

2010

First Nations SchoolNet and the Migration of Broadband and Community-Based ICT Applications

Tim Whiteduck

Follow this and additional works at: <https://ir.lib.uwo.ca/aprci>



Part of the [Social Policy Commons](#)

Citation of this paper:

Whiteduck, Tim, "First Nations SchoolNet and the Migration of Broadband and Community-Based ICT Applications" (2010).
Aboriginal Policy Research Consortium International (APRCi). 84.
<https://ir.lib.uwo.ca/aprci/84>

7

First Nations SchoolNet and the Migration of Broadband and Community-Based ICT Applications

Tim Whiteduck

Introduction

Since 2002, six regional management organizations (RMOs) have delivered information and communications technology (ICT) services and connectivity support and expertise to federally funded First Nation schools as part of the First Nations SchoolNet federal initiative.

The six RMOs serving the First Nation schools in their respective regions include:

- the First Nations Education Steering Committee (FNESC) in British Columbia;
- the Keewatin Career Development Corporation (KCDC), serving Saskatchewan and Alberta;
- the Keewatin Tribal Council (KTC) in Manitoba;
- the Keewatinook Okimakinak (K-Net) in Ontario;
- the First Nations Education Council (FNEC) in Quebec; and
- Mik'maw Kina'matneway, serving the Atlantic region (New Brunswick, Prince Edward Island, Newfoundland, and Nova Scotia).

Many years of experience working with First Nation schools and communities have enabled the RMOs to acquire a strategic understanding of the importance of ICT and broadband connectivity for First Nation communities, and to work successfully to expand ICT-related services and programs throughout First Nations across Canada. As ICT programs and services at the federal level unfold to accommodate the unique needs of First Nations and other Aboriginal communities, a commitment from federal authorities to support effective and efficient delivery vehicles will be a decisive factor in the advancement of local and regional ICT capacities.

The Indian and Northern Affairs Canada (INAC) funding for band schools does not include ICT-related funds. The INAC band schools funding formula emerged in 1988 and was indexed annually until 1996; since then it has been untouched regarding new budget items. As a result it is neither indexed to the cost of living nor to include the new costs that technological developments require. Further-

more, INAC's funding formula excludes specific funding for band schools for the purchase of computers, technical support, broadband connections, and teacher training. Schools are forced to utilize resources from other programs and services to meet the pedagogical requirements of Canadian schools.

Band schools use any means possible to maintain their students' interest in studies, especially communication technologies. First Nations are asking no more and no less than being allowed to benefit from a comprehensive education system that can offer comparable services and quality education that is equitable to that provided to other Canadian citizens. Quality, however, does not come about on its own. It needs the investment of sufficient resources.

The First Nations SchoolNet program was initiated in 1996 within Industry Canada's Information Highway Applications Branch. In December 2006, the program was transferred to the INAC Education program; however, there is currently no official federal policy on First Nations ICT, thus the future of the SchoolNet initiative is uncertain. First Nations are demanding a federal policy on First Nations ICT that supports a new comprehensive program. They are seeking an approach to ICT that features a global vision that is equally respectful of and responsive to local realities.

This paper will document the need for a new federal policy on First Nations connectivity and ICT, drawing on work by the First Nations SchoolNet RMOs, which are engaged in building a national broadband network that is owned and managed by First Nations communities across Canada, arguably the largest network in the world. The network not only supports educational applications, but also telehealth, justice, and economic development applications. The paper will also explore why the RMO structure is an ideal structure not only for the delivery of programs in First Nations across Canada, where national targets can be established, but also for programs delivered regionally in a way that both respects diversity and addresses local challenges.

The Proposed First Nations ICT and Connectivity Policy

The six regional management organizations have been working together to produce a proposed ICT policy for the federal government's consideration. The purpose of this policy is to:

- Establish stable and predictable funding for ICT and connectivity to First Nations and other Aboriginal communities;
- Stimulate a sustainable approach to ICT and connectivity;
- Support the development of ICT capacity at the local and regional levels;
- Ensure that adequate and appropriate support services are available to all First Nations regardless of their geographic location;
- Contribute to the modernization of ICT systems in First Nation schools

and other First Nations and Aboriginal venues;

- Eliminate the silos in education, health, environment, social services, economic development, and public security at the regional and local levels;
- Ensure that local and regional First Nation authorities in all sectors including health, education, economic development, social services, public security, and governance are connected to the appropriate provincial system;
- Provide a framework on which RMOs, government and local/regional partners can identify and respond to economic, environmental, and social well-being issues for the present and for future generations.

There are three pillars to the proposed policy: core elements, implementation, and funding.

Core Elements

The federal government is required, within its jurisdictional and treaty responsibilities, to provide quality and equitable education opportunities for all First Nation students. This responsibility includes the need to adequately fund the provision of the required broadband infrastructure that is capable of supporting access to ICT and various broadband applications.

The Government of Canada recognizes the critical strategic importance of ICT and connectivity to First Nations and other Aboriginal communities' economic, political, social, and educational well-being. ICT and connectivity represent a vital means by which all Aboriginal communities, regardless of their location in urban or geographically isolated areas, can share with other Canadians the opportunities to participate in global information and technology networks and benefit from the advantages that connections and ICT on a global scale offer.

In recognition of ICT and connectivity's strategic importance to First Nations and other Aboriginal communities, the Government of Canada should be committed to supporting this policy so that every interested First Nation and Aboriginal community is able to develop the necessary broadband infrastructure to support ICT and the appropriate applications.

To facilitate the introduction and expansion of ICT and connectivity services to First Nations and other Aboriginal communities, the Government of Canada should ensure that its approach fosters the interconnectedness of government departments and sectors, thereby eliminating or reducing the silo effect in its programs and service deliveries.

Implementation

The Government of Canada could implement this policy in several ways. First, it should work in partnership with the appropriate First Nations and Aboriginal bodies to develop strategies that address this policy. Second, it should work with

the existing RMOs as the principal means by which First Nations and Aboriginal ICT and connectivity policy is delivered to these communities. Third, it should support an annual gathering of First Nations, government representatives, and ICT representatives to identify best practices in First Nations ICT and connectivity, assess progress in the core elements of the policy, and identify gaps in connectivity and ICT.

The Government of Canada should identify a lead department to oversee and administer the policy. The lead department would work closely with RMOs and First Nations and other Aboriginal communities as part of its ICT mandate.

Funding

The Government of Canada should commit the necessary funds annually to support this policy. Sufficient funds would be approved to support the work of the lead department in implementing the policy; to expand the First Nations SchoolNet initiative to all federally-funded band schools; and to support the RMOs individually and collectively to develop and deliver broadband connections, ICT, and appropriate First Nation applications in partnership with First Nations, their schools, their health centres, and other First Nation organizations. Funding should also be adequate to support research in innovative strategies on ICT and connectivity in First Nations and other Aboriginal communities, and to stimulate the emergence of partnerships between First Nations and other Aboriginal communities, governments, and the private sector to research and support projects that focus on expanding and strengthening ICT capacity in these communities.

Benefits of the Proposed First Nations ICT and Connectivity Policy

A new federal policy on First Nations ICT has a variety of benefits at the macro and micro levels. At a macro level, the benefits include: providing First Nations and other Aboriginal communities as a solution for the emerging human capital gap that exists across the country; enabling First Nations and other Aboriginal communities to compete on international and domestic scales in global markets; and diminishing the digital divide that threatens to become the digital abyss between remote and rural First Nations and the rest of Canada.

At a micro level, the benefits include: expanding effective and efficient ICT programs and service delivery in First Nation communities in the areas of education, health, justice, public safety, economic development, and governance; supporting community capacity building and economic development through enhanced training programs and innovative training models; promoting effective and efficient community governance; and maintaining cultural integrities through the enhancement of language renewal and retention, cultural research, and the support of elders.

The National First Nation Broadband Network

A new federal policy on First Nation ICT will stabilize and continue the vital funding of the First Nations SchoolNet initiative in First Nation schools. Equally important to the health of ICT and First Nation communities and schools is the emergence of a national First Nations broadband network that is, among other things, providing the technological platforms and expertise on which the new federal ICT policy can be implemented.

The federal First Nations SchoolNet program has led to the creation of a national First Nation Broadband Network where the six RMOs work in partnership to deliver the vital requirements of ICT to federally funded First Nation schools within their jurisdictions. Five years of participation in the First Nations SchoolNet initiative have enabled the six RMOs to achieve a degree of understanding of the unique needs of First Nation schools and communities that is unrivalled anywhere in Canada today. As partners in the First Nations SchoolNet initiative, they are able to exchange vital and strategic ICT information and knowledge quickly and easily through their existing ICT network.

The RMO network is accessible and user-friendly. Their experience working successfully with First Nations enables them to bridge communication and cultural gaps to First Nation communities, schools and individuals. Access to the RMO ICT network provides a platform on which First Nation communities, organizations, and groups can share knowledge and information on a range of common interests in a variety of fields, including economic development, governance, education, health, and social and family issues.

Each of the six RMOs represents a specific geographic environment and a broad cultural spectrum. This diversity provides a range of experience, knowledge, and understanding of First Nations, their ICT needs and requirements, all of which enhances the RMO working relationship with communities, leaders, and individuals. It also means that the RMOs are equipped to respond positively and confidently to a variety of challenges. As a critical element in the ICT network, each RMO brings a special set of experiences and understanding to any ICT undertaking, broadening the opportunities for success and strengthening the network.

Within the national network, the six RMOs have forged a positive and strong bond based on their commitment to ensure that First Nation schools and students receive quality ICT programs and services. Their commitment has been recognized by First Nation schools, communities, and leaders, and has led to an expansion of the RMO presence in First Nations ICT beyond the First Nations SchoolNet program. To date, the RMOs presence extends to:

- Strengthening local community ICT capacity;
- Participation in a national Aboriginal broadband network;
- National and regional Aboriginal video conferencing;
- Innovative schools projects;

- Collaborative programs with other departments;
- Economic development.

Examples of the individual and collective ICT projects of the RMOs in the First Nations and Aboriginal environments in each of the above categories have multiplied since 2003. Below, several examples of these projects are provided to indicate the range, complexity, and importance of a national broadband network and consortium.

Strengthening Local Community ICT Capacity

Cisco Training: The RMO in northern Saskatchewan (KCDC) took the lead in the development of a partnership in 2003 between the regional management organizations and Cisco, a networking and communications technology firm, for the delivery of Cisco's Networking Academy training programs in First Nations. The program resulted in the development of resource materials tailored for First Nations being delivered through e-learning and video conferencing in First Nations by First Nations instructors from several provinces. In Saskatchewan and Alberta, as a Cisco partner academy, KCDC has trained over 60 students in more than 20 locations in the last two years, with 41 students completing ITE 1 (and several others in progress) and ten students completing ITE 2. The RMOs deliver the Cisco programs through a combination of e-learning strategies including video conferencing, Adobe Connect (previously Macromedia Breeze) meeting rooms, and Moodle e-learning course management software, as well as the Cisco Network Academy portal.

Equipment Initiatives: Equipment Initiatives, a First Nations Education Council (FNEC) project, has improved student and faculty accessibility to leading-edge technologies, and has significantly improved the computer-to-student ratio, from 1:15 in 2003 to 1:5 as of March 2006. Similar ICT equipment purchases and upgrades were supported by the RMOs across Canada.

First Nation Technology Gatherings: All RMOs have coordinated regional and/or national technology gatherings for First Nations to promote the use of technology and to share best practices.

Accredited Training Program: FNEC delivered a long-term accredited training program in conjunction with the University of Montreal to build the capacity of community-based technicians via e-learning technologies. The accredited program enables the First Nation technicians to deliver and support integration locally. This university program is available to all First Nations across Canada.

Youth Employment Program: Through a cooperative effort with Human Resources and Skills Development Canada (HRSDC) and the national First Nations SchoolNet office, all RMOs delivered successful youth employment programs related to technology in communities within their respective regions.

First Nation Technical Interns: First Nation youth are being employed in a variety of positions in their communities to support the operations and mainte-

nance of ICTs. One example is a young man living in a remote community in northwestern Ontario (Sachigo Lake First Nation) who is contracted to deliver the Cisco ITE courses to other First Nation youth in First Nations across Ontario using these e-learning tools.

The National Aboriginal Broadband Network

As a result of the First Nations SchoolNet activities, the RMOs have successfully engaged in a variety of national and regional ICT networking projects and initiatives featuring First Nation communities, schools, and organizations. Through their video conferencing and ICT facilities, they have provided First Nations with timely access to an efficient, innovative, and flexible means of communication. National initiatives include:

Kuhkenah International Indigenous Online Gathering: K-Net participates in national and international video conferencing sessions and events, including the Kuhkenah International Indigenous Online Gathering.¹

Videocom Project: The Atlantic Help Desk, FNEC, and K-Net also participate in monthly research meetings with the Videocom project in partnership with the National Research Council in New Brunswick.² This Social Sciences and Humanities Research Council–funded (SSHRC) research initiative is producing papers and publications that are presented internationally.

Read Around the Planet: Thirteen classes from five Saskatchewan and Alberta First Nation schools participated in this program, which partners classrooms from around the world through video conferencing to promote reading.

Megaconference Jr. Video Conference: KCDC provided a host bridge for the 2007 Megaconference Jr. Video Conference, which brought together 171 sites from around the world in a 12-hour conference designed to give students in elementary and secondary schools around the world the opportunity to communicate, collaborate, and contribute to each other’s learning through video conferencing.

Grand Chief Phil Fontaine, AFN: Based on Grand Chief Phil Fontaine’s discovery in 2003 that RMOs had the capacity to conduct nationwide video conferences independent of telephone and communications corporations, he has been a willing and enthusiastic participant in numerous national video conferences, including events focused on fetal alcohol spectrum disorders (FASD), Earth Day, and the promotion of ICT in First Nation schools.

Regional Aboriginal Video Conferencing

The enormous potential of a national RMO network and consortium is best exemplified in the volume of regional video conferencing activities that have already occurred with the direct input and support of the RMOs and their broadband network. Too numerous to list them all, here are several examples:

K-Net: K-Net operates a managed network environment that supports video conferencing with quality of service (QoS) for applications that include telemedicine consults as part of the Ontario Telemedicine Network (OTN) and the Smart Systems for Health Agency (SSHA), public health education sessions for First Nation health providers across Ontario, administration and research meetings on a regular basis, and court sessions with remote First Nations.

Breaking Barriers: Breaking Barriers is a series of interactive video conference programs that allow students to learn about careers, life stories, and educational programs. The series is available in Saskatchewan and Alberta First Nation schools, and is produced and hosted from KCDC in La Ronge, Saskatchewan.

The programs complement and enhance students' education, better preparing them for active participation in the modern western Canadian economy. As well it provides students with the opportunity to interact with inspirational individuals. The series allows for a wide number of motivational guests, from community elders to astronauts. Most importantly students learn more about different careers and have the opportunity to interact with talented peers. High-profile guests on Breaking Barriers have included senator and hockey legend Frank Mahovlich, Federation of Saskatchewan Indian Nations Chief Lawrence Joseph, *North of 60* actor Dakota House, and then-Saskatchewan Premier Lorne Calvert.³

Elders' Sessions: Elders from a number of Saskatchewan communities have become involved in video conferencing, and use the medium to meet with each other and discuss issues important to their communities. They are currently looking into the effect of teenage pregnancy in their communities.

Fetal Alcohol Spectrum Disorders: In 2005 a regional video conference was held on the topic of fetal alcohol spectrum disorders (FASD) featuring Francis Perry, a Mi'kmaq man who has dedicated much of his life to explaining the disorder from the perspective of a survivor, and encouraging youth to behave in a manner that will reduce the risk for future tragedies. His story inspired grade seven and eight students at Eel Ground School to work with their drama teacher to write and produce a play about FASD entitled *The People vs. Mary Moses*. The students worked with Learning Through the Arts mentors to add music and lyrics, and then produced the play, which won five awards at the New Brunswick Drama Festival. In 2006 a DVD of the play was made and a national video conference was held to share the message across the country. Francis Perry said it best in his humble and emotional way: "Three years ago we couldn't get five people in a room discussing this issue, but look at it now!"

MMTV News: MMTV (Mi'kmaq/Maliseet TV) News was the product of students from several schools who videotaped, edited, and produced short news stories using local, national, or international stories. Multipoint video conferences aired the clips, linking them back to an anchor desk, emulating the capabilities of a small television operation. Students learned about group cooperation, film and broadcast technology, journalism, and current events.

Leadership Certificate Program: In partnership with Saint Paul University, First Nations Education Council is now offering its fourth session of the First Nations Leadership Certificate. The courses are mainly intended for people interested in increasing their knowledge about First Nations dynamics and issues. These courses are intended to develop skills and abilities that can be used in a professional management context. The leadership program is delivered through video conference technology and is producing high participation rates from member communities, as well as non-member Innu communities.

Quebec Health Centres: FNEC is the technical lead in deploying video conference systems across 27 health centres in the region over a two-phase process. Approximately 33% of these health centres share the broadband services provided by the FNEC First Nations SchoolNet program. They now have access to high-speed Internet and use their video conference systems over this same broadband service, access that would otherwise not exist.

Innovative Schools Projects

Through SchoolNet the RMOs have contributed directly to the emergence of several unique First Nation education achievements. Without them (and SchoolNet), these stimulating and innovative projects would not have taken place.

Eel Ground School, New Brunswick: Eel Ground First Nation, a small community in central New Brunswick, has been repeatedly cited as a success story in INAC publications, local newspapers, and national First Nation media. Eel Ground illustrates how innovative, integrated, and aggressive use of technology resonates with Native learning styles and can lead to achievements that exceed those of provincial school counterparts. In 2008, Eel Ground First Nation School received the prestigious Kaiser Foundation Award for Excellence in Aboriginal Programming.⁴

Keewaytinook Internet High School: K-Net, with the support of INAC, delivers an Internet high school program in remote First Nation communities in north-western Ontario that enables students and instructors to engage in an innovative, stimulating online education program.

E-learning for Early Learners: Inspired by its own activity books for children ages four to six, FNEC, through the support of the SchoolNet program, has developed online educational content and games for children. The objectives of the program are to develop educational material of high cultural value and significance, and to facilitate the pedagogical integration of ICT. One such game is “Piku and Mahikan,” which allows youth to develop the motor skills needed for technology use and to learn while having fun. These educational programs are available on the FNEC website in both official languages. The interactive game has been distributed via CD-ROM to all schools and is also available online.

SMART Board Acquisition and Training: Developed by the FNEC, the aim of this project is to improve school attendance by offering a program to communities

that will enable them to equip their schools with SMART Boards, an interactive technological tool, at a reduced cost. Teachers and students have shown by way of various studies that a SMART Board can make their presentations more dynamic and greatly increase motivation.

Collaborative Programs

Several RMOs have been engaged with other federal and provincial departments to strengthen programs and services to First Nations. Some examples include:

Canada Health Infoway Project: FNEC is supporting the First Nations of Quebec and Labrador Health and Social Services Commission to develop its Infoway project. The objective of the project is to develop a strategic telehealth plan for Quebec First Nations and to outline strategic orientations for the development of telehealth in Quebec First Nations communities. The commission has identified the FNEC as the technical lead to provide expertise relative to connectivity, video conferencing, and other related technology issues. Similar to schools, health centres also require dedicated broadband services capable of furnishing video and high-speed Internet services for the long term. The strategic plan for the Infoway project covers a three-year period from 2007 to 2010, and has four focus areas: (1) access to health training possibilities; (2) preventing, reducing, and managing diabetes; (3) using telehealth to obtain help in crisis periods; and (4) teleconsultations. So far, the first and second areas have been addressed.

MoodleFN: In Ontario, K-Net is a key participant in Moodle. MoodleFN is a heavily customized version of Moodle, a learning management system (LMS) that allows people to create and manage their own e-learning programs. The goal of the MoodleFN project is to promote and support quality e-learning programs in First Nation schools and communities in Canada. It provides teachers and students with a secure, managed online learning environment that can also host special events on a structured platform. Different online communication tools are available, including blogs, wikis, discussion forums.

Axia Supernet: KCDC collaborated with the Province of Alberta and Axia Supernet to facilitate and help administer the Supernet rollout to First Nation Schools. Support extended to the technical requirements of the schools' connections and included the proper network appliances through the First Nations SchoolNet program. KCDC aggregates the school accounts for Axia Supernet and helps ease the billing and payment process for school accounts.

Province of Saskatchewan, Saskatchewan Property Management, Saskatchewan Communications Network (SCN): KCDC partners with the Province of Saskatchewan's CommunityNet Learning VPN. This wide area network provided by SaskTel links all provincial schools through fibre, DSL, fixed wireless, and two-way satellite connections. KCDC and First Nations SchoolNet support was instrumental in the transition from one-way to two-way satellite for satellite-served locations. KCDC provides the first point of contact for help-desk enquiries from First Nations schools in Saskatchewan, and coordinates support

activities for First Nations schools with the information technology office help desk, the SCN satellite support desk, and SaskTel. All billing for First Nations schools is flowed through KCDC.

Health Canada: KCDC has worked with Health Canada's First Nations and Inuit Health Branch for the past three years to deliver training through its Technical Work Experience Program (TWEP). Participants received training in computer service and support, including Microsoft Office and Cisco ITE 1 and ITE 2 training, while also performing work within their local communities. In 2006–2007, this resulted in 31 participants receiving ITE 1 certification and 12 participants receiving ITE 2 certification. Health Canada funding has also supported the development of KCDC's central video conferencing infrastructure through the purchase of a second Codian video conferencing bridge, which continues to be used by Health Canada regionally.

Ministry of Justice, Ontario: Ontario's Ministry of Justice engages K-Net to provide video conferencing services for court and justice applications in remote First Nations.

Telemedicine: Through K-Net, the Keewaytinook Okimakanak Telemedicine program, funded by Health Canada's First Nations and Inuit Health Branch, provides clinical and public health education applications over the Ontario Telemedicine Network. The Atlantic region has worked closely with K-Net to duplicate infrastructure used successfully in telehealth applications. Tui'kn, a Cape Breton Infoway project involving five First Nations, has been successfully completed; in New Brunswick, two other projects to leverage existing video conference network infrastructure to serve the health needs of First Nations in Atlantic Canada are underway in collaboration with Health Canada.

Regional Economic Development

FedNor: Industry Canada/FedNor (Federal Economic Development Initiative for Northern Ontario) is playing a key role in the development of the local and regional broadband networks through strategic investments in infrastructure and appropriate applications. FedNor recognizes ICT as a key to the knowledge-based economy and to Canada's science and technology agenda (which includes increased productivity through development and adoption of technology). FedNor delivers its services primarily through contributions arrangements of up to \$500,000 for not-for-profit recipients. K-Net, one of the RMOs, has been an active partner with FedNor to ensure that its programs and objectives are applied throughout northern Ontario First Nations.

Through a 1996 stakeholder consultation, FedNor identified ICT as one of five FedNor priorities for economic development across northern Ontario. Since then, FedNor has invested approximately \$50 million (12% of its budget) in ICT developments across the region, with half of this amount used for infrastructure builds and half for ICT applications. Approximately half of FedNor's ICT spending (\$25 million) was on investments in Aboriginal communities over this same period.

FedNor recognizes and celebrates the various economic development benefits of ICTs and their Aboriginal investment by publishing success stories and recognizing the new employment opportunities, programs and services, business developments, and future knowledge-based developments that are now possible across the region. The K-Net team works closely with FedNor to support the development of their goals and program objectives through the effective use of ICTs across the region. This partnership is resulting in improved broadband infrastructure and access to ICTs, and development of broadband applications, and many other innovative initiatives that are supporting the regional social and economic environment.

Conclusion

In the absence of a new federal policy on First Nations ICT, the First Nations SchoolNet initiative's future is jeopardized. Not only will the initiative be threatened, but the significant work of the RMOs, individually and collectively, to expand their services, expertise, and technological skills for the benefit of Aboriginal communities, federal and provincial departments and agencies, First Nation schools and students, and organizations will be curtailed and potentially eliminated.

Specifically, disconnecting the regional networks will force communities to revert back to slower technologies or agree to commit to paying high rates, which in some cases will double in cost. Terminating the regional networks will disrupt all connectivity and e-learning applications that are currently underway in First Nation schools across Canada. As a consequence, more than 100,000 First Nation students and schools who use these broadband services on a daily basis will lose ICT access and technological support. Without First Nations SchoolNet and a significant investment in the short term, the gap in connectivity for First Nation schools will not be eliminated. The existing infrastructures and investments throughout Canada that have emerged, expanded, and taken root because of the First Nations SchoolNet program would be equally disrupted. As one Health Canada official exclaimed during an RMO meeting in Halifax in fall 2005, "We don't have a Plan B if First Nations SchoolNet ceases to be."

A new federal policy emphasizing long-term funding will bring stability, continuity, and predictability to First Nations SchoolNet. First Nation students continue to benefit from the First Nations SchoolNet program and the related RMO educational activities that have spun off from the program. First Nations SchoolNet clearly enhances students' learning experiences by broadening their participation in a global environment and twenty-first-century technology. Without it, Canada's future is diminished.

Endnotes

- 1 Visit <<http://smart.knet.ca/smart2002/conference.html>> for links to the archives of this gathering along with other gatherings.
- 2 See <<http://videocom.knet.ca>> for more information.
- 3 Program schedule and archived programs are available at <www.kcdn.ca>.
- 4 See <www.kaiserfoundation.ca/awards/winners.php>.