# Final Report: Digital Content Team

## On-Demand Book Service

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## Introduction

There appears to be an abundance of free digital information accessible on the internet. This information comes in various formats, including websites, electronic books, and videos. Historically, libraries have had a key role in distributing content in the book format free of charge. Librarians would provide the service of organizing books by topic, answering questions and recommending resources. Navigating the web to locate what you need is not easy. Online Information is complex and immense, not necessarily organized or authoritative. Finding meaningful and relevant content can be a challenge for anyone in the information-rich age of the internet. Access to the internet does not necessarily support the needs of a community that does not have a library. The On-Demand Book Service is about access to content that is meaningful and relevant which can help support the joy of reading. Our work has provided the foundation of a framework for digital content in remote Ontario First Nations.

The Digital Contents team (DC) has explored a contents strategy based on the goal of *facilitating* the delivery of meaningful and relevant information resources for the On Demand Book Service (ODBS) project in Ontario's Far North. The purpose of the ODBS is to support the joy of reading in remote First Nations communities within the context of learning, education, knowledge sharing and recording history. By providing access to bookbinding equipment and books online via a web portal, users will be able create and print their own books. The books created can be downloaded from the Internet or created using local content to foster a sense of ownership. The online web portal could act as a digital library, facilitating access to content which can be printed and viewed only online in formats other than books. Our team discussions and strategies for content have been guided by the concepts of Ownership, Control, Access,

and Possession outlined by Schnarch (2004). Specifically, we believe that the communities who use ODBS should be able to determine what content is meaningful and relevant to their needs.

This report is prepared in culmination of participation in a graduate class at the University of Toronto Faculty of Information led by Nadia Caidi and Adam Fiser in partnership with Keewaytinook Okimakanak (KO) in the creation of an ODBS. It is written by the Digital Content team, one of four class teams made up of the first students to study and contribute to the ODBS project. It was originally conceived that the goal of DC would be to find culturally appropriate and relevant resources for Northern Ontario First Nations to fill up the ODBS. DC would meet the Community Research team's assessment of the needs of Northern Ontario First Nations. The content would go into a portal developed by the Systems team. Funding and support for the project would be gathered by the Promotions and Outreach team. After the first few weeks of class, it was determined that each team would contribute towards these large goals surrounding the various components of the project. Each team has created a foundation for the ODBS to be taken up by future classes, interested parties and Northern Ontario First Nations communities.

With a focus on providing a foundation for the contents of the ODBS, we developed a guiding mission statement specific to our goals. The mission of DC is to provide content and a classification framework for an ODBS system under the guidelines of a policy statement, while considering information literacy. These goals frame our team's deliverables. Our vision has been to provide a diverse collection of contents demonstrating the joy of reading, which compels communities to participate in the ODBS project. We are accountable to our stakeholders of First Nations librarians,

remote Northern Ontario First Nation communities, Keewaytinook Okimakanak, and future contributors to the ODBS project. We leave a legacy of pointing the way to the diverse content available online, and providing the core supporting documentation for a content delivery system. This connects us to the broad strategy of digital content in ODBS, which aims to contain information resources which are culturally relevant and appropriate to community needs.

The team was able to accomplish five major tasks, delivering components for contents in ODBS. A general collections policy has been developed to guide the selection of meaningful and relevant content. Content in the ODBS will have to be organized in order to facilitate access, therefore a classification scheme has been created based on our exploration of available digital content. A sample of diverse existing digital contents, and a list of resources for discovering content was assembled. The use and creation of content cannot be facilitated without a study of rights and access, which led to a package of intellectual property documents. Study of the relationship between aboriginal peoples and archival resources led to the development of a pamphlet guiding use of archives and records management. The work of the team on each deliverable should be viewed as the starting point for continued research and evaluation. As we have considered information literacy a factor in our mission, we have focused on providing documentation of our journey which is organized around each of these deliverables.

*Team Members*

The Digital Content team consists of six members who all study within the Faculty of Information at the University of Toronto. While we are educational colleagues, each member offers a unique perspective and understanding of the importance of library and

information services. Common to all team members is the sense of responsibility and respect in partnership with Aboriginal communities in Northern Ontario. Each team member had an administrative function in the team, and contributed towards a project deliverable.

Ben is currently studying in the library stream of our program and works for an archives library. Ben worked as one of our team's ODBS project liaisons. He occasionally attended meetings held by other teams to grasp a better understanding of where we are all headed as a class. His primary liason was with the Systems team, as he led our team on the development of a classification scheme.

Ericka is a member of the Sagamok Anishnawbek First Nation and is also half Anishnawbe Ojibway. She is a first-year student, studying archives and records management. Ericka took on the role of community liaison and was responsible for managing and facilitating community contacts. She has created the archival pamphlet for the ODBS.

Jalal is a member of the Lac LaRonge Indian band, and is originally from Saskatchewan, both north and south. She majored in history at the University of Regina, and a minored in traditional Indian art at the First Nations University of Canada. She is currently studying archives and records management. As an ODBS project liason, Jalal monitored the progress and work of the Outreach and Community Research teams. She led the team on the development of a collections policy.

Jesslyn is in her final semester of the LIS stream, after an undergrad in geography at McGill University. She is currently working remotely with the Cree First Nation of Wemindji in Northern Quebec to develop a map-based archive of the community's oral history. This will include stories of the lives of tallymen and hunters amidst the changes

brought on by the interruption of hydroelectric development to their way of life. She is interested in the relationship between Aboriginal cultures and the land. Jesslyn acted as the team coordinator role, ensuring that our everyone is on the right track. She worked on finding digital content, developing a Resource list and compiling a database of sample resources.

Michelle is in her second year of the LIS stream. She completed her BA in religious studies, and is currently employed by the Toronto Public Library. Although Michelle lived and grew up in a large, urban centre, working at TPL has allowed her to appreciate the value of books and knowledge, and the importance of library service for a community. Michelle took upon a communications role, monitoring other groups' wikis helping to keep her team members to keep them abreast of important issues and topics. She worked on the literature review and our final reporting documents.

Trisha is in her second year of the Library and Information Science stream. She holds a BA in Classical studies and a BA, Hons. in Classical archaeology. Trisha is interested in the cultural exchange aspects of working with Aboriginal communities in Ontario's North. Trisha acted as secretary for the team, responsible for editing wiki and monitoring correspondence amidst the various technologies. She led the team on the development of the intellectual property documentation.

**Project Situation**

The work of DC was influenced by class readings, guest lectures and feedback received from our professors. Our mission is to deliver content to an ODBS, which will support the joy of reading in remote First Nation communities. This is significant because just over one-third of these communities are able to operate a public library due

to the current funding challenges (FNPL SPLC, 2004). In Northern Ontario, 70% of communities are without a library (See Figure 1) (Krueger, 2009).

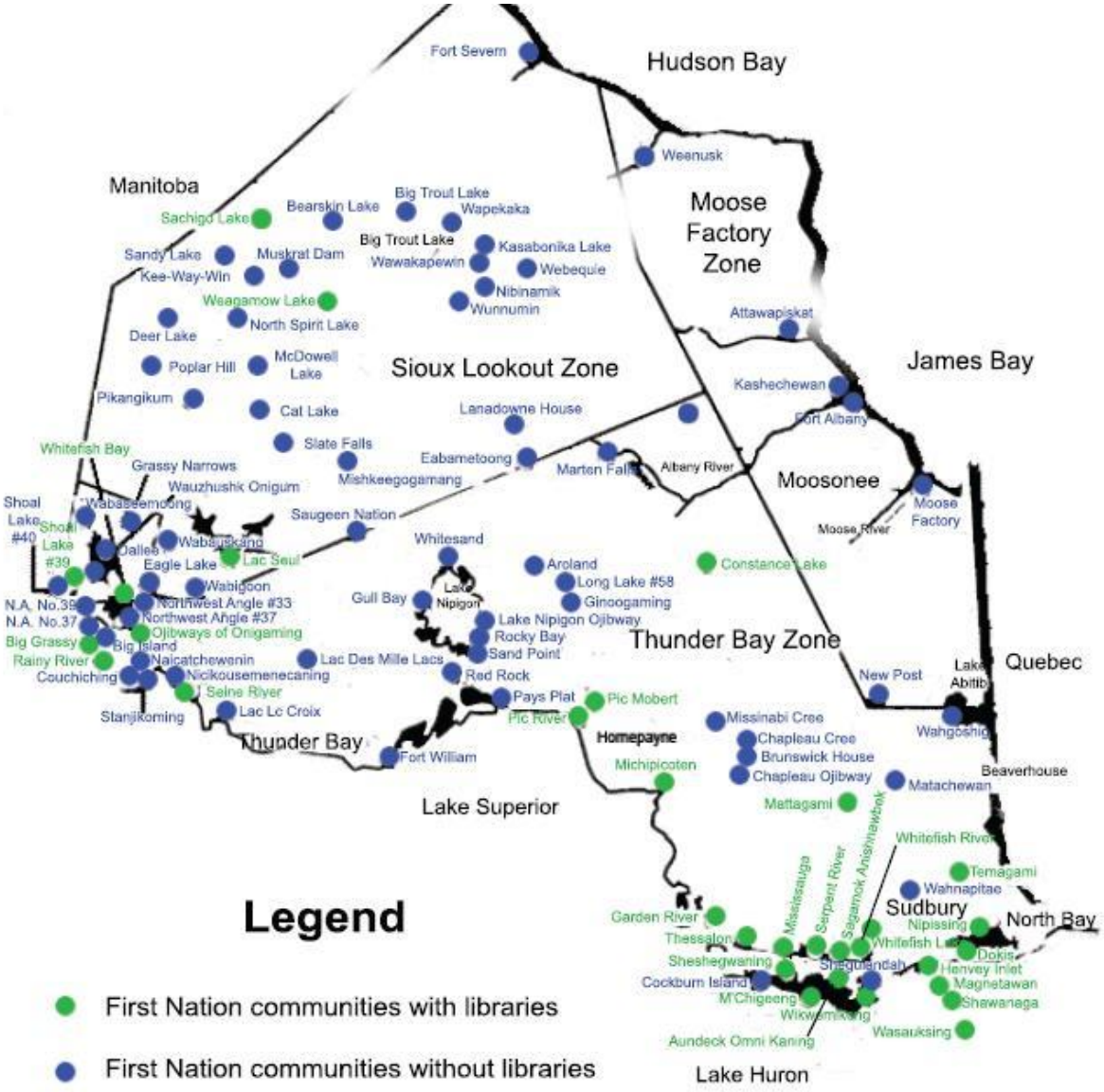


***Figure 1: First Nation Libraries in Northern Ontario***

Further information about libraries in Northern Ontario is detailed in Appendix 1. The facilitation of digital contents aligns with Goal Six of *Our Way Forward*, the strategic plan of the First Nations Public Libraries Committee:

> This plan will support the development of First Nations public library collections that are relevant to the needs of the community, available in a variety of formats,

> and address a wide range of topics. The public library collections must serve personal interest and growth, self-empowerment and educational purposes. The technology to deliver electronic content, and where appropriate to manage collections, must also be present and up-to-date. (2004: 15).

The material housed in an ODBS could contribute towards the collections of First Nations public libraries. Currently, the KO community uses K-net to share its content. Most popular are the myKnet pages at http://www.myknet.org. Users can create their own website and self-publish online. K-net includes a vast video and media archive at http://media.knet.ca/videos including the categories of : Conferences/events; Education; Entertainement; Faith and Religion; Health; KO; Music; Nature and Environment; People; Sports; Traditional Lifestyles; Youth; and Development. Browsing these websites provides some indication of the content of interest to the community, which can be built upon by an ODBS.

With the evolution of the DC mission, the need for research on digital libraries and content arose. We needed to create a classification framework and guidelines for material acquisitions, so it was necessary to consult previous literature on collections policy and online content. Initially our goal and emphasis was on locating culturally relevant resources, however we encountered difficulty in defining what was culturally relevant. Through team discussion, we decided to broaden our scope to include an example of diverse materials on a wide range of topics. This corresponds with some of the preliminary survey results obtained by the Community Research team. Survey respondents have suggested that meaningful and relevant material comes from a variety of topics.

The most useful resource proved to be the International Federation of Library Associations and Institutions document on requirements of a digital library(Graham,

1995). When we considered that the content could be housed in a unique digital library, it became important to define the elements and purposes of a digital library to ensure our content would be placed under a well structured framework. IFLA (Ibid) provides four objectives for a digital library:

1. The digital library is not a single entity but rather requires technology to link resources.
2. The links between digital libraries and information sources must be transparent to the end users.
3. The goal of a digital library should be to provide universal access.
4. Collections housed in a digital library should not be limited to document substitutes, but rather extend to digital artifacts that cannot be represented or distributed in print format.

This last idea was very important to our team, which had been advocating for a move away from a print-only book service towards the approach of a digital library, featuring multimedia.

Using the four objectives outlined by Graham (1995) as a foundation, DC began working to develop a collection policy, a method of organization for the contents, and intellectual property documents. We also began to search for digital content that was public domain or fair use, in order to point towards possible information resources. Being students at a broad Information school, the issue of archives and historical content arose due to the specialization of two of our team members in this area. We decided to showcase archival resources through the creation of a pamphlet. The objectives addressed by IFLA situate a challenge of content file format that was faced by DC. Technology is required to link resources; therefore, we recognized the significance of liaising with the Systems team.

*Collection Policy*

The ODBS policy statement follows the guidelines outlined by IFLA "Guidelines for a Collection Development Policy" (2001) to determine what elements are needed in a collection development policy. Specific libraries' collection development policies are available online and were consulted to ensure that the ODBS policy used comparable terminology . There were a few resources that were especially helpful and relevant when writing the ODBS' collection policy. A collection policy that reflected some of the principles of cultural sensitivity is the National Library of New Zealand Collections Policy (2004), which demonstrated how two different cultures worked together to negotiate each other's information needs. The importance of Maori tradition and culture was repeatedly brought up in the policy, as well, some sections of the policy were written in Maori. Also, the University of Oregon (2006) had a very innovative digital library collection policy that not only focused on the University users, but brought up ideas about how the digital library was a portal or gateway for outside users to discover the University of Oregon library collection. These ideas were reflected in the final collections policy developed by the ODBS digital contents group.

A policy statement is important for ODBS as it provides the framework for the overall scope of the collection as well as provides a foundation upon which the content is built. While considering the objectives and mission of ODBS, the collection policy takes into consideration the community of users, the technical and financial resources available to the project and creates guidelines that determine the selection of materials. It is also used to help in planning the future scope of the collection. Information is provided about exactly what types of materials are in the holdings based on the perceived need of users, but this can change over time as those needs change. Finally

the collection policy is used to relay all of the above information to the community of users at large, providing a type of informal contract that connects the users to ODBS.

*Classification Scheme*

The organizational scheme for providing access to the contents of the ODBS is of the utmost importance. Organizing and facilitating contact with mass amounts of data is a difficult task in of itself. Colomb in *A Digital Library Needs Many Indexes*, concludes that:

> one should expect to have not one, but many indexes for a large, heterogeneous digital library. Philosophical considerations, supported by ethnological studies of information-seeking behavior, lead one to doubt that a single index would work. Therefore, the undeniable success of single-index physical libraries requires explanation - they work because they are limited in scope, and the reasons why they work are not satisfied by Internet-scale digital libraries (2002).

Thus, the information structure ready to house a surplus of digital content could be organized under a faceted classification system with multiple access points. A faceted classification system enables an item to be tagged under several different classifications; allowing for multiple searches to reveal the same result. A faceted classification system allows for:

> a set of mutually exclusive and jointly exhaustive categories, each made by isolating one perspective on the items (a facet), that combine to completely describe all the objects in question, and which users can use, by searching and browsing, to find what they need (Denton, 2009).

Content should be organized into basic classes or facets in order to simplify retrieval.

Of course, the classification scheme has been subject to many ideas that do not necessarily benefit ultimate user accessibility. For example the idea of a "theme" based classification system (i.e. "nature", "elders") may complicate retrieval with superfluous information. A streamlined classification system allows for easier compartmentalization

and can yield similar results with the adequate time and attention given to itemization (and "tagging"). With too much classification, there is a distinct possibility that "subject headings, which long ago slid into uselessness, now actively misrepresent existing nodes and clusters of knowledge in many academic fields" (Burke, 2004).

Likewise, action-based classification may be counter-intuitive to the instinctual search practice. Based on the knowledge systems outlined by Oliveira (2008), the most natural balance is at the centre of "traditional native knowledge" and "western science"; this "common ground" could balance the intuitive traits of both designations. Future research could evaluate the search techniques and method of organization of specific communities.

Another potential avenue for classification lies under the design of Brian Deer. Deer developed a "classification system that reflected modern First Nations concerns" (MacDonell et al., 2003). The classification system is effective as it combines "his own classification scheme for material on Iroquois history and culture, and Dewey Decimal Classification for non-native material" (Ibid). However, the classification system of Brian Deer is over 25 years old. Deer's classification sites Yeh; who wrote "A library classification needs constant revision to absorb current thought" (Ibid).

*Digital Content*

Resources for discovering digital content were compiled through links to websites. A large number of the sites included were recommended by guest lecturers, course readings and classmates. In particular, classmates contributed their digital libraries studied for assignments which increased the diversity of the information resources.

Monitoring the list-serv of the Library and Information Needs of Native Peoples Interest Group of the Canadian Library Association produced several interesting information resources sites. The professionals on this list-serv are experts in First Nations libraries and attuned to the issues and information needs which arise. They forward links to articles, news and brand new databases to the group. A special issue of *Feliciter* was focused on information resources for Aboriginal Peoples due to the work of this interest group (CLA, 2008). It is possible to sign up for this group at http://groups.yahoo.com/group/abin/?v=1&t=search&ch=web&pub=groups&sec=group&slk=4 .

Jesslyn attended the Ontario Library Association Super Conference where there was an abundance of events relating to aboriginal cultural information resources. The event included First Nations publishers, authors and Ontario Library Services. A discussion with the Manager of Aboriginal Heritage Initiatives at Library and Archives Canada provided direction to the key government sites for information resources. Following the links between sites was crucial, and was very useful for gaining many sites from which to collect content.

Some online searching was completed because of the interest in the relationship between Aboriginal cultures and the land. The following search terms were used: Aboriginal cultural mapping; First Nations territory; oral history and maps; land claims; Aboriginal culture and place; Aboriginal geographic information systems. These led to sites which exhibited the relationship between the culture and the land. Following links on these sites often led to new resources. A particularly helpful resource on search techniques came from the First Nations Information Connection of the University of Alberta. This document outlines subjects to use when researching First Nations

information topics (FNIC, 2007). We hope that future work on ODBS can explore obtaining copyright to First Nations publications. A list of First Nations publishers is found at the Xwi7xwa Library of the University of British Columbia (Xwi7xwa Library, 2009).

*Intellectual Property*

The original background research for intellectual property included locating information about digital libraries, collection policies, copyright, open access, and creative commons. This involved searching for online resources, as well as any scholarly literature about the subjects. Copyright, and the concepts of open access and creative commons were mentioned in class when Lisa Sloniowski, from York University spoke about information literacy. She discussed the *Information Literacy Competency Standards* developed by the Association of College and Research Libraries (ACRL). There are seven standards, each with performance indicators, and outcomes (ACRL, 2000, pp. 8-14). We believe that it is important to educate the users of the ODBS about copyright for two reasons; one, because many of the resources on the ODBS could be copyright protected and two, users should know about how to protect their own work, because one aspect of the ODBS will be be the create-your-own-content section.

Although the standards were designed for undergraduate students at various academic institutions, it is appropriate to apply them to other age groups and levels, particularly in today's electronic environment. After class, we looked at the entire ACRL document, which Trisha had from an information literacy course she had taken in the fall. We discovered that standard five states that an "information literate student understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally" (ACRL, 2000, p. 14). One of the outcomes that is used as a way to measure whether a given person is

approaching this standard states that the student "demonstrates an understanding of intellectual property, copyright, and fair use of copyrighted material" (p. 14). Another outcome suggests that students use the appropriate citation styles to document the use of information from another source (p. 14).

In addition to writing an use policy, we also thought that it was important to develop documents that contain links to glossaries and frequently asked questions, because intellectual policy is complicated. There is also a lot of discussion about creative commons and open access and whether authors, artists and other creators should be more liberal and allow for better sharing of knowledge. We included a few links to some of this discussion in two of the documents, but these will need to be further developed in the future.

*Archival Pamphlet*

The DC Team chose to create an archival pamphlet as a means of increasing archival literacy and access to the digital archives that are found on the internet. The pamphlet plays a role in sustaining our team's interest in considering information literacy in general. In conducting their research and survey, the Community Research team discovered that community members were considerably interested in accessing and utilizing documents (records) relevant to their history and land ownership rights. It is our hope that the pamphlet will complement these findings since many of these documents are archival in nature such as maps, letters, forms, ledgers, photographs and audio material. They are physically housed in archival repositories and are often made available to the public via the repository's website. Popular websites with digitized collections include Library and Archives Canada, the Archives of Ontario and the Hudson's Bay Company Archives (Archives of Manitoba). Websites such as these are

valuable resources because the federal and provincial governments allocate funds that are specifically directed at digitizing aboriginal content.

Archival materials are extremely suitable for the ODBS project because there are usually no limitations on access, use and copyright. In some *rare* cases the repository will not own the copyright to materials. We stress rare because the repository needs to own the copyright to digitize the documents. Also, most repositories will not invest the time and money necessary to preserve, store and maintain records that are under the legal ownership of other organizational bodies and individuals. We also feel that the inclusion of archives is necessary because it is often the case that individuals want archival material for historical and genealogical research but they are not sure of exactly what they want or how to get it.

Casual and first time archival users are often intimidated by archival principles, processes and jargon. The pamphlet promotes access and use by explaining 'archives' in everyday language and terms that the general public can understand. It was created using the Association of Canadian Archivist's *Aboriginal Archives Guide* (2007), Library and Archives Canada's *Using Archives* (2007) and the First Archivist's Circle's *Protocols for Native American Archival Materials* (2008). One limitation of the pamphlet is that it restricts the amount of information that can be made available to its audience due to its physical size. Additional information will be made available in the future to users via an archives themed webpage that will be housed on the ODBS website.

**Critical Appraisal**

Having participated in the ODBS project for twelve weeks, there are a number of experiences we have gone through. Assessing and evaluating what worked and what did

not work is important for our stakeholders to understanding the accomplishments of this first DC team.

*Team Objectives*

Our original objectives were very simple and broad:

1. Produce a scan of existing and potential resource
2. Determine a method for organization
3. Determine culturally relevant criteria for selecting resources

Early on in the class, we became aware of some limitations which would influence what we could deliver. We would not have the knowledge to fully scan for relevant resources and develop an organization system. Since all the teams were working simultaneously we would not have input about community needs till late in the class schedule. The Systems team was also starting from a basic level, and could not immediately provide file format recommendations or a system architecture. It was a challenge for our team to get our heads around being limited to produce results, and still do meaningful work. With the number of people on our team, it was a concern to some members that if they didn't produce their own deliverable they were not contributing. As we evolved and matured as a team, we were able to brainstorm new deliverables based on what we were learning in class. We also changed our approach from producing a final polished product to working on objectives that would provide a foundation for future implementations of the project.

*Class Structure*

In terms of the class structure, we feel that more sequential schedule of work for all teams might have been beneficial. Ideally, the Community Research team could have presented us with a report based on their findings before we looked for content.

Similarly, our team should have then reported to the Systems Team and the Promotions & Outreach Team. During the initial stages of the project many of us were under the impression that we would have more data on our users in order to present our communities with actual content that reflected their needs. Once we realized that it was not the case, we then shifted our priorities and focused on policy making and literacy.

We understand that we were limited by time but it is also important to understand that the project is an ongoing and interactive process. During certain time frames of the project some teams have a more defined role and greater responsibility than others, while some teams are dependent on other teams to provide them with the information necessary to complete their tasks and deliverables. It was very challenging to become so embedded in a single area of such a large project. We often needed the expertise of other teams, but were struggling to maintain communication with our own group members. Collaboration with Systems is critical for future work. It was discouraging to discover that we were duplicating some of our efforts.

*Team Organization*

Originally DC was comprised of seven members. We assigned ourselves roles within the team and research tasks following guidelines set out by the instructors, and based on interest and fit. We did discuss who our team coordinator should be a little more at length, because it is important to have good communication in a large group. Jesslyn was the perfect person for the position, and she evolved into a team leader as the project moved on. Each of us was in charge of one research task, and had a second group member for assistance. This worked well, and provided additional support to each of us. We all gave input during weekly meetings as well. Unfortunately, we lost one of our group members, so we had to restructure our roles and tasks. This was not a huge

obstacle, because it happened early in the term, and although it did mean one less group member to contribute to all our deliverables and other assignments, our roles evolved over the course of the semester anyway. Also, when it was time to produce an assignment or have something prepared to discuss in class, all of our group members delivered.

With six members in our team, it was challenging to coordinate a time to meet on a weekly basis. It was also difficult to have everyone present at any given session, as some of our group members had other commitments on certain weeks. Illness and emergencies were also unexpected situations that arose, which limited our numbers at meetings. We did, however, consistently post the meeting minutes on the wiki on Sakai. Professor Caidi was present at one of our meetings, during an important time in the semester for our group. This was very helpful for framing the rest of our work.

*Relationships*

In regards to DC's group dynamic, everyone worked well together and contributed to the work that was assigned. One crisis the team faced was when one member left the group; it affected the morale of some of the group members that remained. Also another, less serious obstacle was trying to get all members to meet at the same time, not once did a meeting occur with all members present. However, we were able to communicate during class as well as over email and Sakai. As to working with other teams, by the end of the project, the digital contents team collaborated closely with the systems team to develop a categorization scheme.

The digital contents team felt hesitant in building relationships with members of the community themselves. Many members of the digital contents team expressed concern about making a commitment to individuals over Moodle that would be most

likely severed at the end of the semester. Building relationships take time, which was not abundant for several group members.

**Going Forward**

We are proud of the accomplishments of our team, and hope that our deliverables will be able to act as the core supporting documents for future work on the ODBS. Our work creates opportunities which can enable future explorations of content.

*Collections Policy*

An important step forward in regards to the policy statement was deciding to avoid creating "criteria for culturally relevant" material, which was an idea that was put forward in the original list of deliverables. After considering the OCAP document the group felt that any criteria about cultural relevancy should be determined by the community itself and not by an outsider. Choosing to write a collections policy instead allowed the group to expand the focus away from purely First Nation related materials and topics, and provide a template that could be used by communities to suite their needs.

DC produced the following Collections Policy for the ODBS:

The ODBS seeks to serve and support its communities by providing a portal to global material and resources that are relevant and useful to local community members.
The goals are to provide access to public domain digital content of community value via a web portal that is developed using the input of local community members and to provide a forum for users to create and print their own content.

The ODBS will not focus solely on resources that can be printed, but facilitate access to strictly online resources such as read-only books, educational games, career and business sites, audiovisual media collections, and any other materials that communities need.

Specific information about holdings, links, resources, formats, and language should be provided when the actual collection process has begun. Content should be evaluated to

ensure relevance and quality. A helpful guide is from the University of Oregon. The University has a "Criteria Scorecard for Digital Collections" (2008, http://libweb.uoregon.edu/inc/data/diglib/dctf_scorecard.pdf) that can be modified by a future expression of DC, or the community itself to suit the needs of ODBS in regards to digital format selection. Other criteria in regards to First Nation specific material should be developed by the community to ensure cultural relevance and respect. A good exploration of this topic can be found in "Native American literature for young people: a survey of collection development methods in public libraries." (Tjoumas, 1993)

This policy should be evaluated periodically to guarantee that it changes and grows with community needs. Both quantitative (user demographics) and qualitative (users wants, needs, opinions) methods should be employed to ensure the policies strength and relevance over time. Other issues that can be explored further and incorporated into the policy statement are the ODBS's role in developing community member's information literacy (with the archival literacy pamphlet and intellectual property information gathered by the team), and how the ODBS site can act as a gateway for the global online community to interact with northern Ontario First Nation communities. Also when community content does come available, a separate policy and guidelines can be developed that focuses specifically on encouraging the creation of the content submitted by users.

*Classification Scheme*

The proposed method of organization can be visualized in Appendix 2. We recommend a faceted classification scheme, as described in the literature review. First and foremost, designating what content is printable is essential under the digital contents method of content organization. This will allow users who only want to use the

ODBS to print materials to view designated print resources. Next, content is classified according to its type of format: be it text, an image or audio-visual. From there, the faceted classification system would organize content by its subject (fiction, non-fiction, etc) under intuitive design. Testing, once the system is in place, can be conducted in order to narrow the classification criteria (and scheme, as a whole) whilst broadening the user-communities search methods.

Challenges arise when considering the technical implementation of this scheme. Trying to organize a clear and cohesive method of organization posed problems when attempting to mesh with the means to store data was regulated through a different team all together, the Systems team. Trying to settle on a specific format for data (be it, for example: ".jpeg" or ".gif" for visuals, or ".doc" or ".docx" for text) has to be resolved. Likewise, agreeing on the slightest changes to the skeleton, framework design (of the system) proved to be a challenge. Opting for a simplistic approach, DC struggled to convince the systems team as to why design specifications were warranted (for example; a single search field for the wireframes with no author/title/genre designation).

The ideal interface for DC retrieval would be simple and require only one search field. With one search field, the faceted classification system would be put to optimum use; as no designation would be required (for "title", "author", etc.). Simplification and intuitive design are key features that would allow users of all backgrounds to make full use of the digital content available. With Boolean features added to the system design, advanced and more seasoned users could search with added precision.

Design issues aside, several key challenges are present in implementing a system to house digital content (and make it available easily). Tagging content with multiple, relevant information (under the guise of a faceted system) may prove difficult as

numerous classifications can be applied to singular content. Intuitive design (or a simple approach or simple design) is not necessarily congruent with the idea of a combination of "common ground" (as explained by Oliveira, 2008). The cultural common ground reflects Burke's idea of "organic organization" (2004) in the sense that classification is best left up to "human context"; and that "the signal benefit of these systems is that they don't recreate the structured, hierarchical categorization so often forced onto us by our physical systems" (Shirky, 2005).

*Digital Content*

In order to provide a good indication of the resources available, the digital content component of our team's work was divided in two. We wanted to demonstrate the diversity of resources which could be accessed online and printed. In addition, we hoped to point the way to a number of useful information resources, such as databases and portals, which are available online. Our digital contents strategy was greatly influenced by the introduction of information literacy concepts to the project.

Examples of Diverse Content:

Early on, DC recognized that it would be impossible to fill up the ODBS with all the relevant resources for community's needs. With the guidance of our professor's we looked at the types of print and non-print materials available online. While at time's our work appeared as a 'random' assemblage of unique documents, we are in the exploratory stage. A collection of unique resources was posted on the ODBS Moodle website for team members and stakeholders to view. It was created with the default Database application provided by Moodle. This is found at: http://meeting.knet.ca/mp19/mod/data/view.php?id=413. A description of the fields used to describe the content is included in Table 1.

There were some limitations to using this application, since it did not provide an attractive or intuitive interface. Specifically, the search function was required to be below the list of results. At this stage in the project, encouraging browsing is useful because there are only a few resources so it may be difficult to meet a user's search needs. It is important to note that this database was not a beta version of the portal. It was an access point to the work of the DC team, providing links to content which demonstrates the variety of resources which could be included in an ODBS portal. Since the resources were collected simultaneous to the development of the classification scheme and work of the Systems team, it would be beneficial to combine the various contents components. The resources could be catalogued using the classification, and information about file format could be incorporated into the system functional requirements.

**Table 1:** Fields in the Digital Content Database on the Moodle

| | |
|---|---|
| Title | A title for the digital content resource |
| Author | The person or institution who created the content |
| Topic Tags | Brief comments about what the resource is, its subject and target audience . |
| Link | Hyperlink to the online resource |
| Format | The type of content it is, ex. |
| Source | The online collection which the resource came from. |
| Date Retrieved | Date when the resource was last accessed. |
| Found by: | Individual who located the content. |
| Print? | A yes/no field indicating whether the content is printable in its current format. |

Online Resources spreadsheet

While collecting digital content resources, our team came across a number of large portals for accessing online information. The Internet Archives and Project Gutenberg were introduced in our course as excellent repositories for open access information. We kept track of the links to these resources, and hoped to be able to provide a starting point for team who would continue to collect content. After the information literacy

lecture, we realized that pointing the way towards relevant content was crucial to our DC mission. Librarians cannot act as the gatekeepers of information in a digital age, but need to provide users with critical thinking skills to evaluate and select their own resources. Furthermore, we could reduce a lot of duplication of effort by documenting the online resources which we found most helpful. At times it felt like we were mapping out the entire internet, but we had a basic collections policy to guide our selection of links. This spreadsheet of online resources is included in Appendix 3. A guideline to the definition of fields used for describing the information about each site is provided in Table 2. It is important to note that this is a working document. The information is organized alphabetically by title, however it could be implemented in a more user-friendly format. This could include organization through the classification scheme. A large number of topics are covered due to the scope of information available online.

**Table 2:** Fields in the Digital Content Online Resources spreadsheet

| | |
|---|---|
| Title | A title for the online information resource |
| Topics | Brief comments about the subject of the material available at the site. |
| What's there? | An indication of the types of resources available through the information resource. |
| Link | Hyperlink to the online resource |
| Format | The file formats available, ex. .pdf, html. |
| Source/Author/ Organization | The online collection which the resource is a part of. |
| Date Retrieved | Date when the resource was last accessed. |
| Found by: | Individual who located the content. |
| Printable? Use Policy | Preliminary comments about fair use of the content. |

We had planned to implement this spreadsheet as a database on the ODBS Moodle. Unfortunately, the import function of the Database application was not working. This was disappointing and frustrating for DC. We would like to acknowledge

the assistance of Margaret from Systems in trying to help us fix the errors. The spreadsheet is included on the Moodle, and can be reformatted to a comma separated value file for import into a future ODBS portal-like application.

*Intellectual Property*

The use policy and accompanying documents that are mentioned above are a very important part of the future development of the ODBS. Currently they are basic documents with minimal commentary and links to other websites. They are included in Appendix 4.

Use Policy:

This policy is very important, because it is necessary for the users of the site to be aware that they cannot simply do whatever they want with everything on the ODBS. It explains that the ODBS respects the work of others, and only resources that are clearly not covered by any copyright (subject to the Canada Copyright Act, etc.) can be printed. Perhaps this part will change, as long as users are informed about giving credit to works if they are not just for their own personal use. The policy should also evolve over time, reflecting the different types of resources that become available on or through the ODBS. It might be useful to list each type of resource and explain what can be done with it, for example, music or video clips, etc.

Guidelines & FAQ:

If a user would like to create a new work using part of someone else's words, or music, or television clip, etc., they must get permission from the copyright holder directly. The guidelines provide users with links to the *University of Pennsylvania*, *Copyright Kids!*, which both have excellent information about getting permission,

finding out who has copyright of a certain resource. The link to *Stanford University Libraries* also discusses the concept of copyright and fair use, so users can understand when they are allowed to borrow someone else's work.

Understanding intellectual property is not easy, so I think it is necessary to have a *Frequently Asked Questions* section to provide further explanation to users. This document consists of links to two different websites. The *Canadian Intellectual Property Office* has already developed an extensive document answering many questions about copyright in a Canadian context. The *Copyright Kids!* website, provides answers to some of the same questions, but aims them at a younger audience. It is intended for kids in grades five to eight. In the future, further links and annotations could be added to both of these documents. There are probably many other resources available that explain copyright from different perspectives. At this time, I have a separate document for the copyright FAQ, but it might be more appropriate to also incorporate them into the FAQ for the entire ODBS.

Glossary:

The glossary was developed with the same goals as the guidelines and frequently asked questions. It is important to define all of the terms that will come up when someone is reading about intellectual property. Again, the glossary could just be a series of links to other websites, which already have excellent definitions, or the definitions could be reproduced on the ODBS, following the fair use policies of the given websites. A third option would be to create a new glossary, developing our own definitions, but this is really not be necessary, considering the quality of existing glossaries. Again, it might be appropriate to also incorporate the intellectual property glossary terms into the glossary for the entire ODBS.

How to Protect your Work: Information for Authors, Creators and Artists:

One of the goals of the ODBS is to provide space for users to create their own content, and when they do so, they should be made aware of their rights as authors, creators or artists. This document provides them with information about copyrighting their work with the Canadian government or the organization *Creative Commons*. The *Creative Commons* website also has several videos and comics about copyright and their licenses, explaining how they work. In the future, this document should become more extensive, with more links to information about copyright, as well as the concept of open access. This issue is discussed briefly in the next document, but perhaps they should be merged. This would provide the creator with enough information for them to decide if they want to copyright their work, or if they would like others to be able to manipulate them free of copyright, while creating new works.

Intellectual Property Discussion:

Following the advice of Lisa Sloniowski, Trisha developed this document to make creators, etc., aware that there is a lot of discussion in the literature about copyright. In particular, many people do not believe that it is a good thing to copyright one's work, preferring instead licenses such as Creative Commons Licensing or open access. It is very basic at the moment, linking to a handful of sites that discuss open access, Michael Geist and his opinions of Canadian copyright, and the *Public Knowledge Project*. I believe that this document should become much more extensive, as it is very important for users to be aware of all the issues surrounding copyright.

Citation guidelines:

These guidelines were developed following the suggestion of Dr. Nadia Caidi. It is important for users of the ODBS to understand how to make reference to the

resources that they come across in the digital library, particularly if they are writing a paper or doing another type of assignment for school. It briefly explains the importance of citing information, even if one is paraphrasing. Terms such as these, as well as plagiarism, should be defined in the glossary so that the user understands. The *University of Toronto* has a citation guideline of its own. It can be linked to on any website as long as it is for educational and non-commercial purposes. They do request that the ODBS let them know that it is linking to them, just so that they are aware. There are several different citation styles, and Trisha thought it was important to introduce as many as possible to the users of the ODBS. In the future, more links could be added to the list, and examples could be developed using resources from the ODBS itself.

It would also be interesting to develop lesson plans that teachers can use with their students (who would hopefully also be ODBS users) to educate them about copyright. The lesson plans could include examples of items from the ODBS. It is important to be aware of the laws and issues surrounding copyright, especially in this digital age, with infinite amounts of information available electronically. It is not adequate to simply direct people to resources to read about copyright; they should have a place to discuss the issues as well. A future collaboration with the Promotions and Outreach team to promote these lesson plans to teachers, or at least to point out that they could create their own exercises, was suggested by a class advisor (Lisa Sloniowski).

*Archival Pamphlet*

In terms of archival literacy, we encourage future participants of the project to emphasize the importance of community-generated materials. The archival pamphlet and resources are outlined in Appendix 5. Archival records are important because they

allow the communities to contribute information *about* themselves to the archives of the future. By contributing to archives, aboriginal communities are able to define and reframe their position in collective (societal) memory as well as their place in the ongoing historical narrative. This is significant because up until very recently, aboriginal peoples have only existed in Canadian archives in records created by third parties such as anthropologists and government agencies. We would like to highlight the fact that archival records come in many shapes and forms. It is up to the community to decide which types of records it wants to produce. Individual communities can choose to follow their own archival 'plan.' Or, several communities might want to share in the creation and maintenance of their collective archival resources. Also, it is important that the community (or communities) determines their own access provisions and limitations on use, if any, for their records. Do they want to share the records amongst their own community, with other First Nations, with the Canadian population, globally?

In terms of community generated records, there are a few things that future participants in the project and communities should note. Oral records, oral histories and oral traditions all have different meanings and serve different functions. These definitions and functions have been briefly outlined in the webpage/archival content appendix. However, it is important that the future students of 2125, community members and administrators of the project refine the definitions under the guidance of someone with archival knowledge and/or training. We highly recommend the continued use of the Association of Canadian Archivist's *Aboriginal Archives Guide* (2007), Library and Archives Canada's *Using Archives* (2007) and the First Archivist's Circle's *Protocols for Native American Archival Materials* (2008). These documents

are without a doubt the most useful, accessible and current resources on archives and aboriginal communities. In addition, other indigenous communities such as the Maori (New Zealand) and the Yolngu (Australia) have been active in creating guidelines for the use and preservation their own archival materials. We encourage future generations of project participants to include additional resources as they become available. As part of our legacy, we have included a list of relevant journal articles in the appendix.

Lastly, we would like to see greater detail on 'archival literacy' as it pertains to records management and aboriginal communities. Records management emphasizes the use, maintenance and disposal of current records. These records are most often administrative in nature and created by bodies such as band offices, health centres and so forth. It is important that communities acknowledge the importance of their current records because they will one day make up a significant portion of their local archives.

On the practical side, we hope that the pamphlet does get distributed to the communities in the future. In addition, we have provided future contents and systems teams with a list of suggestions and possible content for the archival 'webpage' that is to be uploaded to the ODBS website. Our suggestions include archival literacy and a detailed selection of available resources. We can only expect this information to grow in the future as indigenous groups from around the world become increasingly interested in their 'place' in archives.

**Recommendations for the Future**

Knowing what we do now- a key mention for future FIS 2125 students is to bear in mind the scale of the project and the limited time given. Three hours per week for fourteen weeks is not nearly enough time needed for this project; and that is important to keep in mind. Our aim not to *complete* the digital library, but rather to build it; each

semester students will work on specific deliverables that will correspond to the work of the past classes and will help the future classes move forward. It is therefore important for future students to establish set goals ahead of time and instead of becoming over ambitious, work towards feasible deliverables.

Close collaboration with all teams is also essential. Community Research is in charge of assessing the need for contents; and there is important information that they will convey in the future. Community Research can provide DC with, through their surveys and scans, requests and desires for content. With this information DC can strive to find fair use content from the Resource list to provide to the end users. In addition, collaborating with the Systems team is also important. Systems are the developers of the software; and the creators of the website interface. Systems will design the interfaced based on the classification schemes and frameworks developed by DC. In addition, Systems will assess the file format issues; therefore conveying to DC the accepted and workable formats that can be uploaded to the site. Roles must be clearly defined very early on in the semester, as overlapping between teams and group members will happen.

A concept that needs further exploration is the application of information literacy. The goal of the On Demand Book Service is to bridge the information gap and promote literacy and numeracy. Categorizing the content by information literacy concepts is a way to promote and support the use and delivery of contents in ODBS, as well as bridging the information gap between those in the First Nations and us, in the urban centre.

## Conclusions

Through participation in this class, and the ODBS project each member of DC has learned so much. For many early weeks in the project, we were struggling to determine what is the ODBS? Having been connected so intimately with the work of our classmates we are now able to understand the structure and goals of the project. It was difficult for us to move on without seeing our work completed. We believe that our work has advanced this project forward. The deliverables that we are able to leave behind are just aspects of the beginning of a large project to distribute information resources and support the joy of reading in Ontario`s remote First Nations communities. From this position we were able to explore the abundance of digital content available online which could be incorporated into an ODBS. We provided starting points for the supporting documents necessary for a content-delivery system. Throughout this project, our team has strived to facilitate the provision of contents which are meaningful and relevant in an ODBS.

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