

REDUCING THE EFFECTS OF ISOLATION ON STUDENT LEARNING

A STUDY CONDUCTED DURING A PRINCIPAL'S SABBATICAL

**John Garner
Principal
Collingwood Area School**

July to September 2009

ACKNOWLEDGEMENTS

I would like to thank the following for making my sabbatical possible:

- The Collingwood Area School Board of Trustees for giving me leave and supporting my application
- The staff of Collingwood Area School especially those senior members who took on extra responsibilities in my absence. It would have been very difficult to take leave without having the confidence that they would perform their extra tasks with a high level of skill and very successfully
- The Ministry of Education for providing sabbaticals for principals
- The members of the Department of Education in Newfoundland for providing time in their busy schedules to meet with me
- My wife, Joan, and her fellow Newfoundlanders who made me welcome, talked about their schools and introduced me to some of their fine traditions such as Phil who taught me how to barbecue cod tongues and deep fry turkey.

1. EXECUTIVE SUMMARY

Isolation causes very real challenges to the learning of many students. Providing a broad curriculum coverage, especially for senior students who attend a small and isolated school is not easy. From the early 1990s New Zealand has been at the forefront in overcoming some of this challenge by using modern technology to provide distance learning.

While much progress has been made it has depended on very devoted individuals working in small clusters to provide courses for their students. Equipment is purchased using school funds. Expertise, both technical and pedagogical, is often self-taught and often voluntary. The Ministry of Education has provided much valuable support but always faces issues of funding and recognition of how high a priority distance learning is to any individual Government. Consequently underpinning distance education there is a constant concern about sustainability.

Canada's Province of Newfoundland and Labrador has also embarked on an ambitious programme of providing distance learning for students in isolated places. Their Department of Education has a much more directive role in the development of this learning and many aspects of this would be worth much closer study to see what we can learn from their experiences. For example the Department provides all of the equipment required and employs the teachers who deliver the courses. It is also ensuring that fibre optic cable is available to all but the most isolated schools (and some of their isolation would go way off our scale for measuring it).

Newfoundland is also making similar developments to New Zealand in looking at ways to provide more effective on-site and locally clustered professional learning opportunities for teachers. Both them and us could put much more into investigating ways to use distance learning for teachers as well as students.

2. PURPOSE

The primary purpose of this research as originally intended was to investigate how schools in two isolated parts of Canada deal with their isolation. The special focus was to be on:

- I. How do the schools provide a broad curriculum coverage? What types of distance learning are available and how do they make use of them?
- II. How do the schools meet the vocational and further learning needs of senior students?
- III. How do the schools meet the professional learning needs of teachers and principals?
- IV. What are the special characteristics that these schools have in their relationships with their communities?

Once I arrived in Canada some of these foci did change as will be evident in Section 5: Findings.

3. BACKGROUND

Isolation is a factor in the learning of many students in New Zealand schools. Issues around isolation have been recognised and attempts made to address these since the early days of schooling in the country.

The Ministry of Education (MOE) does grade schools on an isolation factor and some funding is provided through Operations Grants to help overcome the extra costs provided by distance. In recent years there has been much discussion on the criteria to assess isolation and how much funding should be provided.

The New Zealand Area School Association (NZASA) has been involved in looking at these factors in isolation as almost all of its member schools are in isolated parts of the country. In 2007 it prepared a paper for the MOE on the issues facing area schools, most of which relate to isolation alongside being small.¹ These issues formed the basis of the proposal for the research to be carried out as part of this sabbatical.

Assistance is given to students in schools which cannot offer full courses. The main way of doing this has traditionally been through the Correspondence School through mostly paper materials and post. Very recently this School has been looking at joining the digital age by looking at providing courses in alternative ways.

Since the early 1990s groups of schools in rural areas have worked together to provide courses through videoconferencing. Several of these clusters, such as Cantatech, have had continuing success despite ongoing challenges. These have mostly been around the sustainability of funding but also timetabling teachers to take courses and having the resources to provide management and administration. Although the Ministry of Education does play a coordinating role for these clusters, provides a “bridge” for the video-conferencing connections and recently has funded a “principal” for each cluster their survival does largely depend upon individuals in each cluster being determined to keep them going.

¹ New Zealand Area School Association “The Issues Facing Area Schools”. November 2007

4. ACTIVITIES UNDERTAKEN

The main part of this research was always intended to take place in the Canadian Province of Newfoundland and Labrador (commonly just known as Newfoundland). The island is large (108,000 sq km) but with less than 500,000 inhabitants. The Labrador part of the province is almost 300,000 sq km and has a population of less than 50,000 and has only two roads. There are also over 7,000 islands in the province. Having flown over Labrador on my way into Canada, besides being impressed by the many icebergs off the coast, the overwhelming sight was of small pockets of land surrounded by large areas of water and virtually no signs of human habitation.

Before leaving New Zealand, contact was made with the province's Department of Education which resulted in a very rewarding meeting with three senior officials from that Department once I arrived in St Johns. My time with these people was very informative but unfortunately interrupted by the calling of ongoing and urgent meetings on how H1N1 was going to be dealt with in the coming school year.

Visits to actual schools on the island of Newfoundland were limited. The timing of my visit did coincide with their long summer break. I was able to visit three schools and talk to people at these.

1. HL Strong Academy on Long Bay Island on the north coast of Newfoundland. Visiting this school involved a 45 minute ferry ride to this small island of 70 inhabitants. The school, when built in 1983 had 115 students. Although officially a K-12 school (the equivalent of a year 1 to 13 area school) it now has five with a principal and one teacher. Although there have been many school closures in the province in recent years, the principal of 28 years, assured me that as long as there was only one student this school would never close as there was no other school for a student to be able to attend.

2. Gros Morne Academy in Rocky Harbour on the north-west coast of the island. This school is a K-12 with 248 students in the 2008-09 year. It is 1.5 hours drive from Corner Brook, where the regional education office is located.

3. Le Gallais Memorial on the south coast of the island. This is a K-9 school of 78 students. It is located just off the main road between Isle aux Morts and Rose Blanche, two old fishing villages which are literally the end of the road around the island. There are no signs on the road to indicate there is a school down the long driveway and it is mostly hidden from the road by cedars. This school also comes under the same regional office as the HL Strong Academy (the Western District Office in Corner Brook). It is, however, only 30km from the township of Channel Port-aux-Basques where the year 10-12 students attend secondary school, and with a population of 4,000 has some resources.

The other main area that was to be visited was that of Mackenzie, in northern British Columbia. The economic recession, however, has meant that its final surviving timber mill was closed early in the year resulting in huge unemployment and difficulties in the area. (A decade ago there were three timber mills – two of them owned by Fletchers of NZ) As a result we were unable to visit but we did hear that the school has lost over 200 students in 12 months.

Other parts of our trip did allow consideration of isolation and student learning in other places outside of Newfoundland.

1. The Frankfurt International School (FIS) is large (1800 students) covers years 1 to 13 and is only 25 km out of Frankfurt. It does, however, use English as its medium for instruction and many of its teachers do not speak German and consequently some of the issues of isolation are felt there.

2. Pinantan Lake Elementary School in inland British Columbia, 400 km from Vancouver. The school has 3 classes and an anticipated role of 63 for the 2009-10 school year. The school has been recently under threat of closure which the local community is resisting. Closure would mean a round trip of about 70km to the nearest centre of Kamloops through mostly narrow and hilly roads.

3. NK'MIP cultural centre. Visiting this Centre was one of the highlights of the 9-week trip.² The centre is part of a development by the Osoyoos Indian Band which consists of about 400 members, most of whom still live on their reservation. They are part of the Okanagan First Nation people who are located in the Okanagan Valley in inland British Columbia in what is known as Canada's only desert area. The Osoyoos Band developed a business plan in 1993 which now sees a very successful complex in operation. Besides the cultural centre there is a research area on the desert (including work on rattlesnakes and visitors are asked to report sightings), a campground, a condominium complex with apartments for rent and sale. The reservation also boasts a winery (the chardonnay is fully recommended) and a restaurant (a platter for lunch to accompany the chardonnay, seated on the lawn overlooking the vineyard and Osoyoos Lake is not to be missed). There is also a nine hole golf course which I was unable to play both because of lack of time after the rest of the visit and a basic fear of being bitten by a rattlesnake if erring off the fairways.

The relevance of this visit to the research was the history of local schooling which was part of the cultural display. Until the 1930s all of the local children were sent away to residential schools where any recognition of their own language was strictly denied. (This experience was not uncommon. The First Nation display at the University of British Columbia in Vancouver provides a similar denial of the rights of the indigenous people).

In the 1930s a local school was set up with the goal of combining the learning of the traditional language and culture with learning about the modern world. The vitality of this centre and the successful and varied activities taking place there are an enormous credit to the Osoyoos Band and shows the importance of learning locally.

4. Fraser Valley Distance Education School. This is a publicly-funded school that provides free lessons to any resident of British Columbia using a mixed approach of printed materials and on-line learning. Loan computers are provided free where required.³

5. FINDINGS

Information gained through meetings, discussions and observations falls into four categories.

1. The provision of curriculum coverage for students in isolated areas and the importance of having a strategy to provide for distance learning for these students.

Isolation in the Province of Newfoundland and Labrador reaches levels that are unimaginable for New Zealand, except possibly the Chatham Islands. Six schools in Labrador can only be reached by plane. One I visited could only be reached by boat and there are many more like this. Isolation can mean something else as well in a region where snowfalls can be very heavy and snow covers the ground in many areas for at least six months of the year.

Consequently the provision of distance education has been given a huge priority by the provincial Department of Education. The local university, the Memorial University of Newfoundland (MUN)

² www.nkmip.com

³ www.fvdes.com

created a chair in tele-learning in 1997. The holder since its inception is Dr Ken Stevens, a New Zealander, formerly from Victoria University. Interestingly this chair is jointly funded by Industry Canada, the Atlantic Canada Opportunities Agency and Human Resources Development Canada. Dr Stevens is adamant that his new home leads the world in the provision of distance learning.

The Province sees itself as having full responsibility for distance learning. As such it directly allocates 36.5 teaching positions to provide the courses. These teachers are usually seconded from one of the provinces six districts for a fixed period of time. The aim is to ensure quality teachers with subject speciality. It was noted that teachers in mathematics, the sciences and French are the hardest to recruit.

The Department of Education expects to have fibre optic in 95% of schools in the province within the next three years. It also provides all IT equipment that a school requires to provide distance education and provides technical support and a help desk. The Department is currently hiring four people to travel around schools to provide technical assistance

The Department of Education provides forty courses to students in years 10 to 12 (Years 11-13 in NZ) in 180 of the province's 279 senior secondary schools. Some schools are so small that they may only have one senior high school student and some students receive all of their classes through tele-learning. Moves are just beginning to provide courses for younger students.

Synchronous learning is for about half of the allotted time for each subject and videoconferencing is for about 20% of the time.

Various tools are used to assist with learning. The Learning Management System used is "desire to learn" the same one as NZ's Correspondence School signed up to use this past July. A web conferencing tool, "Illuminate Live" is also used. This allows for a whiteboard to be used alongside a shared desktop. Teachers can also use this program to record the session.

Besides costs, major issues are seen with some schools having sufficient bandwidth and providing practical courses such as fine arts and practical science. Several itinerant science teachers have been recently hired to travel around schools to provide laboratory experiences for students.

The effectiveness and provision of courses described by Departmental officials was supported through discussion with teachers I met with schools in the province. Where there are insufficient student numbers in a school to run a class, courses are provided by the provincial Department of Education. At Gros Morne Academy in Rocky Harbour, for example, senior students study Physics, Chemistry and French on-line. They also do have some difficulty being able to hire suitably qualified people in these subject areas.

It must be noted that in both Newfoundland and British Columbia curriculum content is prescribed at the provincial level. While in New Zealand there is much debate about how much independence schools should have in their curriculum in Canada this prescription was just accepted as the status quo.

In Newfoundland, provision is also made for students with physical special needs who have to learn from home. There are 25 to 30 such students each year. Courses, equipment and support are provided for these students

The Fraser Valley Distance Education School, based in Chilliwack, British Columbia is organised differently from the distance education in Newfoundland. Although publicly funded it has a large degree of independence from the provincial Department of Education. It provides lessons and materials for school students of all ages who cannot attend a local school whether for geographic or social reasons. It uses First Class as its on-line tool as it is in the process of moving away from the traditional provision of paper materials to more on-line learning. Computers are loaned free to students and technical assistance is available. It also sees as an advantage that all school courses in British Columbia are prescribed across the Province.

2. The provision of ongoing professional learning and development for teachers in isolated schools.

The officials in Newfoundland were very aware of this as an issue in remote schools. They knew of cases where attending a one-day PD course could mean a week out of the classroom. One teacher spoken to at Frankfurt International School missed a week's teaching to attend a 3-day course in London.

In Newfoundland the Department of Education is aware that professional learning done within the school is often more effective than that carried out at a distance. DVDs have been prepared and sent to schools, most recently to do with curriculum development. It is working with the local teacher unions to provide websites that teachers can use and arrange for teachers to be provided the time out of school to study through these. This is all very much under development but the experience, expertise and equipment available for student distance learning is giving them a good head start.

One teacher I spoke to in a remote Newfoundland school said that there is increasing focus on teachers working together within a school or with teachers with similar responsibilities in nearby schools being brought together by Departmental officials who would at times bring in expertise from outside. An example given was of an expert from the United States on student motivation being brought into work with a small group of schools in western Newfoundland.

In Frankfurt there is also the awareness of providing ongoing professional development. They are encouraging teachers at the school to run professional development sessions for their colleagues because there is nothing available locally using the international school curriculum or in the English language. Teachers are paid E100 (about \$NZ250) for running a session.

This school is financially better off than the majority of state schools and can, therefore, afford to pay teachers extra, as described above, or having funding to provide all classrooms with smartboards and train two teachers in their use so that they now have a schedule for training all of the others. Even with all of their money, however, there can be issues. While videoconferencing equipment has been purchased (mainly for carrying out preliminary interviews for applicants for teaching positions who come from all around the world) they have had serious issues with connecting into the local fibre optic line and having compatibility with systems both locally and around the world. This does frustrate the six full-time technicians that the school employs.

3. The Importance of Having a Sound IT Infrastructure

The Department of Education in the province of Newfoundland and Labrador fully recognises the importance of IT. It is close to having fibre optic available to all schools. It pays for computer equipment and provides technical support. It provides the teachers for distance learning. It also provides a Centre for Distance Learning & Innovation (CDLI)⁴ which Dr Ken Stevens of

⁴ The CDLI website is www.cdli.ca. Access is by password but I had no difficulty gaining one as a guest.

Newfoundland's Memorial University sees not only as a world leader but also having the potential to revitalize isolated communities that are struggling to survive with the demise of the fishing industry.⁵

Dr Stevens also states "What we've got in this island economy is a sophisticated communications network, and what we've achieved is collaborative electronic structures to enhance the capacity of schools, and to considerably extend the opportunities for young people."⁶

While New Zealand is also a leader in distance learning Newfoundland, largely through Government leadership, has developed theirs further and faster than ours. Consequently more learning is available to more students, or as Stevens calls it "horizontal integration". He is now recommending "vertical integration" so that whole isolated communities can benefit from the technology.⁷

4. The importance of administrative structures that allow isolated schools to reflect their own community and be independent while also gaining support from an administrative centre.

Canadian schools do not have their own Boards. In Newfoundland there are four district boards (and a fifth one for French speaking schools) which run all of the schools in their district. This goes so far as stating the policies for each school and influencing the appointment of teachers.

The most obvious effect of this was that all schools seen in the Western District were similar rectangular block buildings with virtually no outdoor area and very little sign of any pride being taken in the external appearance.

The same architect seems to also have been employed in British Columbia where all schools had the same rectangular structures with no obvious entranceways and virtually no play areas.⁸ While in Vancouver, the provincial Government did announce cuts to spending in education which would include less money spent on buildings.

The lack of independence for schools in appointing teachers was noted in one community visited. In British Columbia teachers are appointed by seniority. A school must appoint the most senior applicant who applies for a position. At the local school this meant a person unknown who was nearing retirement had to be appointed ahead of a much younger local person who had recently trained. Within six months the parents of the students in the class of the newly appointed teacher were refusing to send their children to the school.

6. IMPLICATIONS

a. The Importance of Distance Learning

Dr Ken Stevens states that "since the introduction of the CDLI... there has been rapid development of internet-based education. Obstacles of small school size and remote location have been largely overcome."⁹

⁵ "From E-Learning to E-Living" by Dr Ken Stevens published in the Newfoundland Quarterly Vol 100 No 4, 2008. www.mun.ca/harriscentre/Memorial

⁶ "Education Prof Promotes E-Learning" by Heidi Wicks January 2008, posted on the memorial University website: today.mun.ca/news.php?news_id=3436

⁷ Stevens "From E-Learning to E-Living "

⁸ One school I looked at did have only one external door. Posted on this door were two notices. The first stated that all visitors must use the main entrance. The second warned that anyone refusing to leave when asked could face a maximum fine of \$10,000 or up to six months imprisonment. I went no further.

⁹ Stevens "From E-Learning to E-Living "

New Zealand is very close to having most of what Newfoundland has but their greater commitment means that they have moved ahead of where we are. We could investigate what they are doing more closely and see what we can learn from them. The Department of Education there ensures that the latest technology and software are being used, that there is technical support and employs the teachers who deliver the courses. In New Zealand we have a much more piece-meal approach that means the system relies much more on devoted individuals with the risk of much duplication of effort. It also creates a much greater risk of our system not being sustainable.

b. Ongoing Professional Learning and Development for Teachers

The importance of the ongoing growth of teachers is clearly recognised in New Zealand as it was in the places visited overseas. Like here, Newfoundland has recognised that on-site learning with colleagues is often much more valuable than the off-site course. This is often particularly so for teachers in isolated schools because the off-site training can be both expensive and time-consuming. Both places are only just beginning to realise the potential of teachers using distance learning in the way that students have been learning for over a decade. This needs to be developed much more and the providers of teacher development need to be at least encouraged if not compelled to provide much more distance learning opportunities.

c. The self-managing school

There is much debate in New Zealand about the responsibilities on Boards of Trustees and the administrative load on senior staff. There is a certain attraction to the thought of having prescribed policies and curriculum, as in Canada. There are also, however, the huge advantages for Boards in appointing the teachers that fit their needs and in being able to make a difference to the appearance of their school.

Much more is needed here on supporting Boards of Trustees and in recognizing the administrative loads on senior management but from what I observed it does seem to be a preferable model to having decisions made from afar.

7. CONCLUSIONS

Like New Zealand, Newfoundland is an island with many small and isolated communities. With the demise of the cod-fishing industry plus a downturn in forestry many of these communities have faced serious challenges to their future existence. There is now the recognition in the Province that future development means making the most of the potential of its young people, even those in these isolated communities. Consequently there is a major focus on providing and supporting distance learning in these communities and providing support for teachers. Furthermore the infrastructure provided for schools is now being recognised and actively pushed by Dr Ken Stevens as a way of helping all residents in isolated communities move forward.

There are sufficient similarities in New Zealand both geographically and in a realisation of the importance of distance learning that we could learn from their more sophisticated structure and development.

John Garner
October, 2009