within them. Traditionally, senior rural high school students have been encouraged to complete their studies in larger institutions, including boarding schools, most of which are located in urban areas. In many instances, small schools have been closed and their students transported by bus to schools in larger centres.

A problem common to small schools throughout the world is the issue of curriculum choice for senior students. It is difficult to justify the appointment of specialist teachers for very small

numbers of students in rural schools. Accordingly, rural high school students often do not have access to the same range of curriculum choices enjoyed by their urban peers who are educated in schools located in larger communities.

The educational policy dilemma of providing resources for small schools in ways that ensure their students have access to educational and, indirectly, vocational opportunities comparable to their urban peers is compounded in countries where it is necessary to maintain viable educational institutions in areas where there are significant economic resources. In Canada, Australia, New Zealand and many of the Nordic countries, schools in small and remote communities are vital to the national economic infrastructure as they are often located near mines, forests, fisheries or agricultural activities. However, it is difficult to attract and retain professional and service personnel in rural areas if local schools are not perceived to be at least as good as those in cities.

## **THE DEVELOPMENT OF VIRTUAL CLASSES IN NEW ZEALAND AND ATLANTIC CANADA**

When schools are electronically linked so that they can share their teaching resources, often over considerable distances, a much wider curriculum for students can be provided. When schools link classes by audio or video technology and, more recently, by the Internet, “virtual classes” are created. Tiffin and Rajasingham (1995, p. 6) describe the virtual class as a place in which:

*...everybody can talk and be heard and be identified and everybody can see the same words, diagrams and pictures, at the same time.*

They further note that the virtual classroom is:

*...an extension of, or alternative to, conventional schools and classrooms.*

By linking electronically, schools in rural areas of New Zealand and Canada have provided students with new dimensions to their educational experience by extending and enhancing their remote and isolated classrooms.

In Newfoundland and Labrador, one of the most geographically isolated provinces in Canada, all teachers are able to be linked through the “Stem-net” network. Within this network, the “Stellar Schools” program has been developed to take advantage of recent developments in information and communication technologies in those areas of the province in which there are advanced telephone services. Not all schools in the province are members of the Stellar schools program, but more are able to join as the local telephone company expands its services and provides broadband connections to remote areas.

In the Canterbury area of the South Island of New Zealand, 10 rural schools each faced the threat of closure because of falling enrolments and the relatively high cost of keeping each school open for fewer and fewer students. As each school declined in terms of its student enrolment, fewer areas of the curriculum could be provided to senior students because fewer teachers could be employed. Most schools in the region were in decline and many parents in the rural communities were worried about the ways in which this affected the educational opportunities of their children. In rural areas the school is a special institution because of the central role it has in the life of its community. In the absence of a local school that is able to provide courses of the level and quality students require, many families are reluctant to stay in a rural area. School closure is often therefore associated with population out-migration and subsequent rural economic decline (Stevens, 1995a, 1995b). The solution in

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