

NRC Publications Archive Archives des publications du CNRC

Videoconferencing Connects Remote Communities O'Donnell, Susan; Kakepetum-Schultz, T.

NRC Publications Record / Notice d'Archives des publications de CNRC: https://publications-cnrc.canada.ca/eng/view/object/?id=645c6098-0dde-4f20-9fa9-24c24df5d0a0 https://publications-cnrc.canada.ca/fra/voir/objet/?id=645c6098-0dde-4f20-9fa9-24c24df5d0a0

Access and use of this website and the material on it are subject to the Terms and Conditions set forth at https://nrc-publications.canada.ca/eng/copyright

READ THESE TERMS AND CONDITIONS CAREFULLY BEFORE USING THIS WEBSITE.

L'accès à ce site Web et l'utilisation de son contenu sont assujettis aux conditions présentées dans le site https://publications-cnrc.canada.ca/fra/droits

LISEZ CES CONDITIONS ATTENTIVEMENT AVANT D'UTILISER CE SITE WEB.

Questions? Contact the NRC Publications Archive team at

PublicationsArchive-ArchivesPublications@nrc-cnrc.gc.ca. If you wish to email the authors directly, please see the first page of the publication for their contact information.

Vous avez des questions? Nous pouvons vous aider. Pour communiquer directement avec un auteur, consultez la première page de la revue dans laquelle son article a été publié afin de trouver ses coordonnées. Si vous n'arrivez pas à les repérer, communiquez avec nous à PublicationsArchive-ArchivesPublications@nrc-cnrc.gc.ca.







Institute for Information Technology

Conseil national de recherches Canada

Institut de technologie de l'information

NRC-CNRC

Videoconferencing Connects Remote Communities *

O'Donnell, S., Kakepetum-Schultz, T. May 2008

* published in Sagatay (Wasaya Airways in-Flight Magazine). May 2008. NRC 50376.

Copyright 2008 by National Research Council of Canada

Permission is granted to quote short excerpts and to reproduce figures and tables from this report, provided that the source of such material is fully acknowledged.



Videoconferencing Connects Remote Communities

Susan O'Donnell and Tina Kakepetum-Schultz

Videoconferencing is like a winter road network that is open all year. Like the winter roads, videoconferencing is vital to northern communities. People use it to connect in real-time and face-to-face. But instead of travelling, they stay in their own communities and talk with people in other communities on a television screen.

"Videoconferencing is, to me, a really great way of uniting communities, bringing communities together that haven't really spoken to each other in a long time," said a speaker at an event in January. The First Nations Women in Leadership event hosted by Keewaywin First Nation was held entirely by videoconference. The event brought together 25 women in six communities to share stories and ideas about developing women leaders in communities.

Keynote speaker RoseAnne Archibald, Deputy Grand Chief for Nishnawbe Aski Nation, participated from Timmins. She suggested that NAN could use videoconferencing for its women's events to include more women from remote communities in discussions and activities.

The videoconferencing network in Northern Ontario was developed originally to improve access to health services. A telehealth worker from Keewaytinook Okimakanak Telemedicine explained that with videoconferencing: "Patients don't have to leave home. They don't have to leave their families. They don't have to leave work."

Videoconferencing is a resourceful tool used for health and wellness by First Nations people. The regular community videoconferences for Elders are very popular. Elder Aglaba James from McDowell Lake First Nation said: "It's good to see friends and relatives from different communities. It strengthens our health when we feel happy. It makes us forget about our illnesses. I always feel excited as I prepare to attend these gatherings."

In 2005, Peggy Kakepetum, an Elder from Keewaywin First Nation said: "I am just waiting for the day when doctors will assist midwives to deliver babies with the aid of Telemedicine. Children were born at home in the past, Telemedicine will bring that back." Only two years later, in 2007, expectant mothers in Lac Seul First Nation and Mishkeegogamang First Nation had

their babies delivered by telehealth workers linked by videoconference with Dr. O'Driscoll in Sioux Lookout. Kraven Armadeus J. Wesley and Lenny Wassakeesic were the first two babies born using KO's Telemedicine Network.

Over the past eight years, videoconferencing has grown beyond telehealth and is now used by many community residents. Every remote community in Northern Ontario has at least three videoconference units: in the school, health centre and band office. Some communities also have units in the e-Centre or distance education centre. Families use these units to visit relatives or take part in events in other communities. Businesses, band councils, schools and health centres use them for meetings and many other purposes.

K-Net, Keewaytinook Okimakanak, works with the communities to maintain the videoconferencing network in the North. K-Net is partnering with the National Research Council and other partners to understand how videoconferencing is supporting community, social and economic development in remote First Nation communities.

Their VideoCom research project found that K-Net supports about 1,000 videoconferences a year in addition to telehealth sessions. The communities use videoconferencing to conserve financial and human resources. Videoconferencing allows participation in events that may not otherwise be possible due to time and travel constraints.

Videoconferencing provides more access to regionwide activities. It promotes interaction between sites and groups that may not have connected previously. Videoconferencing fosters many community development initiatives.

Interactive learning is the main purpose of videoconferences in the Northern communities. Other videoconferences support personal, professional or community development, meetings and community get-togethers. The main topics of the videoconferences are health and wellness, education and learning, culture and language, information and communication technology, and economic and community development.

Muskrat Dam First Nation also hosted a community videoconference in January. That event: "Anihshininiimowin: Our Language of the Past, Now and Tomorrow" brought together more than 30 participants in nine communities. Staff at the Kwayaciiwin Educational Resource Centre in Sioux Lookout used the videoconference to showcase how they are restoring, teaching and preserving the Oji-Cree language in Northern Ontario.

Wawatay Native Communications Society participated in the January event by videoconference from their Sioux Lookout office. Christine Chisel, Executive Director, presented information about Wawatay's Aboriginal Language Survey in the Treaty 3, 5 and 9 communities. The survey, which will estimate the number of language speakers in the region, is available in *Wawatay News* and from the Wawatay website. Wawatay is using many different technologies in its work. Christine Chisel said that there are a lot of uses for videoconferencing and "certainly it would save in terms of a more efficient way to do things."

During the videoconference event, one of the Muskrat Dam participants said: "I'm always thinking about how we can use the technology in education and teaching children. Our children are growing up in a culture of TV and computers, and yet I see very little use of the TV concept in the classrooms. I'd like to be able to see a videoconference unit set up in a kindergarten classroom that's in Bearskin Lake, one in Sachigo and one in Muskrat Dam, and the three people being able to teach other communities through videoconferencing, because kids grew up watching television."

Anyone can view the video archives of the Keewaywin and Muskrat Dam January videoconference events on the VideoCom website (videocom.knet.ca). The project website also contains video archives of other sessions and resources on community-based videoconferencing.

The VideoCom research found communities use videoconferencing to connect with other communities in Ontario, with sites in other provinces, or even internationally. Most videoconferences connect more than 10 participants.

VideoCom and K-Net co-hosted a meeting in July 2007 that demonstrated how multi-site videoconferencing allows many remote locations to assemble into one meeting space. That meeting brought together more than 40 people from 22

different communities across Canada. There were seven sites in the Atlantic region, 13 sites in Ontario, one from Alberta, and one from British Columbia.

Videoconferencing connects remote communities so they can think regionally. As one speaker at the July meeting said, "with videoconferencing, it is like you're walking into an office that feels like it's next door and it can be 3,000 kilometres away, so that's a very good feeling."

The national meeting in July, "Advancing the Green Agenda via Videoconferencing," was open to anyone interested in using videoconferencing for "green" meetings. Videoconference meetings are "green" because they reduce travel and the carbon footprint and can promote action to address climate change.

The topic of videoconferencing and the green agenda is important for the future sustainability of remote Northern communities. KO and the VideoCom project are beginning to identify some of the issues to be looked at. They include: How can remote communities use videoconferencing more effectively to lessen dependence on energy, distribute energy and influence energy policy? How can we save energy using videoconferencing? What environments can we provide to simulate more person-to-person contact at a distance? What videoconferencing technologies and pricing strategies can be used to encourage more energy conservation? What community businesses might grow to support these initiatives?

Northern communities are leaders in using videoconferencing for community sustainability. By using videoconferencing the communities are demonstrating ways to unlock the green potential in technologies. At the same time, they are using these new technologies to unite and work together more effectively.

Dr. Susan O'Donnell is a Senior Research Officer with the National Research Council in Fredericton. Tina Kakepetum-Schultz is the KO Telemedicine Community Engagement Coordinator and a Keewaywin First Nation Band member.