

CYBERCIRCLES: INTERNETWORKING FOR ABORIGINAL COMMUNITY RESEARCH

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ABSTRACT

This paper explores the history of cyberspace and its use today by Aboriginal community research projects in Canada. It focuses on the free use of social media in cyberspace, the importance of cyber networks in Aboriginal community health and research, and the need for individual and institutional mentoring to promote these resources. The paper highlights the author's personal experiences with the use of new networking tools, and the need for community involvement in cyberspace.

INTRODUCTION

Over the last 20 years, I have seen myself, my friends and family, and now communities and society, come to live more and more in the new place called cyberspace. William Gibson's fictional "cyberspace" (now no longer fiction) is described as a place that contains all the information in the world, which can be entered with the aid of a computer. It is an "infinite" place wherein the heights and depths of power, pleasure, culture, and survival are plumbed (Gibson, 1988).

Cyberspace offers power to those who can use its tools and information, whether lone programmers relying on expertise (like scouts in a new territory), large corporations, youth looking to reach out to others around the world, or small or remote Aboriginal communities. Cyberspace is the map to the new information economy. It transcends traditional boundaries,

yet “involves a distinctive territory, citizenry, literature, technology, capital and finance, ritual, weapons and belligerencies, a recognizable past, and variegated if unspecified futures” (Starrs, 1999). Like a new strange territory, it offers tremendous gifts, opportunities, and dangers to those who choose to enter it.

Cyberspace is also the place “where the forest meets the highway,” (Patterson, 2005) where land and place-based indigenous peoples meet the landless world of e-commerce, dot-com, and global change. In terms of networking and communications, it is an extended “Moccasin Telegraph,” free and informing for visitors and communities.

In the last decade I have been fortunate to help introduce many Aboriginal elders, researchers, and organizations to the power of cyberspace, using tools freely available to build information and working networks. Some people have concerns about the impact of new technologies on our communities, particularly on the youth. Recognizing this potentially powerful way to bring communities together with health and social workers could result in social technologies serving as a vital resource for widening our circles of knowledge.

Using cyberspace to reach youth is very effective as most of them have already adopted these tools: “For the first time in history, children are more comfortable, knowledgeable, and literate than their parents about an innovation central to society” (Tapscott, 1998). In Australia, “Young people have a key role at the interface of maintaining cultural traditions and contemporary innovation in Australian Aboriginal communities” (Singleton et al., 2009).

Aboriginal peoples in Canada are leaders in networking with new technologies, from Inuit adoption of GPS and wireless communications, to the use of telehealth by remote First Nations communities, to the development of online enterprises in communications, commerce, culture, and languages.

Today community workers, researchers and organizations increasingly need cyber communications and networks, but most research projects and programs are still being designed without the cyber network component. This paper describes the benefits and barriers involved in putting together ad-hoc, virtually unfunded networks out of the “thin air” of cyberspace.

PUBLIC ACCESS TO CYBERSPACE

Freely available tools in cyberspace have helped marginalized and isolated people for some 20 years now, and their importance is growing. In Mexico

in 1994 the Zapatista National Liberation Army led the people of Chiapas to an insurrection on New Year's Day, forcing the government to the negotiating table with an international media campaign using a "new element of revolutionary warfare," the Internet. Mexico's foreign minister Jose Angel Gurria observed that "the war has been a war of ink, of written word, a war on the Internet," and the commander of the Zapatistas declared that "one space ... so new that no one thought a guerrilla could turn to it, is the information superhighway.... It was a territory not occupied by anybody" (Lal, 1999). In wars for cultural and community survival, cyberspace is now a key territory.

Today the disaster in Haiti is publicized on Facebook, and Twitter is being used to raise funds.¹ Kids in the Inuit North connect across town, and across territories, using Facebook, MSN, Skype, and other tools. Parents and grandparents are finding new ways of keeping in touch with ever-expanding extended families. Cyberspace is a place for communities, and for getting things done.

On the East Coast in the Mi'gmaq territory of Listuguj, community developers and language researchers Joe Wilmot, Diane Mitchell, and Eunice Metallic used cyberspace to create a language instruction and retention website, which has attracted interest and support in the community and around the world (<http://www.mikmaqonline.org>). In tandem with the website, Joe now uses Skype to interact with students in the language, and to meet new friends and researchers around the world. It is a community-based project that both reinforces culture and presents it to the global community. Similar language retention projects, community-grown, are hosted across Canada, and there are also government-sponsored sites with ambitious agendas: *First Voices* in British Columbia archives some 60 languages and dialects (<http://www.firstvoices.com>).

Other examples are occurring across Canada and the world. The James Bay Cree, the Samis of northern Europe, and other groups of spread-out communities are using cyberspace

... as a tool for the solidification and preservation of local cultural boundaries. The reinvention of local identities through the Internet does not place as much direct emphasis on the legal pathways toward self-determination as on the promotion of Indigenous language as a starting point for solidifying attachments to lore, land, and lifestyle. (Niesen, 2005)

1. This article assumes that most readers will be at least somewhat familiar with the names and functions of these new tools. Full descriptions are available via Google and Wikipedia.

Most people are familiar with the use of web pages for information, or for promotion by organizations. Web pages are largely passive though, and do not encourage active participation in making things grow. Some basic tools that Aboriginal communities, organizations and projects should consider in building their networks:

- Listserv to discuss project issues and keep people informed (can be hosted free on Google, Yahoo, etc.).
- Weblog (Blog) for posting items of interest (can be hosted free on Google, Yahoo, etc.).
- Skype, MSN, Elluminate, Google Wave, or ooVoo for weekly meetings and informal chats (anyone can have a video meeting with anyone else, at any time).
- Facebook, YouTube, Twitter and other social media to a) post relevant pictures and videos for the group and b) disseminate research findings, encourage wider participation or membership, educate general public. This is a partial list; other examples of social media can be found at Wikipedia (http://en.wikipedia.org/wiki/Social_media).

An example of this last application is the use of YouTube to build capacity and self-esteem among a research team and participants by creating music and video, at the same time promoting awareness of relevant issues. Dr. Colleen Dell at the University of Saskatchewan works with Aboriginal women with addictions. Their use of social media (YouTube) is an example of how community health networking can benefit research participants, and also reach a wide audience, as in this song by Violet Naytowhow (<http://www.youtube.com/watch?v=1QRb8wA2iHs>).

Perhaps the most powerful of all these tools is the video conference. Video conference infrastructures are being built around the world, partly to help cut down travel and meeting costs, and to reduce the carbon footprint involved in air travel, long distance driving, and the like. Aboriginal communities across territories throughout Canada are doing the same to create a “public sphere” in their own communities to link to others (McKelvey and O’Donnell, 2009). These funded networks can feature up to 6 community locations at a time, with up-to-date tools and technical support.

The Kuhkenah Network (K-Net) is a private telecommunications network that provides communication technologies and support to First Nation communities across a vast, remote region of northwestern Ontario as well as in other remote regions in Canada (<http://meeting.knet.ca/mp19>).

These privately funded telecommunications networks are now essential infrastructure for many communities. But unlike the cyber networks and tools discussed here, they involve significant capital outlay and ongoing funding, and are not available to all. Also, they are less free and flexible, and more closed (for instance, in most cases one has to be on-site to join a conference), than the cyber tools available to everyone, in their own homes, communities, and work spaces.

CYBER MENTORING AND NETWORK BUILDING

Cyber networks with free and accessible tools can be used for mentoring community-based researchers in research approach and methods, sharing experiences regarding data collection, capacity building through sharing of front-line experiences, informal dialogue, engaging mother organizations, and interacting with guest speakers. We can engage in discussions in cyberspace at little or no cost, bringing distant participants together. Using tools such as Skype, MSN, or ooVoo, audio and video conferences can be hosted for up to 20 people at a time. But first, participants need mentoring in using the tools, in venturing into cyberspace.

The main problem in developing these networks is not the network tools (each participant needs: computer; Internet access; microphone; webcam), but the huge range of experience and facility with computers and Internet among participants. There are also many people who are reluctant or afraid to venture into cyberspace, for various reasons. Cyber skill training and exercises can help people overcome their fears, and engage cyberspace.

During a four-year research project in falls prevention in the Mohawk community of Akwesasne, several Mohawk researchers including two elders received training in the use of Skype. They used it for formal and informal chats, and for working on documents we produced (brochures, articles, and calendars) with falls prevention messages. These elders had computers, but rarely used them and had never spent much time on the Internet. Driven by budgetary and jurisdictional constraints (Akwesasne is divided by two provincial and national borders between the US and Canada), we developed a regular Skype meeting schedule that took the place of most face-to-face meetings.

In the dark winter months of 2008 and 2009, we produced these calendars from the comfort of our homes. Two elders were in one part of the territory, our graphics and layout person in another, and I was in Ottawa.

Using Skype for audio, video, and screen-sharing applications, we were able to talk and work together much as if we were in the same room. Our layout person could make changes that we could view in real time via screen sharing, and we could make comments, suggestions, and share laughs much as we did when physically together.

In addition, the informal nature of Skype made it possible for us to keep in touch to discuss issues relevant to the research, or just talk about events of the day, without being concerned with long distance costs. Funds that could have been used for travel and meetings were instead used to hire local youth to mentor the elders in computer skills. Being in cyberspace brought the team together and strengthened it in ways beyond the originally scheduled meetings, by introducing flexibility, informality, and collaborative tools to the project. I learned then that a day's drive to have a physical meeting for an hour or two, once every month, was not enough to keep the team together and growing. In cyberspace, we were able to come together at any time of day or night to chat.

The funded part of the project is over now, but a legacy is that these elders now keep in touch with me, each other, and friends in Florida using cyberspace. Their initial fear of computers and the Internet has been overcome, and they are now using tools that would otherwise have been gathering dust in their homes. The interactive nature of Skype made them feel at home in cyberspace, and more in tune with what their children and grandchildren were doing. There was a great sense of pride and accomplishment in learning something they had thought would always be beyond their understanding.

Researchers in various communities and academic environments have a huge range of abilities, facility with computers, and interest in cyberspace. Harmonizing this range of abilities and interests, and mentoring, are the primary tasks in building a cyber network. Not everyone will want to participate: in my experience with larger groups there is often a core crew of around one-third of the participants, who join in things like informal Skype meetings, contribute to posts on a Listserv, or visit the Blog or web page. Another one-third will stop by occasionally, and some are just not able, not interested, or too busy.

A Listserv and Blog keep relevant project information organized, but the Skype sessions can be the most productive in building relationships, mentoring researchers, and discussing issues and concerns relevant to the researchers and their work. The informal (and cost-free) nature of cyber-

space also allows people to link one-on-one, at any time, and a lot of work in support of the core project can be done that way.

The informal nature of tools such as Skype complement the more formal structure of project teleconferences and fly-in meetings, making team-building easier and supporting individual needs and agendas. People are often available online for quick questions or discussions, and rather than be distracting, these “kitchen table talks” in cyberspace help further agendas and grow the scope of research projects. There are extended mini-meetings over time, bits and snippets of information are exchanged that grow relationships and ideas.

The free and flexible nature of cyber networks can help with what psychiatrist Patrick Barta calls the “bursty” realities of clinical practice (and research project management) by making more, meaningful, shorter contacts over time. He uses Skype and other cyber tools in his practice, as do increasing numbers of Aboriginal mental health professionals (Barta, 2010; Gibson et. al., 2009).

Community Information and Epidemiological Technologies (CIET) is currently setting up a network for a new project to help prevent Aboriginal domestic violence. Called “Rebuilding from Resilience,” the project began with the idea that many Aboriginal communities already have a lot of what is needed to prevent domestic violence, but many still lack culturally appropriate science and research practices to acquire funding for solutions that truly work. The project develops research tools and procedures for this purpose, in partnership with Aboriginal women’s shelters across Canada.

During Phase One, over an initial three months or so, plans are to do one-on-one mentoring with participants to familiarize them with Skype, then introduce them to group calls, and finally initiate a regular weekly meeting time (Skype allows for audio, text, and file sharing for up to 20 people; video is limited to one-on-one). Project management will encourage participation and allot time in researchers’ schedules for building of the network. Although somewhat time- and labour-intensive at the start, the network is ultimately designed to save time for participants (through easy access to all information at any time, easy access to mentoring, less time for travel and formal meetings).

The initial training is important, as everyone will have different levels of expertise. For instance, many people might have trouble getting used to using a microphone properly (to avoid sound loss, feedback, and other problems), and these problems are best sorted before the group gets togeth-

er. We will introduce the Listserv and Blog during Phase Two, and train people to use these tools for sharing information with the group, and for discussion of project issues. During phases Three and Four, some participants will be trained to act as facilitators and conveners for the network, and to further explore the use of potential tools such as Facebook for social networking and dissemination, and Elluminate (at a modest cost) for full-blown formal video conferences at six or more locations.

SYNERGIES AND BARRIERS IN CYBERSPACE

The combination of tools explored in the previous sections can result in synergies that make for stronger and easier sharing of information, building relationships and capacity in the process. How these tools will be combined varies from group to group, as each community or project has particular needs and barriers.

Aboriginal communities in Canada have been victimized by the “Digital Divide” (Niezen, 2005; Sciadas, 2001; Singleton et al., 2009) that separates the mainstream from the marginalized in the knowledge economy, further privileges the wealthy over the poor, and separates communities and community members themselves when it comes to access to these new technologies. When I first began researching cyberspace I came upon this quote by Iroquois artist William Powless: “The information highway is criss-crossing the earth, and I am roadkill by the ditch” (in Marple, 1998). The recent introduction of these free or low-cost tools in cyberspace over the past five years promises to level the playing field and bring more Aboriginal peoples in Canada “up to speed” with regard to cyber networking.

Barriers remain. One I call “institutional interference”: academic, Aboriginal, and other organizations have varied degrees of acceptance of these tools. Universities typically ban Skype and other third-party applications beyond their control (not licensed or verified as is commercial software), and prefer to sell their own in-house conferencing tools to researchers, making communications between researchers in their offices and others in communities difficult. Similar resistance exists in many NGOs, where these tools have not been tried or tested and are looked upon with suspicion.

Managers unfamiliar with the use of cyberspace are understandably cautious, even afraid, of all these new networking tools that have appeared. One hospital shut down access to Facebook for its employees because it feared they were wasting too much time there; but provincial providers

of Internet for some remote Aboriginal communities have also blocked Facebook and other social networking tools.

Technical support for these tools is also lacking in organizations and Aboriginal communities. Unlike commercial software, there is no formal training given for these tools, and many technicians are only peripherally aware of them and how they work. In remote rural communities, dialup access can also limit the use of certain tools because of slow connection speeds. So cyber networks and communities have to develop their own technical expertise. There is an ongoing need for “community capacity building to address these challenges and use video communications to its full potential” (O’Donnell et al., 2009).

There are also personal, sometimes irrational, fears on the part of many people unfamiliar with computers and the Internet. Elders in the North have told me “we don’t have any Internet here,” unaware that it is now everywhere. Older people are reluctant to try something and fail or look foolish. It happens with front line workers also, who can handle things well in their communities, but can feel lost in the bigger community of cyberspace.

Further considerations include potential misappropriation of cultural knowledge when it goes global, and the archiving of networks and information in a public space (almost all information on the Internet can be viewed by owners of the tools, and various governments, particularly the US). It is important to take these last points into consideration when deciding how sensitive certain information can be, and what types of information should be shared.

DISCUSSION

In terms of capacity building, beyond research agendas, our aim should be to establish networks that will remain long after projects and funds are gone, to support front line workers by expanding their circles. Cyber networks are the key to this. Research policies and proposals should take into account the use of, and training in, these tools.

Cyber network developers take on many different tasks, from mentoring people in the technical side to contributing to group discussions on a range of health, social, and research issues. The tools are constantly changing, as are the needs of each group member as they develop and grow through their cyber networks.

As Buffy Sainte-Marie says, “The digital scene in Indian country at the moment is a microcosm of the way it is most everywhere else, with people at various stages of expertise and enthusiasm going through the big shift” (Sainte-Marie, 1998). Aboriginal people have always been open to using new technologies. New tools and territories are now open in cyberspace for all to explore, and grow our circles together.

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BIOGRAPHY

Dr. Mike Patterson (Métis) completed his Ph.D. in Sociology at Carleton University in 2003, focusing on the meeting of two worlds: First Nations in Cyberspace. His postdoctoral training was at the School of Nursing, University of Ottawa, working in Aboriginal community health, knowledge translation and research grantsmanship and management. Mike has worked with many First Nations elders, communities, and NGOs in fields as diverse as Native music, prophecies (Seventh Fire), HIV/AIDS and injury prevention, research capacity building and networking in cyberspace, and the syncretic weaving of Western and Aboriginal worldviews. He hosted Spirit Voice Native radio for seven years, and was music editor for *Aboriginal VOICES* magazine. He developed the first graduate seminar in Aboriginal health at the School of Nursing at the University of Ottawa. Currently he is Adjunct Research Professor at Carleton, focusing on online community research networks. Mike works with qualitative and mixed methods, involving principles found in participatory action and community-based research. Contact: Mike_Patterson@Carleton.ca

