

# **Indigenous Knowledge Organization: A Study of Concepts, Terminology, Structure and (Mostly) Indigenous Voices**

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## ***Abstract***

The lack of published information (especially in Canada) on modified classification systems and thesauri for describing and organizing Aboriginal materials sparked the idea to conduct a survey study on this topic. The surveys were distributed at five Indigenous-related conferences and gatherings in Canada and the United States between fall 2009 and fall 2010, and more than 50 completed surveys were collected. Research findings included preferred changes in terminology from Library of Congress Subject Headings (which were seen to be outdated and inappropriate). These findings indicated that there was no clear consensus on a "one-size-fits-all" terminology for thesauri, particularly for the LCSH term, "Indians of North America". Rather, responses generally fell into three preferred terms: "Indigenous", "Aboriginal" and "First Nations, Inuit and Métis". This split in the results was not surprising given the diverse range of participants who took part in the survey; however, it also suggests that preferred terminology needs to be localized based on the users of each particular library. Respondents also commented on survey questions inquiring about the use of the "Medicine Wheel" concept as a way to organize Aboriginal-related materials, as well as other possible structures that might prove more culturally relevant for organizing these materials. There was both substantial support for and strong opposition to the use of the Medicine Wheel for this purpose, for a variety of reasons. Participants indicated a preference for non-hierarchical and less linear structures than current mainstream classification systems provide. There also seemed to be support for "landscape-based" structures. Although research findings were not conclusive, two hypotheses and some valuable insights were gained from this exploratory study. These hypotheses need to be tested, which suggests more research (and more in-depth research) in this area is required.

## ***Keywords***

Indigenous Knowledge organization; culturally relevant library services for Indigenous / Aboriginal Peoples; thesauri

## **Introduction**

"Many aboriginal peoples around the world, and particularly in Australia, have comprehensive and sophisticated systems of natural classification. Studies have shown that these systems often compare in complexity and detail with the taxonomy of modern biology. As one would expect, with regard to the diffusion of a classification system within a language group, aboriginal peoples often have a greater knowledge than urban whites, based on both training and experience. For example, unlike most adult Westerners, the average five-year-old Tzeltal Maya in Mexico can make hundreds of botanical distinctions. Interestingly, Western and aboriginal categories sometimes correspond closely and sometimes do not. When they differ, it is usually not due to one or the other system being closer to nature but rather due to the differing logic, or principles, which guide inclusion (e.g. structure, function, medicinal or nutritional usage, evolutionary position, historical or mythic significance)" (Watson-Verran, H. and Chambers, D. W. in "Singing the Land, Signing the Land", 1989).

The idea for this study came about when the author was asked by the late David Farris, who was Editor of Canadian Subject Headings at Library and Archives Canada at the time, to contribute to a discussion he initiated on the inaccuracy or inappropriateness of Library of Congress Subject Headings (LCSH) to describe Aboriginal-related materials in a Canadian context. Many Aboriginal researchers (or those using library catalogues or databases) in Canada today are offended by the subject heading, "Indians of North America". One explanation is that the word "Indians" is a term that originated from Christopher Columbus' mistake in thinking that he had landed upon the country of India in 1492 but had instead "discovered" North America, or what Indigenous North Americans call "Turtle Island". Another part of the terminology "problem", as identified by Farris, is that in Canada it is difficult to find agreement on a "one-size-fits-all" subject heading that would match the LCSH term, likely due to the many differences between cultural groups and the wide range of demographics of various users. For instance, there are 615 First Nations across Canada, with 50 different tribal groups who speak more than 50 Aboriginal languages; additionally 54% of Aboriginal peoples live in urban areas (Indian and Northern Affairs Canada website). While many people prefer the term "Aboriginal" (the legal term provided in Canada's Constitution of 1982 and which refers to First Nations, Inuit and Métis peoples), others prefer the term "Indigenous", which is generally understood to reflect an international or global perspective. And other word preferences exist, as this study will demonstrate.

At the same time, a second challenge presented itself: that is, to develop a new structure for organizing the categories or subject headings of a database or virtual library (the Indigenous Studies Portal) of Aboriginal-related materials managed by the author. The reason for this was that several Aboriginal users of this online research tool had commented that the homepage with all its categories looked too linear, too Euro-centric and, as a result, presented something of a barrier to its use.

Consequently, this study emerged by conceptualizing a process of how to combine the two needs (i.e., for specialized thesauri to describe Indigenous materials and for a culturally relevant tool to organize these materials on a website / database). The next phase of this formalized study concentrated on inviting input into the issue by Aboriginal / Indigenous peoples, as well as those non-Aboriginal people who work closely with Aboriginal materials in libraries, other cultural institutions and universities in Canada and the United States. This paper will highlight the results of the study, with a (primarily) Canadian focus.

## ***Literature Review***

It is important to contextualize this study as an example of one area of scholarship within the broad field of "Indigenous Librarianship". For those who are unfamiliar with this field of librarianship, one recommended article by Burns, Doyle, Joseph and Krebs adequately summarizes it (see: Cited Works).

Furthermore, it is important to acknowledge that this study on Indigenous Knowledge Organization focuses on description and organization issues, and once again, is a smaller subset of the field of Indigenous Knowledge Management and Preservation. As such, please note that this literature review is not exhaustive or inclusive of all published work involving an intersection between libraries and Indigenous Knowledge (particularly in the context of IK management, preservation and intellectual property issues); this restriction has been necessary as a means to limit the scope of this paper. Suggested further readings are available at the end of this paper for those interested in a more comprehensive view of IK management and preservation.

Little has been published, particularly from the North American perspective, about Indigenous Knowledge organization (and specifically in the area of developing local thesauri), but there are some published works that have discussed various aspects of the issues involved. Perhaps best known in this area of IKO are the Pathways (Thesauri) online project of the Australian Institute for Aboriginal and Torres Strait Islander Studies (AIATSIS) and the Maori Subject Headings website from New Zealand Aotearoa. These initiatives were years in the making and incorporated extensive consultation with the Indigenous peoples of their respective countries. They were also successful in obtaining their institutions' political will to carry them through to completion. The AIATSIS Pathways website is a combination of three thesauri (for place names, for languages and peoples, and for subject areas) and is an extension of the original publication "The Aboriginal and Torres Strait Islander Thesaurus". This book was written by Heather Moorcroft and Alana Garwood and published by the National Library of Australia in 1997. Moorcroft should be credited with being one of the first to write about the inappropriateness of mainstream classification systems to describe Aboriginal materials, based on her early publications: "The Construction of Silence" (1992), and "Ethnocentrism in Subject Headings" (1993). Garwood-Houng continues to carry the torch (along with others at AIATSIS) in the development of the AIATSIS Pathways website, and has written about the Aboriginal and Torres Strait Island Protocols for Libraries, Archives and Information Services (developed in 1995).

In her 2005 article, "Protocols: Meeting the Challenges of Indigenous Information Needs", Garwood-Houng points out the eleven principles of dealing with Indigenous information issues, with number four focused on the classification and description of materials, as follows:

"This area addressed Indigenous concerns about outdated and inappropriate description and classification of Indigenous materials evident in subject headings, indexing terminology and classification systems. To further assist in this area the *Aboriginal and Torres Strait Islander Thesaurus* was published in 1997" (p. 150).

In another publication from Australia, Godbold discusses some user-centred design techniques for an online repository, the Traditional Knowledge Revival Pathways (TKRP), which was initiated by Elders of the Kuku Thaypan clan in an area of north-eastern Australia to help preserve the clan's traditional knowledge. This article encompasses much more than the vocabulary used in the database; that is, it includes such important factors as the history of how the TKRP came to be, underlying principles surrounding the custodianship of traditional knowledge, and the need to determine the complex process of setting up user profiles, which ultimately prohibits web-based delivery of the TKRP databases (p. 117). Although there are many differences between Aboriginal Australians and Aboriginal Canadians, such as the far greater variety of Indigenous language groups in Australia<sup>1</sup>, there are also many similarities. For instance, clan members "expressed their rejection of pre-designed thesauri or taxonomies. They expressed distaste both for the intrusion of 'western' ontologies and the need to juggle and comprehend great lists of terms" (p. 121).

Another important passage in the Godbold article explains the user-centred browsing structure as well as the satisfaction experienced by users when using a culturally relevant organizational structure for database records. She states:

"...the concern was that a browsing structure useful for one clan is not assured – indeed, not likely - to be a good taxonomy for all. However, it appeared that the act of navigating through the categories from the front page (all creation) to the animals, to the land animals, was to trace a journey or path which paid correct homage to the wallaby knowledge and its place in the database and in the world. Navigating the browsing structure reminded me of ceremonies linking place with meaning. The journey through and recognition of knowledge structure was as satisfying as arriving at and thinking about 'wallaby'." (p. 120)

Interestingly, the TKRP was also developed to provide a shell of a database that other clans could use to create their own repositories to preserve their cultural knowledge. The database shells could then be modified to support each clan's needs for their own, localized vocabularies. For instance, Godbold explained how the taxonomy for the

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<sup>1</sup> "a map of Aboriginal Australia...reveals several hundred language groups with all the cultural variety that implies" (Godbold, p. 119), while in Canada, as mentioned previously, there are only 50.

Kuku Thaypan clan used certain vocabulary or categories (such as "frogs") that identified it as a rainforest culture, and how some of their vocabulary would not be relevant to other clans in Australia which were, say, desert cultures (p. 121) whose clan members would likely use the broader category of "feral animals".

This article also raised the issue of providing such flexibility in the structure and management of the database that clan members could not only add their own materials (such as videos, reports, documents and photos) but also could "allow users to rename categories" (ibid) and in effect, "choose how knowledge is to be tagged" (p. 122). Although this surely added to the popularity of the database, this also meant that "improvement in customisability creates databases with divergent metadata" (ibid.). This problem was somewhat mitigated by presenting the user first with a list of already existing tags in the database. Then, if these tags were not sufficient, the user could create a new tag, in the hope that this would "reduce the creation of synonymous and surplus tags" (p. 124).

Moving on to Aotearoa / New Zealand and the Maori Subject Headings website, it showcases a project that was sponsored by three organizations: the Library and Information Association of New Zealand Aotearoa (LIANZA), Te Ropu Whakahau (Maori in Libraries and Information Management), and the National Library of New Zealand. On the home page of the site there is a statement on the purpose of the MSH, which:

"is to provide a structured path to subjects that Māori customers can relate to and use to find material in libraries. It is not intended to be used as a dictionary. It has been developed so that cataloguers and descriptive archivists have a reliable and comprehensive resource to use when describing material either in or about Māori. It will be used by the National Library of New Zealand to enhance its service to Māori library users. However it should not be seen as authoritative beyond its intended purpose for use in libraries and archives".

For more information on the Maori Subject Headings Project, the Te Ropu Whakahau provides a description of several components of the project and links to related documents (including one that is a thesaurus and another that identifies problems of existing classification systems) at: <http://trw.org.nz/about.php?page=projects> . Also, a presentation and paper delivered by Robin East at the Australian and New Zealand Theological Library Association (ANZTLA) conference in 2008 provides some important historical background, analysis and implementation of the MSH for those interested in further reading.

In North America, Martens (2006) published an article on her experience of moving from a local thesaurus for the National Indian Law Library to updating this thesaurus (or what she terms their "internal subject headings list") and incorporating some features of Library of Congress Subject Headings (LCSH). The primary reason for this reorganization was to bring their catalogue of holdings into the 21<sup>st</sup> Century for resource sharing purposes through membership in OCLC. Another benefit was to create a

thesaurus that could better accommodate their growing specialized collection. Their project was funded through the American Association of Law Libraries in 2002-03 and involved consultation with other librarians and with volunteer Native American law attorneys. Some of the changes included the splitting of compound terms, i.e., "Hunting, fishing, trapping, and gathering rights" into individual terms such as "hunting rights", to adding more specific terms such as "water rights", "mineral rights", "fishing rights", "whaling rights" and "subsistence rights" (p. 293). An example of a difference in terminology from LCSH was the adoption of "Grazing rights" rather than "Pasture, Rights of" (indicating a preference for both a different terminology and for natural language). Other differences and additions included:

- "Ancestral lands" and "Fee lands" rather than "Indian allotments" (LCSH) (p. 293)
- "Elders" rather than "Aged" (LCSH) (p. 293)
- "Sweat lodges" rather than "Sweatbaths" (LCSH) (p. 294)
- "Sovereign immunity" rather than "Government liability" (p. 294)
- "Urban Indians", "Non-members of a tribe" and "Non-Indians" (p. 293)
- "Contributions of Indians" (p. 294)

In another publication (2008), this time combining voices from both the U.S. and Canada, Webster and Doyle literally converse about the issues of classification and terminology in describing Native American materials in their book chapter "Don't Class Me in Antiquities". Highlights of this conversation include:

- That LCSH classifies American Indians as "remnants of the past" (p. 189)
- That LCSH uses the E schedules in classification as a "dumping ground for all things Indian", thereby cluttering the E schedules and the shelves in that area, particularly when used in classifying large collections of Indigenous materials that could be spread throughout the collection, such as in Health, Education, etc. (p. 189, 191)
- That "the lack of appropriate description and classification were significant blocks to access for Aboriginal people" (p. 189)
- That criteria for describing and classifying Indigenous Knowledge materials should include the evaluation of this material "in terms of its own values and attitudes rather than in terms of those of another culture" (p. 190)
- That Indigenous cataloguers feel a discomfort in perpetuating the racism and ethnocentrism identified in Library of Congress Subject Headings (p. 190)
- That "classification systems carry systemic biases; they reflect the values and perspectives of their makers" (p. 191)
- That some of the problematic issues relating to mainstream classification systems result in "marginalization; historicization; omission; lack of specificity; failure to organize materials in effective ways" (p. 191)
- That "inappropriate subject representation also affects reference services because it limits both the efficiency and accuracy of information retrieval" (p. 191)
- That it is time to rethink and restructure the organization of Indigenous Knowledge materials especially given the "burgeoning interdisciplinary literature

being produced by First Nations / Aboriginal scholars who are designing and conducting research, as well as publishing" (p. 192).

In a paper by Doyle, originally delivered at the 2006 International Society for Knowledge Organization (ISKO) conference in Vienna, she discusses her experiences working at a First Nations library, the Xwi7xwa Library at the University of British Columbia, the problematics of Indigenous Knowledge organization and how these have led her to pursue a doctorate on the topic. For instance, the necessity to incorporate more inclusive and appropriate subject headings (i.e., LCSH has no term for Musqueam Nation, upon whose lands sits the UBC Library, but which is usurped by the subject heading, "Coast Salish Indians") has been addressed to some extent by this library's use and modification of the Brian Deer Classification System (BDCS). This system was developed by one of the first Indigenous librarians in Canada, Brian Deer, from Kahnawake, in the 1970s for the National Indian Brotherhood – now known as the Assembly of First Nations – collection. Doyle also discusses the similarities between the biases first identified by the National Indian Brotherhood in Canadian school textbooks 30 years ago and those identified in mainstream classification systems. Also of importance is the discussion on how knowledge erasures and loss are symptomatic of the widespread use of these mainstream classification systems:

"The international standardization of knowledge organization and subject representation systems enables unprecedented sharing of knowledge and also holds unprecedented power to erase local and regional knowledge domains. At risk are the voices that represent diversity of human experience, including the thousands of unique Indigenous cultures, languages, stories and ways of expressing them. The result could be the loss of representation and access to alternative ways of understanding, conduct and being in the world (Smith, 2005)" (Doyle, 2006, p. 438-439).

One study conducted by MLIS students in the School of Library, Archival and Information Studies program at the University of British Columbia (see MacDonell, Tagami and Washington) explores the use of the Brian Deer Classification System (BDCS) by two local libraries. Of special interest is their comparison of the BDCS with the Library of Congress Classification System (LCCS), particularly in three areas: naming and language use, collocation of related topics, and level of specificity. For instance, the BDCS uses spellings of names that are common to specific tribal groups, whereas LCCS uses older or outdated names. In terms of collocation, the LCCS lacks the ability to show relationships between different groups, whereas in the Brian Deer schedule "culturally similar or related groups are near each other in the schedule – so that researchers can easily access material pertaining to related groups and may discover this material through shelf browsing". For level of specificity, one example provided is that the BDCS offers four classes of "self-government" (including: Government administration; Self-government – Canada, and Self-government – B.C.) in comparison to one within LCCS, i.e., "Tribal government. Politics and government".

Readers may also want to consult the "B.C. First Nations Names Authority" available on the University of British Columbia Library website:

<http://www.library.ubc.ca/xwi7xwa/bcfn.pdf> as an example of a localized thesaurus (with reference to Library of Congress terminology) for describing Indigenous library materials in a Canadian context.

This literature review would not be complete without mentioning some work being done through Canadian Subject Headings (CSH), a division of Library and Archives Canada. Due to a lack of published material describing the CSH work, there is no easy way to track the changes made to Canadian Subject Headings for Aboriginal-related materials. One can, however, make some observations about new and revised headings on the CSH website, which is updated monthly. For instance, one new heading added recently (Dec. 2010) was "M'Chigeeng Reserve No. 22 (Ont.)". For a more official and high level account of recent changes made to subject headings describing Aboriginal materials, below is the content of some personal emails exchanged between the author and David Farris, former Editor of CSH, during the summer of 2009. These verbatim emails summarized the work done between 2007 and 2009 to add and revise subject headings for Aboriginal-related materials as follows:

- Library and Archives Canada initiated a review in 2007 of the terminology used in Canadian Subject Headings (CSH) to identify Aboriginal peoples in Canada. An LAC proposal to change these headings was posted on several discussion lists for comment. To recap, the proposal was to change the existing headings "Indians of North America" to "First Nations", "Native peoples" to "Aboriginal peoples" and headings for individual peoples such as "Sarcee Indians" to simply "Sarcee".
- The feedback we have received since then from some 35 institutions or individuals indicates a recognition of the inadequacies and outdatedness of many of the existing headings; however, there is concern raised about the choice of the proposed new headings, and a lack of consensus on better terminology. As well some users of CSH expressed concerns about systems considerations for them when LCSH and CSH terms differ for the same concepts, as they would if LAC were to go ahead with the proposed changes.
- LAC has studied the feedback to the proposal thoroughly, and also consulted the editors of LCSH and RVM [Répertoire de vedettes-matière] as to future directions in those lists. Based on these factors, LAC has decided not to go ahead with the changes as proposed. We will instead consider changing headings for specific Aboriginal peoples on a case-by-case basis, to see what we can do to improve access (personal email between the author and David Farris, July 21, 2009).

One of the main drawbacks was that when Farris consulted with his counterparts at Library of Congress, they did not "recognize the problems with the existing headings as a large enough concern to act on" (personal email, Aug.4, 2009). Although it is more difficult for larger institutions to make changes, the minor changes first proposed by LAC could be incorporated into individual institutional catalogues based on the preferences of their Aboriginal users. This is a natural segue to the survey I conducted in this regard.

## **Methodology**

### **Choice of method**

A number of factors contributed to the choice of using a questionnaire survey for this study. They are:

- The exploratory nature of this research to obtain input from Indigenous peoples regarding the description and organization of Indigenous materials in a Canadian context and the importance of obtaining some baseline data in this regard, especially given that there is no existing published research on local thesaurus-building in the Canadian context.
- The cost involved in conducting a focus group or one-on-one interviews (such as the costs of bringing in a facilitator or travel costs to interview not only international experts in the field but also researchers within Canada), as funding for conducting this research was limited.
- The difficulty in obtaining Indigenous research participants in a general sense, due to a long history of cultural appropriation through the research practices of non-Indigenous researchers with little or no resulting benefit experienced by Indigenous peoples or participants. Indeed, Battiste & Henderson devote a whole chapter (i.e., "Ethical Issues in Research") to this concern. And as Smith so aptly writes:

"While Western theories and academics were describing, defining and explaining cultural demise, however, indigenous peoples were having their lands and resources systematically stripped by the state; were becoming ever more marginalized; and were subjected to the layers of colonialism imposed through economic and social policies... Very direct confrontations took place between Maori and some academic communities. Such confrontations have also occurred in Australia and other parts of the indigenous world, resulting in much more active resistances by communities to the presence and activities of researchers" (p. 88).

- The difficulty in finding Indigenous research participants is intensified in the case of library-related research, as a result of the low priority placed on libraries by the majority of Indigenous peoples and given the history of a lack of use of and availability of library services in Indigenous communities (see Burns, Doyle, Joseph & Krebs, p. 2332).

### **Questionnaire Development**

Survey questions were developed with two goals in mind. The first few questions of the survey were meant to determine partial demographics of participants and their views on

thesaurus-building. The remainder of the questions concerned the structure or framework for organizing subject headings on a database website, one that would reflect an Indigenous worldview or aesthetic. More specifically, it was important to ask participants their thoughts on the appropriateness of a Medicine Wheel as a possible framework for this reorganization and, if not, what alternative structures would emerge instead?

For those unfamiliar with what a Medicine Wheel symbol looks like, please note the image below, which was created for [Our Legacy](#), the University of Saskatchewan's website of digitized Aboriginal archives (provided with permission from the U of S Archives).



Note the four quadrants of the circle, with the four colors of yellow, red, blue and white.

The idea of using the Medicine Wheel structure to classify the Indigenous Studies Portal categories came from personal experience. To be more specific, I had experienced Medicine Wheel teachings many years ago while working at an Aboriginal training center for addictions counselors. Although the Medicine Wheel was not a part of my cultural teachings as a youth, the teachings seemed familiar to me, at least intuitively. I felt a connection to the basic principles of the Wheel, and its four quadrants making up the individual's four aspects of the self: emotional, mental, physical and spiritual (as well as the four stages of life: childhood, young adult, adult, elderly). The teachings explained that these four aspects were interconnected and if one was out-of-balance, then the whole self could become that way unless corrections were made to "put things right" again. Putting things right meant attending to the aspect of the self that was out of balance: such as if someone was working too much, other parts of their lives would suffer (i.e., emotional, physical or spiritual) as a result. Also associated with putting things right were the teachings about the main qualities or characteristics of "getting along in life", such as reciprocity, respect, kindness, being non-judgmental, sharing, and generosity (giving back to community). There were also teachings about the four races (yellow, red, black – sometimes represented by the color blue – and white) and the strengths associated with each race (although these were not necessarily agreed upon by all who learned about and taught the teachings of the Medicine Wheel). But the colors did appear (in different orders or schemes depending on the tribal group involved) on the Wheel primarily to differentiate the four quadrants and aspects of the self. These are the teachings that I carry with me to this day. I was and am aware of the discrepancies of the Medicine Wheel teachings between cultural groups, but I thought that there was enough similarity in understanding basic tenets of the Wheel between cultural groups to move forward with the idea of using it as a tool for categorization.

It is also difficult to find authoritative written teachings on the Medicine Wheel to explain this concept for the non-Indigenous reader or others not familiar with the concept, given that these teachings are generally passed along through the oral tradition. One recent article written from a local Prairie / Plains perspective, however, provides some insight into the understandings of the Medicine Wheel in an academic capacity. Twigg and Hagen (2009) note some of these understandings in the following passages:

"The Aboriginal world view is shaped by a sense of balance, interconnectedness, and transcendence (McCormick, 1996)." (Twigg & Hagen, p. 14)

"A circular, rather than linear, way of thinking puts the focus of the world view on relationships and balance. From this perspective mental health can be understood as achieving a balance between the parts of the self - emotional, physical, mental and spiritual; finding one's place in relation to other human beings, finding one's place in relation to mother earth, and looking beyond oneself (Chansonneuve, 2007)." (ibid., p. 14)

"Montour, speaking from the twin perspectives of a person of Mohawk ancestry and a medical practitioner, says:  
'The Medicine Wheel concept from Native American culture provides a model for who we are as individuals. We have an intellectual self, a spiritual self, an emotional self, and a physical self. Strength and balance in all quadrants of the Medicine Wheel can produce a strong, positive sense of wellbeing, whereas imbalance in one or more quadrants can cause symptoms of illness. Addressing issues of imbalance can potentially diminish your patient's symptoms and enrich their quality of life. (Montour, 1996).'" (ibid., p. 14)

Given this background information on the Medicine Wheel teachings, it seemed plausible that individual resources (such as articles, reports and websites) classified in such categories as "Society" or "Law" or "Education", etc. could be reclassified in various quadrants of the Medicine Wheel. Ideally, reclassification of these resources would depend on whether their main focus pertained to emotional, spiritual, mental or physical aspects of life. At the same time, consideration was given to the possibility that some difficulties might emerge due to the broad nature of the quadrants. On the other hand, many resources may be too holistic to be classified under only one quadrant. This was one reason for seeking feedback through the survey.

The survey (see Appendix A) was a mix of closed and open-ended questions and was also a mix of short and long answers. The questions were not extensive and comprehensive in terms of thesaurus-building; however, there were open-ended questions about the kinds of preferred terminology that respondents would like to see used.

It should be noted that the survey was revised after its first dissemination, which was in effect the pilot group. In its original format, the survey asked no specific questions about thesaurus changes; the author assumed that respondents would offer their own thesaurus or terminology changes without any specific examples for them to jog their memories, but this was not the case. As a result, six examples of thesaurus changes (i.e., in Question #3) were added to the revised version of the survey. There were no further changes made to the survey questions.

### **Survey Dissemination**

Shortly after obtaining Ethics approval from the University, the survey was distributed via a number of library and academic-related conferences and gatherings, most of which had accepted presentations by the author. The decision to present at these events and disseminate surveys was made for several reasons:

- Surveys sent to random samples are notorious for low response rates and this situation would be exacerbated in the case of Aboriginal respondents due to the lack of interest in library research by Aboriginal peoples noted earlier in this paper.
- It seemed likely that participants who were library workers would be more responsive to completing a survey than users, given that, in general, library staff would be more interested in library research (however, at two of the five events, the participants were users).
- It was assumed that the presentation on the Indigenous Studies Portal database at the gatherings would help "concretize" the abstract nature of the survey. For instance, the presentation was expected to make it easier for those participants unfamiliar with the database to see the linear nature of the categories (or subject headings) on the homepage, and to gain a better understanding of what the survey was trying to accomplish in terms of their restructuring.
- Face-to-face interaction within Aboriginal communities is preferable and more likely to generate responses.
- Face-to-face interactions at the gatherings provided the opportunity to offer rewards of books by way of a draw, thereby generating instant gratification for those participants winning the book prizes.
- Enough funding was available to attend and present at these gatherings (given that two of them were held in my community and two others were geographically and chronologically close to each other) through the University's New Faculty Start-up Research Fund.
- The idea of using other methods (including focus groups or one-on-one interviews) was prohibitive, not only in terms of costs for the author but also in terms of the time factor for respondents (which would again decrease the possibility of finding participants).

The five gatherings where surveys were distributed were as follows:

- The Tribal Archives, Libraries and Museums (TALM) conference, held in Portland, Oregon, Oct. 20-22, 2009.
- The Canadian Association of University Teachers (CAUT) Workshop for Aboriginal faculty, held in Saskatoon, Saskatchewan, Nov. 13-15, 2009.
- The Celebrating Indigenous Knowledges: Peoples, Lands and Cultures international conference, held at Trent University, Peterborough, Ontario, June 16-20, 2010.
- National Aboriginal Day celebration, Indian and Northern Affairs Library, held in Gatineau, Québec, June 21, 2010.
- A regular meeting of the Library Services for Saskatchewan Aboriginal Peoples Committee, held at the University of Saskatchewan Library, in Saskatoon, Saskatchewan, Nov. 29, 2010.

In addition, in February, 2011, an email providing an online link to the survey was sent to a related listserv, the Canadian Library Association, Library and Information Needs of Native Peoples Interest Group, known as "abin", to encourage participation in the survey from a wider but still relevant audience. As this method did not provide face-to-face interactions, participants were asked to print the survey, complete it and fax it back to the author.

## **Research Findings**

### **Summary of Gatherings and # of Participants**

Table 1 outlines the gatherings where the surveys were disseminated with their respective locations, dates, numbers of participants and notes on anonymity.

Table 1: Summary of gatherings and # of participants: N= 53

<u>Name of Gathering</u>	<u>Location of Gathering</u>	<u>Date(s) of Gathering</u>	<u># of Participants</u>	<u>Notes</u>
Tribal Archives, Libraries & Museums Conference	Portland, Oregon	Oct. 20 – 22, 2009	21	Pilot group – 3 individuals provided their email addresses on their surveys, thus forfeiting their anonymity
Aboriginal CAUT Workshop (Canadian Assoc. of University Teachers)	Saskatoon, Saskatchewan	Nov. 13-15, 2009	10	5 of the 10 surveys were completed by participants known to the author and so lacked anonymity
Celebrating Indigenous Knowledges – Peoples, Lands, and Cultures Conference	Trent University, Peterborough, Ontario	June 16-20, 2010	5	

National Aboriginal Day, Indigenous Studies Portal Demonstration	Indian and Northern Affairs Canada Library, Gatineau, Québec	June 21, 2010	10	3 of the 10 surveys were completed by participants known to the author and so lacked anonymity
Library Services for Saskatchewan Aboriginal Peoples Committee Mtg	University of Saskatchewan Library, Saskatoon, Saskatchewan	Nov. 29, 2010	6	These 6 surveys lacked anonymity as the investigator knew all of the respondents.
Other (Invitation to abin* listserv members to complete survey)	Members were directed (via email) to a URL with the survey and to fax the printed and completed survey back	Survey was available on a website from Feb. 22 – March 7, 2011	2	These 2 surveys lacked anonymity due to the evident fax number on completed surveys
Total # of Participants			53	

\* Denotes Canadian Library Association, Library and Information Needs of Native People Interest Group

As can be seen in Table 1, at three of the gatherings and amongst the listserv group, participants were affiliated with libraries or cultural institutions. The other two gatherings were more academic in nature and these groups represented library users rather than library staff.

### Demographics of respondents

Most respondents (33 out of 53) identified themselves as working in libraries; 8 identified as working in archives, 3 in museums and 6 in cultural centres. The numbers won't add up, however, as some identified themselves as working in multiple types of organizations (i.e., library and archives; library and museum; library and cultural center; archives and museum; and some in libraries, archives, and museums or cultural centres). Still others identified themselves as working in tribal preservation centres (2), universities (12), a teachers' association, government (2), small consulting business, and literacy.

Although there were no survey questions that asked respondents to self-identify in terms of racial or cultural background, respondents were both Aboriginal and non-Aboriginal. This can be stated because the investigator knew approximately 30% of the respondents, and because she met and interacted with many of the respondents at the conferences and gatherings, some of whom self-identified as Aboriginal or not at that time. It is not known with accuracy whether any particular completed survey was responded to by an Aboriginal person or not due to the anonymity of approximately 70% of the completed surveys (i.e., for those participants who were not known by name to the investigator). In my opinion, this was not an important factor influencing survey

results, primarily because I anticipated that almost all respondents would be very familiar with Aboriginal culture, given the nature of the conferences and gatherings attended.

### **Type of classification system used in the workplace**

Table 2 is helpful for portraying the variety of classification systems used in the range of workplaces of participants.

Table 2: Type of classification system used in the workplace

Type of Classification System	Number of Participants	# of Participants Using More than one Type of Classification System
Library of Congress (LCCS)	20	8
Dewey Decimal System (DDCS)	11	4
Sears List of Subject Headings	2	2
Canadian Subject Headings (CSH)	2	2
Rules for Archival Description (RAD)	3	2
Architectural (sic) Thesaurus	1	0
National Library of Medicine (NLM)	1	1
LC, with an expanded E98 for Inuit	1	1
INAC (Indian & Northern Affairs Canada) Subject Thesaurus (IST)	2	2
Other (i.e., chaos!, don't know)	10	0

The most common type of classification system identified by participants was the Library of Congress (with 20 responses), followed by the Dewey Decimal System (with 11 responses). Please note in Table 2 that some locally modified systems were identified (such as LC with an expanded E98 for Inuit, and the Indian and Northern Affairs Canada – or INAC – Subject Thesaurus). Of interest is that many of the workplaces used more than one type of classification system, i.e., a combination of LC & DDCS, of LC & RAD, or of LC and a locally modified system. The data in Table 2 indicate that 60% of the libraries that used LCCS did not also use DDCS, which suggests that they were either non-Education branches of academic libraries or government libraries. Similarly, 7 of the 11 (or almost 65%) of libraries used DDCS but did not also use LCCS, suggesting affiliation with either public or school libraries. These distinctions were not requested via specific survey questions.

Although neither the Art and Architecture Thesaurus nor the INAC Subject Thesaurus (IST) are classification systems, respondents referred to them as helpful tools for describing their library materials. As a point of clarification, both participants who referred to the IST also stated that their Library used LC as a classification system. This confusion about including a thesaurus as a type of classification system may suggest that the survey question should have asked for type of system of subject headings rather than type of classification system, given that the latter consists of call numbers which delineate where a book would sit on a shelf. In contrast, this study is more concerned with the terminology used to describe library materials, i.e., the subject headings.

For those interested in finding out more about the IST, there is also an "About the IST" page on the INAC website which explains its bilingual nature (including nearly 3000 terms in English and nearly 3000 terms in French). It also describes its scope and purpose as well as providing discussion on some of the preferred terms and use of word order that is more associated with natural language (such as "Treaty Rights" instead of "Rights, Treaty").

Also, the INAC Subject Thesaurus provides a listing of the expanded thesauri for several terms, such as the topic of Inuit: Inuit agencies, Inuit ancestry, Inuit art, Inuit communities, Inuit councils, Inuit government, Inuit groups, Inuit lands, Inuit organizations, Inuit people, Inuit population, Inuit settlements, Inuit youth, and Inuk. The IST also expands other terms such as "Aboriginal" and "land".

### **Dissatisfaction with mainstream knowledge classification systems**

Only 34 participants responded to Question #3: "Do you have some ideas about how IK materials might be classified better to help Indigenous people access these materials? If so, what kind of changes would you like to see happen?". Of these 34 respondents, 20 made substantial comments, while 14 others responded with: "No, I don't how IK materials might be classified better". Of the 20 who made substantial comments, 10 (or half) expressed some kind of dissatisfaction with the way that LC and other mainstream classification systems described and classified Indigenous Knowledge materials. Some examples of such responses are as follows:

- "I don't appreciate Native Knowledge all categorized in 'American History' and then in geographical areas of the States".
- "LC Subject Headings are antiquated and do not reflect terminology currently used."
- "We use many of these [mainstream] terms as non-preferred terms, leading to a preferred term. That way, if your system is linked to a search engine, it captures terms searchers may use and lead them to the preferred term." (underline is respondent's emphasis)
- "[I would prefer an] "entire classification dedicated to Indigenous Knowledge regarding all aspects of subject areas: religion, language, history, pre-history, science and technology."

- [I would prefer] "More use of specific tribal names".
- [I would prefer changes] "According to the local epistemology as it is rooted in the land".
- "More subject headings used and more specific subject headings used. For example: Blackfoot – eurocentric term used in Canada; Blackfeet – eurocentric term used in U.S.; Niitsi tapi – Aboriginal term. Or, Ojibwe (eurocentric), Anishinaabeg (Aboriginal)."
- "LC sadly lacking in classification for Inuit."
- "I prefer local names, or ones in the Native language of the community. I also prefer greater distinction – not 'Aboriginal Peoples', rather 'First Nations, Inuit and Métis, etc.'"

Furthermore, six respondents out of the 20 suggested changes without expressing dissatisfaction, as follows:

- "It would be great to have one word for the whole world. What that would be would not be for me to say. But in the meantime, what about a pop-up message on each subject heading and list the term accepted by each country or area (i.e., Canada uses 'Aboriginal'; States uses 'Native', New Zealand uses 'Maori', etc.)."
- "Begin from 'the land', i.e., a geographical matrix."
- "Maybe classify American Native / Alaskan authors alphabetically."
- "I do legal research. Legal references such as 'Aboriginal title', 'Aboriginal rights', 'treaty rights' are most useful".
- "We could have research headings / categories 'distinctive rights-bearing peoples' or 'oral traditions' or 'performance laws' or 'Aboriginal Elder Wisdom' or other headings grounded upon Indigenous Knowledge."
- "Add First Nations, Inuit and Métis terminology used by the Ministry of Education, Ontario."

Still a few others (3) were concerned that if changes were made, there would need to be linkages from the new terminology to the old, as follows:

- "If a major change is to be made, it has to consider / link to the old terminology, at least temporarily. If ever you changed these subject headings, I think a 'hidden link' should remain, so that the search results would not be limited (i.e., if I still use an old terminology, I don't want to be penalized)."
- "When changes occur, a link from the old names to the new subject heading would be very helpful."
- "I am a cataloguer for a county library system and I would not want to lose the information from around 'see' and 'see also' references provided by the LC authorities; therefore I would download the LC authority into my system, then modify it to include the locally accepted subject heading. You do want to keep headings that non-Native peoples use too."

The linkages referred to in these responses remind us that changes to subject headings and thesauri have implications for Information Technology Systems and the workload and resources (including software) associated with integrating these changes.

### Specific examples of preferred terminology

For the six specific examples of changes to LC Subject Headings that were put forward in the survey questionnaire, there were no clear "winners" for preferred terminology; that is, generally, there was not a "one-word-fits-all" solution. This is not surprising, given the diversity of perspectives and demographics between and among various Indigenous groups; however, it is helpful to see the various preferred terms that emerged and the popularity of each.

The "**Indians of North America**" subject heading was the example that elicited the most response / change, with 24 people responding for change (out of a possible 32, as the 21 surveys collected from the pilot group did not have this multi-part question). Some of these 24 participants provided more than one suggestion for the term. Here are the terms that emerged, with an account of how many responses agreed with the term:

- Primary term of **First**, as in First Nations, First Peoples, First Nations of North America, or First Nations, Inuit and Métis (10 respondents). [It should be noted that those who responded in this way were generally associated with public libraries].
- Primary term of **Indigenous**, as in Indigenous Peoples, Indigenous Peoples of North America, or North American Indigenous Peoples (8 respondents, plus 2 respondents also suggested "First Nations" or "Aboriginal" in addition to the term "Indigenous"). One of the 8 respondents also suggested Indigenous Peoples – cultural group name (eg. Anishnabe). [It should be noted that those who responded with "Indigenous" were generally associated with a university, that is, the CAUT and Trent groups.]
- Primary term of **Aboriginal**, as in Aboriginal Peoples of North America, or Aboriginal People of Turtle Island (5 respondents)
- Primary term of **Native**, as in Native North American (1 respondent)
- Primary term of **Tribal**, as in Tribal affiliation (1 respondent)

It is interesting to note that one participant who preferred the term "Native North American" also thought that the term "Indian" was acceptable:

"Personally, I am hoping that more people reclaim the term 'Indian'. I believe that this would be a positive step in healing from the effects of colonization. Once First Nations people reclaim the term for themselves, then I am hoping they make that well-known to non-Indigenous peoples so that we all can put the negativity of the term 'Indian' behind us."

The "**Native peoples**" subject heading also had a heavy response, although two respondents thought that no change was required. As for the rest:

- Primary term of **Indigenous**, as in Indigenous or Indigenous Peoples (10 respondents, including two responses that were combined with First Nations and Aboriginal terms). One of these respondents suggested: "Indigenous – cultural group (e.g., Haudenosaunee)". Another respondent in this group suggested: "Aboriginal (Canada) / Native American (United States) / Indigenous (Int'l)".
- Primary term of **First**, as in First Nations or First Peoples or First Nations / Inuit / Métis (9 respondents, including one who also stated: "First Nations / Inuit – to me, this term [i.e., Native] does not include Métis.").
- Primary term of **Aboriginal**, as in Aboriginal or Aboriginal Peoples (9 respondents)

There seemed to be fairly equal support for each of the three terms suggested above, i.e., Indigenous Peoples, or First Peoples, or Aboriginal Peoples, with only two people suggesting the Native Peoples subject heading could remain as is.

The "Indian religion" or "Indian mythology" subject heading provided the most diverse responses:

- Primary term of **Indigenous**, as in Indigenous spirituality, Indigenous mythology, Indigenous epistemology, or Indigenous knowledge (8 respondents)
- Primary term of **Aboriginal**, as in Aboriginal spirituality, Aboriginal philosophy, Aboriginal religion, Aboriginal worldview, Aboriginal storytelling, Aboriginal understandings, or Aboriginal belief system (8 respondents)
- Primary term of **First**, as in First Nation spirituality or First Nation religion (4 respondents)
- Primary term of **Native**, as in Native spirituality or belief system, or Native religion (2 respondents)
- Primary term of **Tribal**, as in "Less parsimonious headings -> Tribal group (i.e., Cree or Mohawk, etc.) + beliefs" (1 respondent)

The "**Riel Rebellion**" subject heading generated the fewest responses:

- Riel or Métis Resistance (with or without the dates, i.e., 1869-1870 or 1885) (8 respondents). One of these respondents stated "it was not technically or legally a rebellion".
- Louis Riel (1 respondent)
- Riel Movement (1)
- Riel Legacy (1)
- Riel's Story (1)
- Métis Struggle for Self-Determination (1)
- Aboriginal History (1)
- No change required (1)

As for the "**Indian philosophy**" subject heading, there was, again, a lot of variety in the responses:

- Primary term of **Aboriginal**, as in Aboriginal worldview, Aboriginal ways of knowing, Aboriginal philosophy, Aboriginal cultures / practices / traditions, Aboriginal beliefs & practices, or Aboriginal knowledge (9 respondents)
- Primary term of **Indigenous**, as in Indigenous worldview, Indigenous philosophy, Indigenous thought, Indigenous ontology, or Indigenous knowledge (7 respondents)
- Primary term of **First**, as in First Nations philosophy, or First Nations ways of knowing (2 respondents)
- Primary term of **Native**, as in Native philosophy, or Native North American philosophy (2)
- Traditional ways of knowing (1)
- Worldview (1)

The sixth example, the "**Native American**" subject heading generated the following suggestions:

- Primary term of **Indigenous**, as in Indigenous Peoples, Indigenous Americans, or Indigenous Peoples of North America (7 respondents). One of these respondents stated: "Show where these words are used, eg. Native Americans / American Indians (U.S.A.) / Aboriginal (Canada) / Indigenous (Int'l)"
- Primary term of **Aboriginal**, as in Aboriginal, or Aboriginal Peoples (6 respondents)
- Primary term of **First**, as in First Nations, First Peoples, First Nations, North America, or First Nations / Inuit (to me, this term [i.e., Native American] does not include Métis), or First Peoples – United States (6 respondents)
- American Indian (2)
- No change required (1)

Summarizing these responses, it seems that the terms "Indigenous", "Aboriginal", "First Nations" and "Native" were recurring preferred terminology throughout the six examples of subject heading changes (excluding the Riel / Métis example).

Other thesaurus changes suggested by respondents include:

- From "Indians of North America – Kings & rulers" to "Aboriginal chiefs or leaders".
- From "Costume" (for First Nations) to "Regalia".
- "Wampum" does not equal "Indian money".

### **Familiarity with the "Medicine Wheel" concept**

The next phase of results pertain to the other reason for conducting this study, namely, to obtain feedback and suggestions on how to restructure the categories of the virtual

library, the Indigenous Studies Portal, so as to resolve the issue of a Eurocentric construct "greeting" users on the homepage of the website. The primary focus was to ask for feedback on the idea of restructuring the iPortal categories by rearranging them within a Medicine Wheel framework. In addition, the survey also included a question concerning alternative conceptual frameworks for restructuring categories that might be more appropriate or useful.

First, respondents were asked about their familiarity with the concept of the Medicine Wheel. About two thirds (35 out of 53) of the respondents indicated that they were; 16 respondents indicated they were not (or not sufficiently familiar to respond meaningfully). They were also asked what the Medicine Wheel meant to them. A wide variety of responses was generated, falling generally into the following six themes:

- Interconnectedness
- Spiritual guide for living a balanced way of life
- A tool for healing both body and soul
- A reference for teachings related to Indigenous Knowledge
- Ceremonial / sacred purpose or significance
- Medicine Wheel is not accepted as a traditional concept

Please note that all of the following responses in this section are verbatim (not paraphrased) but are absent quotations for simplicity.

Comments related to the "Interconnectedness" theme include:

- All life, all knowledge, interconnected in a circular manner
- The circle is the link and source of all things: relationships, learning, growing, expressing...
- Interrelatedness and respect for all things and directions
- A holistic learning system
- A belief in a way of life based on the four directions, the interrelatedness of all things

The second theme, that of "Spiritual guide for living a balanced way of life", included such comments as:

- Four directions symbolic of the four hills of life
- Holistic way of living your life: Balance
- Four directions, four aspects of life; individual guidance (spiritual, emotional, mental, physical), four seasons, etc., earth elements, circle concept
- Power of a greater spirit in the circle of life / importance of directions
- 4 directions, 4 colors, 4 people, 4 stages of life – a continuum, a reminder that we can have and do need balance in everything we do.
- [Four others just stated] "Balance"

Another theme, "A tool for healing both body and soul", was characterized by such comments as:

- It is a symbol of the power of healing for Northwest Native and plains people
- An Aboriginal philosophy to heal the body and the soul
- An interrelated system of classifying ideas, often related to health

The theme "a reference for teachings related to Indigenous Knowledge" captured comments such as:

- A way of understanding concepts of the directions, colors, and corresponding knowledge of Aboriginal ways of knowing
- Cultural knowledge, traditions of Native people
- The Medicine Wheel is a conceptual framework for illustrating a particular Indigenous group(s) belief system
- Means of categorization within First Nations belief systems

The "ceremonial / sacred purpose" theme was expressed as follows:

- Medicine wheels, often considered sacred, were used for ceremonial, religious and teaching purposes. To me it is a holistic, inclusive symbol.
- The Medicine Wheel means ceremonial or holds religious significance to me.

The last theme, that of "Medicine Wheel is not accepted as a traditional concept" was characterized by a discomfort with the teachings of the Medicine Wheel, that it is problematic because not all Aboriginal people across Canada and the United States accept its teachings:

- There is evidence to indicate that the medicine wheel is not a traditional concept. Certainly it is not tradition for First Peoples of Eastern North America.
- Andrea Bear (Malecite) says Medicine Wheel is not an Indigenous concept. For me, it does create static categories in fours (Race – color irks me most!!!). It is a concept that illustrates interconnectedness but a tree shows that better than a wheel.
- This concept is not consistent with my cultural understandings but I realize it holds much respect for many Indigenous peoples across what is now central Canada, and many students are familiar with it.
- It is my understanding that not all tribes used such 'circular' teachings.
- It is not essential for my tribe, though I'm sure our people could obtain deeper healing from it if we were to know more, centered in the belief that all Indian people can heal other Indian people.

## Thoughts on using the Medicine Wheel concept as a tool for Indigenous Knowledge Organization (Question #6)

Although 23 respondents provided some kind of answer to the first part of this question (Part A, i.e., in the affirmative and with an explanation of "how"), 7 of the responses were not legitimate answers as they either answered with a brief yes and that was it, or they answered how it could NOT be used or suggested an alternative. These responses will be reviewed in the next section.

Some of the valid responses (that is, those that explained how the Medicine Wheel could be used) were related to the themes of the previous question, such as the significance of the Medicine Wheel. As a result, there were some responses that were associated with "interconnectedness", the four directions (but linking this to geographical groupings), and ways of knowing, while others were linked to the spiritual / ceremonial theme. Once again, responses are verbatim (but without quotations):

- Showing interconnectedness.
- Groupings by geographical location (east, west, n. and south); groupings by associated values of each direction.
- Explains beliefs, values, worldview.
- Medicine Wheels provide a contextual framework to understandings and by extension, research (see Dr. Lillian Dyck's Medicine Wheel analysis).
- Classify Indigenous Knowledge by geographic region (N., E., S., W.) Classify Indigenous Knowledge by Mental / Emotional / Spiritual / Physical.
- Maybe find four overarching topics that relate in some way to the four directions and classify materials that way.
- Less linear, so able to show relationships more clearly. More holistic in nature. Webbing possibilities and uses such as Venn [sic] diagrams can show relationships more effectively. Less hierarchical.
- To some extent only. The Medicine Wheel can represent ideas but I use the concept of the Medicine Wheel from a spiritual perspective.

On the other hand, there was strong opposition to the use of the Medicine Wheel concept for Indigenous Knowledge organization. Here are some of the "most vocal" responses (again, verbatim):

- Some traditionalists may object to the outside access this way would provide to "plastic shaman".
- Not all cultures are familiar with it, and not applicable to all tribes.
- Currently the Medicine Wheel has been used / appropriated by non-Native practitioners of health in many different ways.
- Using the Medicine Wheel to classify materials may be too broad of a tool.
- It doesn't apply to all Aboriginal / Indigenous ways of knowing for different tribes. If we do this, we are only duplicating colonization principles all over again – self-inflicting this time. And a blanket application will not work.
- Far too confusing. Too many groups with differing belief systems.

- Medicine Wheel is more a philosophical / spiritual thing that could not necessarily easily include "Academic" stuff.
- I prefer that the Medicine Wheel not be used for this. Particularly for [collections] that are much broader than health.

### **Alternatives to using the Medicine Wheel for organizing Indigenous Knowledge materials**

When asked for alternatives to be used for organizing Indigenous Knowledge materials, responses were varied, but most presented ideas as opposed to providing a "how to" guide. The following are verbatim responses (without quotations):

- Modified hierarchical structure that shows interconnection.
- The clan system.
- A panel of thinkers could be convened to go over these questions and concepts.
- Features of the landscape.
- Creation stories, legends.
- As scholarship moves towards using more appropriate language to talk about Indigenous ontologies and epistemologies, there may be a way to tie this in to how material is classified.
- Spiritual, Physical, Emotional, & Mental.
- Not presenting materials in a manner that reflects time in a linear manner.
- Presenting materials relating to things that possess energy (eg. all of the natural sciences) together, and separate from these concepts created within the minds of human beings (eg. social sciences, mathematics, arts).
- Someone suggested a watermark on the homepage. But keep the basic structure. I like the basic present set-up since it is like other sites. I grow weary quickly of creative layouts that I get lost in.
- Icon links associated with some categories could be introduced...like the notion of trackers' trails, i.e., zoos use pathway prints > bear > lion...
- Asking Elders, Knowledge Keepers?
- Traditional Knowledge; ways of knowing; local knowledge; cellular knowledge.
- Tree of knowledge / photos / symbols / artifacts / traditional items...this allows for more flexibility than a Medicine Wheel.
- Canadian Subject Headings might be used in combination with the Brian Deer System for example.
- Using terms that Aboriginal peoples themselves use. However, it is important to also use the outdated Eurocentric terms to assist access.

### **Opinions on how to classify a book on spiritual health**

The final question of the survey solicited responses on assigning subject headings to a book on spiritual health, asking if it should be classified under health or spirituality or both. The purpose of this question was to see how respondents might deal with the complexity of classifying holistic concepts. There was a tendency for most participants

(37 out of 53, or 70%) to say "both", with a common qualifier that cross-referencing from one to the other would be the most helpful. There were, however, a few more in-depth or insightful (and verbatim) responses such as:

- Our patrons are more apt to look for the book under Health.
- Spirituality classification please. In non-Native classification system, there is no room for spiritual healing but rather it would be the science of medicine. Native people cannot be healthy without spirituality and spirituality would not be complete without healthy mind, body, soul.
- If you mean being healthy spiritually, I would put it into religion with a second heading for psychology and a third for health and well-being. If you mean healing the body through spirituality, I would put it under health with a second heading for religion.
- Both, I would have more chance of finding it. As a non-health researcher, I don't tend to use "health" related search terms – but I might be very interested in a book about spirituality.
- Neither. I would have to see the overall system organization before making that call, as well as who wrote it for what purpose. Knowledge of the audience is key.
- Health – I don't see these things as distinct entities. Spirituality is an aspect of health.
- Both as both can be linked. Your physical health may depend on your spirituality.
- Both. Also, depending on whether your subject classification is pre-coordinated or post-coordinated. In our system, we do have some post-coordinated terms so there would be a term, "spiritual health".
- It might depend if all the books in the collection were about Native people or if it was one book on Native spiritual health in a larger academic collection. I would tend to put the book in the "B"s (BL for spiritual) where there are other helpful books on recovery / health / spirituality, etc.

In summary, although most participants preferred having the choice to assign both health and spirituality subject headings to a book of this nature, some felt that the decision should be based on a number of factors, including consideration of the library's clientele and how they are likely to search; consideration of the library's organization system; and consideration of the nature of the library's collection (i.e., Is it basically a health collection, or is it more than that?).

### **Survey Limitations**

Unfortunately, most respondents did not take advantage of the opportunity to expand on thesaurus-building examples, perhaps because they could not think off the top of their heads about specific mainstream subject headings that frustrated them without having the benefit of a library catalogue or thesaurus in front of them. This is one area where a focus group would be able to obtain much more comprehensive and useful data.

In addition, the nature of responding to survey questions (and at a conference or gathering where time is very limited) is not necessarily conducive to respondents providing thorough answers or even responses that require a bit more thought (such as long answers). This would partially explain why many questions went unanswered. Other participants, especially those who were not associated with libraries and archives, may not have understood how they could contribute to the abstract nature of some questions.

Similarly, and as mentioned previously, more effort could have been made to clarify the difference between classification systems and subject headings. For instance, a glossary of terms used in the survey with their definitions could have been provided with the survey for the benefit of those who were not familiar with the task of describing materials.

Furthermore, the lack of response to the online survey method (only two participants responded in this way) may have been due to a perceived lack of anonymity for participants, given that their fax number on the returned survey could partially identify them. It is also possible that some readers might feel that the survey was not anonymous because the investigator was in the room during the dissemination of the other surveys at the gatherings. While this may be true for 30% of participants (i.e., those whom the investigator knew personally), there were many other participants (i.e., 70%) whom the investigator did not know (i.e., by name or even where they were from). Another factor that should be considered is that it is difficult to maintain anonymity when conducting research with Indigenous participants given that the likelihood of obtaining participants may be related to whether or not the participants know the investigator. An additional complicating factor is that three participants (whom the investigator did not know) wrote their names and/or contact information on their surveys so that they could be notified when the research findings would be published. In this case, some participants were willing to sacrifice their anonymity due to their interest in hearing about the research findings. For this study, although anonymity has been deemed a complex issue, it is not certain how this has affected the survey results. At the very least, confidentiality of participants' responses has been maintained as none of the participants has been identified in this article.

## ***Conclusion***

This paper has provided considerable background information on the issues relating to thesaurus-building and classification systems for describing and organizing Aboriginal-related library materials. It has also provided some useful information gathered from a survey on thesaurus-building (and matches the sentiments of many of the cited studies that Indigenous peoples are dissatisfied with mainstream subject headings) and possible conceptual tools that might be used for improved descriptions and organization of these library materials. The results of the survey as discussed in this paper are rich and varied and, as occurred for David Farris, do not offer a clear consensus for a one-size-fits-all terminology or classification system for describing Aboriginal library materials.

But this lack of consensus has raised the notion that it may be unrealistic to expect agreement, considering that participants in the survey came from differing tribal and language groups (for instance, Cree, Anishnabe, Métis and Inuit) and geographic locations and landscapes. Participants also came from varied walks of life, given their associations with libraries, archives, museums, cultural centres, universities, tribal preservation centres, government and literacy. Thinking back to Godbold's article, there was an expectation that each clan would have its own vocabulary. Extrapolating from Godbold's research, the wide range of terminology preferences highlighted in the current article points to the need for local thesauri (developed with input by Indigenous users) for each library.

In my opinion, two hypotheses can be generated from this study. For instance, there seems to be some evidence that users of academic libraries in Canada prefer the term "Indigenous Peoples" rather than "Indians of North America", whereas those staff at public and school libraries in Canada preferred the term "First Nations", although if a non-academic library incorporated the term "Aboriginal", there would likely not be huge objection to it, given that this term is also popular. Nonetheless, it would be wise to test these hypotheses first by consulting with various libraries' Indigenous communities of users before making this call. At any rate, it is also important to note that none of the participants in the survey voted to keep the LCSH term.

Other proposed thesaurus changes might also be tested: Riel Rebellion (in LCSH) is not a preferred choice; whereas, the term, Riel or Métis "Resistance" seems to have a lot of support. "Indian religion" is also not popular; many preferred a heading that incorporated "spirituality" (either Indigenous or First Nations).

As for the structuring of the database, survey responses indicated that there is both support for and opposition to the concept of the Medicine Wheel as a structural tool for organizing the categories. Opposing voices took the shape of resistance to its universality as an Indigenous concept and as a teaching tool better suited to spirituality and healing than academia. On the other hand, no other conceptual tool had resounding support either, with alternative suggestions such as "using the clan system", "using something that shows interconnection and non-linearity", and using "features of landscape" were vague but were not repetitive. It would be interesting to put these suggestions forward with other groups and see if a consensus emerges. Perhaps the best advice was for more consultation (i.e., "a panel of thinkers could be convened to go over these questions and concepts") and with strong input from Elders (i.e., "Asking Elders, Knowledge Keepers?").

Also, interesting and complex ideas emerged regarding the classification of a book on spiritual health. It was enlightening to see respondents' reflections on the multitude of complex factors that could influence the assignment of subject headings to holistic Indigenous materials.

Finally, this study incorporated the views of only about 50 people, and I would encourage others to conduct similar studies relating to libraries and Indigenous Knowledge organization, or more complex studies (i.e., involving focus groups or one-on-one interviews). For instance, a focus group led by a skilled facilitator, especially one familiar with developing local thesauri and with Indigenous communities, could elicit responses for a much broader range of examples of LC Subject Headings that would incorporate the specific needs and values of a particular community. Another solution might be similar to what was discussed in Godbold's article, that is, to provide the opportunity for Indigenous community members to tag the Indigenous Knowledge materials in the collection.

In terms of conducting a more in-depth study concerning the culturally relevant structural / organizational tool, an experienced facilitator or interviewer could tease out more in-depth responses about the "how to" of organizing categories according to, say, landscape features, a clan system, or legends and creation stories. Art materials and guided meditation techniques might also be used to facilitate this brainstorming process.

Another solution might be to bring together some experts in IKO to determine how the Brian Deer Classification System could be modified to better accommodate large (and growing) academic collections, given that it was originally developed in the 1970s for a small governance-related collection.

One last suggestion would be for others to replicate this study with their own participants and disseminate the results to further develop research in this area.

### ***Acknowledgements***

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## ***Appendix A: Indigenous Knowledge Organization Survey***

### **Indigenous Knowledge Organization: Restructuring IK in Libraries, Archives and Museums**

**Survey Questionnaire  
Prepared by Deborah Lee  
Indigenous Studies Portal Librarian and Team Leader  
University of Saskatchewan**

1. What type of cultural organization do you currently work in (circle all that apply)?
  - Library
  - Archives
  - Museum
  - Cultural centre
  - Other (please explain)
  
2. What type of Classification System or Subject Headings do you currently use for structuring Indigenous Knowledge materials in your organization?
  - Library of Congress
  - Dewey Decimal System
  - Sears List of Subject Headings
  - Brian Deer Classification System
  - RAD
  - Other
  - A locally modified system, if so, please explain:
  
3. Do you have some ideas about how Indigenous Knowledge materials might be classified better to help Indigenous people access these materials? (Circle yes or no below.)

Yes: If so, what kind of changes would you like to see happen?  
For instance, a change of subject heading such as

  - "Indians of North America" to \_\_\_\_\_
  
  - "Native peoples" to \_\_\_\_\_
  
  - "Indian religion" or "Indian mythology" to \_\_\_\_\_
  
  - "Riel Rebellion" to \_\_\_\_\_
  
  - "Indian philosophy" to \_\_\_\_\_
  
  - "Native Americans" to \_\_\_\_\_

**Any other terminology or other suggestions?**

**No, I'm not sure how IK materials might be classified better to improve access to these materials by Indigenous people.**

4. **Are you familiar with the Medicine Wheel concept? Yes      No**
5. **If so, what does the Medicine Wheel mean to you?**
6. **If you are familiar with the Medicine Wheel concept, do you think it could be used to classify Indigenous Knowledge materials?**
  - a. **Yes. If so, how might it be used? (What might some strengths be of using such a concept for classification?)**
  - b. **No, the Medicine Wheel could not be used to classify IK materials because (please explain):**
7. **Aside from using a Medicine Wheel concept, how else might Indigenous Knowledge materials be classified in a way that reflects an Indigenous perspective?**
8. **If you had a choice in classifying a book that was about spiritual health, would you classify it under spirituality or health or both? Please explain.**
9. **Would you be willing to talk more about Indigenous Knowledge organization or classification? Yes      No**

**If yes, please contact me.**

10. **Would you like to be informed of where the results of the survey might be published? Yes   No**

**If yes, please contact me.**

**Thank you very much / hiy hiy / meegwech for your participation in this survey.**