Working with First Nations: On-Demand Book Service

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Introduction

In Canada, we are fortunate to not only have a rich multicultural context within which ideas are born and developed, we also have a living history of indigenous peoples and communities with whom we share this country. Understanding and articulating our relationship with First Nations is not easy. Within the field of information studies, the development of information services *with* and *for* First Nations communities requires an appreciation for the impact of cultural difference and social context during the conceptualization, development and implementation stages of such services.

The "On-Demand Book Service (ODBS)" is a collaboration between First Nations communities in Northern Ontario and some academic researchers from the University of Toronto. The aim of the ODBS is to bridge the gap between physical and digital libraries. This position paper will provide some history as to how the project began, its use within graduate level courses since 2009, and a follow up workshop held in March 2010, which culminated in funding being allocated to sending technological and human resources, which created more opportunities for the stakeholders to find out solutions together. Using the ODBS as a case study, we will share our experiences and relating them to three themes at this conference: sensitivity to social context, designing across cultural boundaries, and the integration of content and service.

Context

In 2003, under the auspices of the Canadian Research Alliance on Innovation and Networking (CRACIN) at the University of Toronto[1], a collaborative research relationship was established with the Keewaytinook Okimakanak (KO) tribal council under the supervision of Prof. Nadia Caidi. Since then, Prof. Caidi has continued to collaborate with the KO communities by working with Brian Walmark, Director of the KO Research Institute (KORI) and Brian Beaton, co-ordinator of KNET Services[2]. Of particular interest to the collaborating partners was

the role, or the lack there of, that libraries play in communities such as those in Northern Ontario. Access to library and other information resources and services was viewed as essential by many of our community partners, but was also depicted as a dream rather than the reality in the present circumstances.

With only 37 per cent of First Nations communities having established libraries, and diminishing operating grants to support the existing ones, First Nations libraries face a formidable challenge in serving the information and reading needs of their communities (Edmonton Public Library, 2005; Lawlor, 2003; Library and Archives Canada, 2004). Not surprisingly, funding is among the major concerns. Public libraries in most Ontario First Nations are funded by the Ontario Ministry of Cultural Heritage and are typically governed by the Councils or educational department of each community. The grant for First Nations public libraries funded by the Government is based on per capita; so if a First Nation community has a low population, this directly affects the funding of the public library of that community.

Another ongoing challenge is raising awareness of community members about the role and significance that a library might play within the community. Since many First Nation communities lack basic necessities such as proper shelter, clean water, and heating, it is quite understandable that the library may not be a top priority. Brick and mortar libraries, in particular, are difficult to establish due to the shortage of materials and space in Northern communities.

To investigate the options available to provide library and information services in connection with KNET, Prof. Nadia Caidi along with Brian Walmark from the Keewaytinook Okimakanak Research Institute (KORI) organized a workshop in November 2005, which brought together 32 researchers, librarians, band council members, academics and government officials.[3] The objectives of the workshop were to discuss best possible models for providing information resources and services to communities in remote areas of Northern Ontario and to devise a strategy for the creation of a digital library for elementary and secondary school students in Northern Ontario. Digital libraries offer users the opportunity to access materials that traditional brick and mortar libraries might not be able to provide. A large portion of the workshop was spent determining exactly what a digital library has to offer and how one might best operate in the context of a northern Aboriginal community. It was deemed essential that the digital library fit within the existing knowledge and learning environments of the KO community, along the lines of the Internet High School or TeleHealth services (Caidi & Walmark, 2007).

In the workshop, a clear need was identified for a mixed approach to the provision of information services and resources through *digital* as well as *physical* libraries. Community partners and librarians at the workshop pointed out that children and other

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[1] The Canadian Research Alliance for Community Innovation and Networking (CRACIN) is a research partnership established in 2003 that brings together community informatics researchers, community networking practitioners and government policy specialists from across Canada to investigate the status and achievements of community-based information and communication technology (ICT) initiatives in Canada. (Source: http://www3.fis.utoronto.ca/iprp/cracin/)

[2] K-Net Services is a private telecommunication network that provides information and communication technologies (ICTs), telecommunication infrastructure and application support in First Nation communities across a vast, remote region of north-western Ontario as well as in other remote regions in Canada. (Source: http://knet.ca/info/departments/knet)

[3] http://www3.fis.utoronto.ca/research/iprp/dlac/index.htm

members of First Nation communities often have limited access to print material and books (i.e., health-related materials and resources, children's literature, leisure reading materials (e.g. fiction, cookbooks, etc.)). In addition to the lack of books relating to curriculum content and development, there was also an interest expressed by community partners to have a repository of culturally-relevant works dealing with knowledge and history of the community, language scripts, and local artifacts. There was also an interest in other types of information, but these represent the types of books that were a priority.

The workshop generated a lot of support and enthusiasm for developing a library project (a mixture of digital and physical libraries) in Northern Ontario and some concrete steps were suggested. A spin-off project took the form of a feasibility study for an "On Demand Book Service"[4]. The purpose of the On-Demand Book Service (ODBS) is to support the joy of reading in rural and isolated First Nations communities within the context of learning, knowledge sharing and history recording. Using either free online content via a web portal that is developed by community members, or using content developed by the local community, the user can create physical copies of texts using ODBS printing and bookbinding equipment (Caidi & Walmark, 2007). The service builds on the power of ICTs to provide users with access to public domain materials (as well as possible contributed materials), and allowing the works to be downloaded and printed. The On-Demand Book Service is modeled under the Internet Archive Bookmobile initiative.

Despite the end of CRACIN, the relationship formed around the ODBS between KNet and the Faculty of Information continues. In March 2010, the University of Toronto made available funds from the 2009-10 Council on Aboriginal Initiatives allocation for two initiatives related to the On Demand Book Service (ODBS): 1) purchasing and shipping ODBS-related equipment to First Nations communities in remote and isolated areas of Northern Ontario; and 2) a public event/workshop on reading and literacy issues, with a special focus on the provision of information resources and services (featuring the ODBS and other related reading technologies and initiatives).

By then, the On Demand Book Service had grown to become a web portal that allows students, community leaders and members of the community to reflect together on issues of access to materials, reading, and library and information services in remote and isolated areas of Northern Ontario. While it remains a work in progress, it has also provided an experiential hands-on workshop that allowed many students to engage in real-life projects and in community-based research.

With the funding received, three complete sets of On Demand Book Service equipment — and related technologies and resources — were shipped to three Northern Ontario communities. The full set of equipment included: a computer station, an all-in-one colour laser printer and scanner, a thermo book binder, a DIY book binder, a prototype of a DIY book scanner, portable netbooks, as well as associated publishing and editing software. Besides the equipment that was shipped to the communities, a selected list of titles was compiled by Faculty of Information students in consultation with community partners based on the survey of reading preferences that the students from a previous course offering designed and administered. Finally, we were able to send facilitators amongst the students to various sites

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[4] http://odbs.knet.ca

(Thunder Bay, Sioux Lookout and Keewaywin) to meet the community and assist in setting up the equipment.

In addition to the shipping of the ODBS equipment, a public event was organized to raise awareness about reading in First Nations communities. The theme of the event (held on March 29, 2010) was "Reading in First Nations: Infrastructure, Access and Imagination." The aim was to explore the realities, barriers and challenges to reading in/for First Nations communities particularly in remote and isolated areas of Northern Ontario. The meeting was a hybrid of physical and virtual presence (through tele- and videoconferencing) with four nodes: one in Toronto, one in Sioux Lookout, one in Thunder Bay, and one in Keewaywin, with additional bridges to Sandy Lake and other locations who participated. The day included keynote speeches, roundtable discussions with members of various Northern Ontario communities who related the obstacles and challenges to reading in their communities, and generally sharing stories and experiences. There were also demos of various initiatives aimed at enabling reading in First Nations communities at each site (including the on-demand book service; DIY scanners, e-readers, libraries' initiatives, etc.). The ODBS is a testament to the strong and meaningful relationships that have been built over the past few years, starting with CRACIN. The ODBS is viewed as an alternative means to get information resources and services to many of these remote and isolated communities. But ultimately, many of these communities still long for libraries in the more traditional sense (or a hybridized version) to fulfill the educational and leisurely needs of the populations.

Throughout the development of the ODBS in the last five years, we have gathered a variety of experiences working with community partners, graduate students and researchers in different contexts. Below is an outline of the guiding principles that drive our research approach, as well as discussion on the role of community partners, conceptualization of design in cross-cultural contexts, and the integration of content and service within a community context.

OCAP Principles:
Framework to First Nations Research

When engaging in cross-cultural research, it is important to have community partners and stakeholders as collaborators. Successful collaboration relies heavily on a spirit of mutual respect, trust and understanding. It demands a certain comfort level with taking a reflexive stance in order to recognize unarticulated social and cultural assumptions that inform one's work. It also requires keeping an open mind and open ears for feedback, and learning to move on after agreeing to disagree on various issues. As a guiding set of principles, researchers and community partners frequently refer to the First Nations' principles of OCAP (Ownership, Control, Access and Possession) all community-based research and initiatives. It serves as a baseline for critical reflection and evaluation of new project ideas and developments at different stages of development, and a common point of references.

The Role of Community Partners
in Sensitivity to Social Context

The importance of community partners cannot be over-stated in community-based research. Our community partners in the On-Demand Book Service project served as gatekeepers of the community who provided insight into the challenges that needed to be acknowledged as we worked towards a solution that would address the lack of access to libraries in First Nation communities.

The value of direct experience and interaction with the community members is recognized, but the prohibitively high costs of travelling to these communities makes it difficult to achieve. Our partners at KORI and KNET has served as a effective bridge to keep us connected to those communities who are situated thousands of kilometers away, and help us stay aware of related initiatives and activities.

The funding that made it possible to send project team members into Keewaywin, Sioux Lookout and Thunder Bay has lead to better understanding of the realities and challenges that the community faces, and created an opportunity to connect directly with community members. Such face-to-face meetings would not have been possible with the facilitation and referral by community partners who are supportive of the initiative. They recognize potential champions within their community with whom further collaboration with local community members can be made possible.

Designing in a Cross-Cultural Context

The importance of community partners contributes to the success of the On-Demand Book Service at every juncture, such as the design of the On-Demand Book Service web portal. We conceived of a design process that would be based on the OCAP principle by taking a user-centered or participatory design approach. We took design ideas from the online social spaces where community members were actively participating in (Please see myknet.org and meeting.knet.ca), and used those spaces to interact and learn more about the way the community was already engaging with ICTs.

Due to the fact that assumptions about user behaviour and expectation drive the design choices such as technology, visual design, text, images, sound, it was important for us to share early concepts to potential users, and soliciting feedback. The user-centered or participatory design approach involves the user from the early conceptual stage, and continues to engage the final user throughout the life of the system. In the context of a community-based initiative, the level of community engagement can also be a measure of success of the participatory design process. It is the philosophy behind the design methodology, and not specific procedures, that enables a sensitive approach to design that takes into account the social and cultural context in which the portal will be used.

Conceptualizing Content and Service
in a Community Context

The recent opportunity to visit and meet members of remote first nation communities highlighted the need to take into account the on-going need to provide some level of service as an essential factor contributing to the success of the project. While community partners are essential in facilitate the development of the On-Demand Book Service, the reality is that an effectively solution is owned by the community itself. Any effective solution to the problem of library access requires buy-in from the community and a momentum that builds from the ground up, and this requires a level of service implementation that is not only technological, but also human. Having all the right technologies and infrastructures available and ready for use is necessary for the implementation of the service, but insufficient to guarantee its long-term effectiveness in addressing the problem of library access. It requires champions from both within and without the communities who will work in collaboration with project partners to demonstrate and advocate for its use. Without such champions,

it is not always clear to community members how to make the most of the resources that have become available.

A great example is the library at the Keewaywin public school. The library space is reasonably well stocked with novels, encyclopedias and other resources that look a bit dated. The problem was obviously not a lack of *number* of books, but the quality or the type of books. The natural question to ask the teachers was, what are the gaps in their existing collection that needed to be filled?

The answer lied not in the books themselves, but in the human resources available at the school. The special education teacher uses the library as a classroom, so the library is a space she is responsible for. However, beyond organizing the books by subject, she does not have the know-how nor the time and resources to work as a librarian. Due to limited access to the space as a result of the special education classes being held in the library, teachers tend to keep a small collection of books they use in their own classrooms. The library also keeps the same hours as the school itself, which means it is not opened in the evenings or on weekends.

Furthermore, there is no catalogue or circulation system in place to keep track of the books. The only kind of circulation activity that the teachers talk about are duplicates that have come as a result of book donations — such as the ones organized by James Bartleman — that were given away by the school principal to students who do not have books at home. What appears at first sight as a typical school library —shelf spaces, working areas, and of course, books — the *resources* are not being used to their full potential as a library due to a lack of dedicated resources to provide a *service* to the community.

One aspect of the On-Demand Book Service that requires human facilitation is the software that was included to enable the community to self-publish. A few teachers had ideas of creating custom education materials for their students, while others were inspired by the artistic and creative potential. Existing online tutorials for the use of the software is highly technical in nature, and geared towards an audience that is familiar with publishing and design software. Training sessions designed to enable community members to engage in projects that the equipment demos inspired them to do can go a long way to generating the buy-in and excitement from the ground up that needs to be cultivated.

Champions from within and without the community are needed in order for these pilot sites to continue to develop, and for even more sites to be added to the project. It may be a passionate teacher in collaboration with a librarian to develop projects and initiatives within the community that have been inspired by the On-Demand Book Service. It would also provide a framework to address the challenges faced by the community dealing with information or computer literacy, and improve the community's ability to take ownership over of how the On-Demand Book Service will be used within their own community.

Looking Forward

At the moment, the pilot sites have been running for about three months. We are planning to follow up with the community participants, learn what has been done with the technology, and work towards the applying the lessons learned outlined above into the next phase of the project.

It is worth rearticulating that the interests of a community as well as the social context in which they exist is not something you can simply expect to be articulated in an email exchange, or even a video-conferencing session. It is only from observing *in*

situ, and engaging in real life interaction with community members in that context, that one can begin to develop the sensitivity necessary to design relevant and useful information services. A final anecdote below highlights an important insight that will inform the next stage of development of the On-Demand Book Service.

During the breaks between sessions on the March 30th event, it was clear that the teachers at Keewaywin had many ideas about the On-Demand Book Service project, and questions about what it could be used, but only when they were 'off camera'.

A teacher explained their relative silence and seeming disinterest during the "Reading in First Nations" event: they show respect to other people, especially elders by listening and refraining from interrupting what is being said. Their silence during the video-conferencing was not disinterest, but their way of showing respect. He was also intimidated at times by the speed of dialogue and conversation from other participants, which made it difficult for them to gage when it was their turn to speak.

Immediate at the next session of the event, the site facilitators at Keewaywin made sure that Keewaywin participates had the floor in such a way that encouraged them to share their thoughts. Simple acts of consideration that were made by the site facilitator during the following session resulted in exponentially more involvement of the Keewaywin participants. The event wrapped up on a high note, with teachers at Keewaywin Public School having the last word.

As we proceed to collaborate with community members and find out the way the equipment have been used since they were shipped in March, the process of reconnecting with them should reflect the lessons we have learned from our recent experiences. We have available to us the same types of ICTs to bridge the geographic distance between all of us, but what we have gained is the experience of meeting each other in real life, some for the first time since relationships were established years ago. It is an important milestone and foundation upon which to launch into the next phase of development for the On-Demand Book Service.

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