Indigenization of Knowledge Organization at the Xwi7xwa Library Ann M. Doyle¹, Kimberley Lawson², Sarah Dupont³

Abstract

This paper examines the Indigenization of knowledge organization within library and information studies through conceptual analysis and a descriptive case study of an Aboriginal academic library, the Xwi7xwa Library at the University of British Columbia, Canada. We begin by locating the library in place and time, review its historical development in the context of Indigenous education in Canada and describe the evolution of its unique Indigenous classification scheme and related Indigenous subject headings. This place-based analysis leads to a particular articulation of *Indigenization* and a conceptual framework for Indigenization of knowledge organization at the Xwi7xwa Library, which guide the practice of knowledge organization design and modes of mobilization at this particular Aboriginal library. The conceptual framework rests on two basic assumptions: firstly, that collection development is curatorial in nature and is the seminal step in library knowledge organization, and, secondly, that the Indigenized knowledge organization system is critical to effective Indigenous information and instructional services, programming and research at the Library. The final section presents future possibilities for the Indigenization of knowledge organization through convergences and collaborations with emerging networks of Indigenous scholars and Indigenous communities of knowledge within the context of new technologies.

Keywords: Indigenous Knowledge Organization; Canadian First Nations Libraries; Cataloguing; Aboriginal Classification Systems; Aboriginal Subject Headings

1. Introduction

The Indigenization of knowledge organization within library and information studies is an emergent field that is part of a larger global Indigenous cultural renaissance and burgeoning Indigenous scholarship (cf. Callison, 2014; Carter, 2002; Doyle & Metoyer, 2015; Lawson, 2004, 2014; Moorcroft, 1993; Russell, 2005; Yeh, 1971). In this paper we examine the Indigenization of knowledge organization through conceptual analysis and a descriptive case study of the Xwi7xwa Library, the Aboriginal library at the University of British Columbia, Canada. The blended method reflects the dynamic

interrelationship between theory and practice: we learn from our daily professional activities that in turn inform theoretical frameworks, including concepts, that are then tested in practice through an interactive cycle (cf. Ranganathan, 1967) of applied research. We begin by locating the Library in place and time, and provide an account of its historical emergence within the context of Indigenous education in Canada including its associated Indigenous knowledge organization systems (KOSs). This place-based analysis, conjoined with a conceptualization of *Indigenization* leads to a provisional theoretical framework for knowledge organization that guides

^{1,2,3} Xwi7xwa Library, University of British Columbia, Canada

^{*} Corresponding Author: Ann M. Doyle, E-mail: ann.doyle@ubc.ca

the current practice of knowledge organization design and modes of mobilization at this particular Aboriginal library. The framework gives rise to our conceptualization of "knowledge organization in action" (based on Archibald, 2008) as we argue that Indigenous classification and metadata are fundamental to Indigenous user-centred information and instruction services, including teaching, learning and research.

The final section presents future possibilities for Indigenized knowledge organization at the Xwi7xwa Library through convergences and collaborations with emerging technologies and networks of Indigenous scholars and Indigenous communities of knowledge. The paper concludes that knowledge organization and its practices do not constitute an isolated endeavor that takes place in the back rooms of a technical services area or as decontextualized theoretical research. Rather, we argue that knowledge organization is fundamental to the Xwi7xwa Library's key services and programming, and is deeply embedded in organizational, political, and social contexts of a particular time and place, and within the global relations of those dimensions; its possibilities enabled or constrained within those contexts.

1.1 Terminology

Terminology in Indigenous contexts is varied and often contentious. We use the term *First Nations* to refer to Indigenous sovereign nations in Canada and individuals who identify as members. *Aboriginal* is used as an inclusive category for all Indigenous people in Canada, including First Nations, Inuit, and Métis people. *Métis* people are distinct Aboriginal peoples whose early ancestors were of mixed Aboriginal and European heritage

and who identify with a distinct *Métis* culture. *Indigenous* is used both in local and global contexts to refer generically to tribal peoples and includes *Aboriginal* people (Canada. Royal Commission on Aboriginal Peoples, Erasmus, & Dussault 1996, pp. xiv-xv). The term *wholism* denotes Indigenous understandings of the interconnectedness of everything in the universe as an epistemic and a spiritual principle (Pidgeon, 2008). This spelling is used to distinguish it from the Western philosophical concept of holism.

1.2 Location

The University of British Columbia (UBC) is located on traditional and unceded territories of the Coast Salish nations of the Musqueam, Squamish and Tsleil-Waututh in the city of Vancouver, British Columbia (BC) Canada. BC is home to approximately 203 First Nations, 34 First Nations languages and 59 dialects (First Peoples' Cultural Council, 2015) that generate a high degree of Indigenous cultural and linguistic diversity, and plurality of Indigenous histories, experiences, epistemologies, governance structures and knowledge systems. The UBC Library is one of the largest academic libraries in Canada with 14 branches and divisions, two campuses and a large multipurpose teaching and learning facility. The Xwi7xwa Library is the Aboriginal branch of the UBC Library and the only Aboriginal branch of a university library system in Canada. Chief Simon Baker of the Squamish Nation named the library Xwi7xwa (pronounced whei-wha) meaning echo in the Squamish language. True to its name, the mandate of the Library is to echo the voices and philosophies of Indigenous people through its collection, services, spaces and programming.

The Xwi7xwa Library collection is comprised almost exclusively of Indigenous materials consisting of approximately 15,000 items in digital and traditional formats including monographs, media, grey literature, serials, dissertations, maps, posters, realia, special collections and archival materials. Its catalogue is fully integrated with the UBC Library catalogue and supports its information services that are dedicated to interdisciplinary and multidisciplinary aspects of Indigenous studies for a diverse academic and community audience of Aboriginal patrons, the wider campus community and the general public. The unique building architecture reflects a traditional Salish circular pit house form and is a clear statement of Indigenous presence on campus and the sophistication of Indigenous design (Kirkness, Archibald, & University of British Columbia First Nations House of Learning, 2001).

In May 2013 we celebrated the 20th anniversary of the Xwi7xwa Library. The windows were ribboned with the names of almost 800 individuals and organizations who have sustained the library with gifts of library materials and other resources. However, Xwi7xwa is both older and younger than 20 years! It began with the Indian Education Resource Centre (IERC) (1970-1977) which was both a resource centre for Native education and a lobby group for Indian education in BC and across Canada (cf. Wodarczak, 2010). It housed the small research collection of the British Columbia Native Teachers Association (BCNITA), a group of Indigenous educators who were working to establish an Indigenous teacher-training program in BC. First Nations communities, cultures, languages and knowledge systems had been dislocated by successive assimilationist government policies and the Indian residential school system in Canada. An early national survey on First Nations public education reported that only four percent of registered Indian students completed grade 12 compared to 88 percent for non-Indian students in 1962-1963 (Hawthorn, 1967). In response, the National Indian Brotherhood (now the Assembly of First Nations) prepared a national policy statement asserting Indigenous jurisdiction over the education of First Nations children, *Indian Control of Indian Education* (National Indian Brotherhood, 1972). It was ratified by the Canadian government a year later and remains a blueprint for local control in contemporary Indigenous education policy frameworks.

It was within this national and regional context that BCNITA, in cooperation with UBC, established the Native Indian Teacher Education Program (NITEP) (Note 1) in 1974 in order to get First Nations teachers into the classroom (Grant, 1995). The associated NITEP Resource Centre collection, inherited from the IERC, continued to grow as the educators scoured North America to acquire appropriate curriculum materials for First Nations learners and classrooms. In May 1993, NITEP donated the collection to the new First Nations library that opened as part of the First Nations House of Learning (FNHL) facility composed of a longhouse and a library located in a separate building. Although forty years have passed since the founding of NITEP, and although there is a burgeoning Indigenous scholarship within the academy, Aboriginal education remains a pressing concern and public policy issue in the country (Archibald & DeRose, 2014; White, Maxim, & Beavon, 2003). Efforts continue to attain equitable educational opportunities, and the

integration of Indigenous experience, histories and contributions within education curricula – and libraries. The Xwi7xwa Library has been integral to the development of Indigenous education in BC and in the 21st century plays a role in the continuing Indigenization of education, decolonization and reconciliation efforts.

1.3 Indigenization: The vision

The Xwi7xwa Library shares a unique logo with the First Nations House of Learning: created by Tsimshian artist, Glen Wood, it consists of a human face surrounded by two ravens, which also form the frame of a longhouse. The face represents First Nations people, and the house design represents the university, or "House of Learning." In many First Nations cultures, Raven is a symbol of creativity and learning and is also known as a trickster or transformer. The logo represents Raven transforming the university to reflect First Nations cultures and philosophies, linking the university to First Nations. It evokes a two dimensional vision of Indigenization within the academy: a focus on Indigenous values and knowledge, and a commitment to institutional and social change. These dual aspects are manifest at the Xwi7xwa Library through its professional practice and scholarship.

We profile Indigenous knowledge and experience through the Library's collections, services, and programming; we also develop conceptual analyses and theoretical frameworks to Indigenize the discipline of library and information studies (LIS) -adapting professional tools to serve Indigenous purposes and incorporating Indigenous methods to (re)shape the discipline and the profession. Balancing the responsibilities

of an academic branch library within a university library system we simultaneously explore methods and seek partnerships to ensure the integrity of an Aboriginal library in continuously changing pedagogical, social, and institutional environments.

The Xwi7xwa Library has long maintained this fine balance. Shortly after opening in 1993, the question arose whether to propose that the Xwi7xwa Library become a branch of the UBC Library system. At stake was Indigenous autonomy, including Xwi7xwa's unique Indigenous classification and metadata. This was weighed against the benefits that might accrue from the strong infrastructure and resources of a well-established research library. First Nations students were surveyed and a student discussion was held at the First Nations House of Learning. The student consultations informed the decision by staff to work toward becoming a branch of the university library system. Over the next decade many people were involved in negotiating the financial and staffing resources required to further the \underline{X} wi7 \underline{X} wa initiative to gain branch status (Lin, 2006). Ultimately, the Senate Library Committee recommended a proposal, submitted jointly by the First Nations House of Learning and the UBC Library, to create the Xwi7xwa Library as a branch of the UBC Library that was accepted by the University President on June 23, 2005 (Allen, 2005).

A joint agreement provided core funding for collections and staff positions, and secured the <u>X</u>wi7xwa classification system and the FNHL Subject Headings. The University recognized that the Indigenous knowledge organization systems (KOSs) play a significant role in the intellectual

integrity of the Xwi7xwa Library and this role was acknowledged and protected in the formal Agreement (MacIvor, 2005). A full history of the Xwi7xwa Library has yet to be written, however, as this summary indicates, Xwi7xwa is a product of Indigenous vision, persistence, innovation, and perhaps social justice. It is not (yet) a mature academic library that was established, administered and funded by the university for many decades to meet the information, research and curriculum needs of its students, faculty and staff. As a UBC branch library in 2015, Xwi7xwa is barely 10 years old ... and full of possibilities. Like the library itself, the Xwi7xwa KOS developed gradually over time within a broader national context. The KOS development was guided through the leadership of two First Nations librarians, Gene Joseph and A. Brian Deer.

1.4 Colonial classification: A problem

Gene Joseph, Wet'suwet'en/Dakelh First Nation, founding librarian of the Xwi7xwa Library, did not need to undertake a research study to identify problems with dominant universal classification systems and subject vocabularies. Her deep understanding was based on experiential knowledge: the terminology and arrangements in use in libraries to organize materials on Aboriginal topics reflected the views and values of newcomers to First Nations territories including early anthropologists, missionaries, government agents, and travellers, and not Indigenous perspectives or values. As Joseph states,

... in the late '70s and early '80s, a lot of our people were bringing back the use of our own names, of our own nations, as well as bringing back the names of our own villages, our terminology, our spellings ... And it became a point of pride to be able to access information by our own name, rather than something that, you know, we at times felt could be derogatory, or that we just plain and simple didn't identify with. (personal communication, April 20, 2009 cited in Doyle, 2013, p. 191)

Joseph's statement alludes to the significant collections of historic and contemporary materials written *about* First Nations and Aboriginal people held in libraries across Canada, as well as other settler societies. For example, in Australia, Lynette Russell (2005, p. 169) describes these types of collections as the documentary result of the "surveillance of Indigenous people and their cultures. ... [as] archival texts within which Indigenous people were the object (and subject) of the gaze of colonial authorities and 'experts', and from which Indigenous knowledge, perspectives and voice were excluded."

A fundamental challenge for knowledge organization (KO) of Indigenous materials is that the dominant KO infrastructure is based on literary warrant of historic (and contemporary) colonial literatures and the Western epistemological assumptions of the 19th century. KO processes that rely on this kind of exogenous literary warrant tend to produce colonial classification and description, which are widely critiqued in Indigenous contexts due to historicization, omission, marginalization, lack of recognition of sovereign nations, lack of specificity, and lack of relevance (Carter, 2002; Duarte & Belarde-

Lewis, 2015; Moorcroft, 1993; Olson & Schlegl, 2001; Webster & Doyle, 2008; Yeh, 1971). A conundrum is that historic colonial documents may be highly relevant to First Nations and Aboriginal people in reclaiming culture, language, knowledge, and territory, although the documents are well hidden through the misrepresentation and omissions of their contents in the dominant knowledge organization systems. Gene Joseph drew upon her knowledge of these complexities in designing and developing Indigenous KOSs for NITEP and the Xwi7xwa Library, including leveraging the seminal classification work of Kahnawake Mohawk librarian, A. Brian Deer.

1.5 Indigenous classification, naming, and collaborations

As newly graduated librarian, A. Brian Deer took a radical departure from conventional practice: He rejected the dominant KOSs for his work in organizing the National Indian Brotherhood (NIB) Library (1974-1976), and instead designed his own classification system, the Brian Deer Classification (BDC). The structure was based on the areas of activity of the NIB, a national Indigenous political organization representing Aboriginal interests, rights and title. The design reflected Indigenous values and perspectives, and unlike the dominant systems, it is not discipline-based but designed for action. Deer worked as the NIB librarian for only two years however his legacy continues to inspire the field.

Following Deer, librarian Keltie McCall (Note 2) took on the role at the NIB and when the Chief of the NIB, George Manuel, moved to BC to serve as the President of the Union of British Columbia Indian Chiefs (UBCIC) (1977-1981) (Note 3),

he recruited McCall to the UBCIC Resource Centre. From 1978 to 1980 Keltie McCall and Gene Joseph worked together at the UBCIC and collaborated on revising the Brian Deer classification for British Columbia producing the (BDC-BC). Later from 1984 to 1986 when Gene Joseph was organizing the NITEP Resource Centre, she again rejected the dominant KOS and instead began to expand and adapt the UBCIC version of the BDC for the NITEP education collection (Doyle, 2013). The creativity and innovation of Brian Deer in developing a classification specifically designed for Indigenous purposes and audiences has inspired a number of variants and new iterations across Canada. The BDC demonstrates ways in which theoretical innovation transforms practice across space and time, and continues to generate scholarly study of the topic and the classification scheme (cf. Cherry, 2015; Duarte & Belarde-Lewis, 2015).

Gene Joseph continued to pursue her interest in KO at graduate school (1980-1982) where she conducted a research project to collect and analyze subject headings used by First Nations libraries across Canada. The unique research product, a collation of thousands of First Nations subject terms, became disseminated in various forms across the country. It served as a basis for Joseph's future work in organizing First Nations libraries in Canada, including \underline{X} wi $7\underline{x}$ wa, and in her role as the librarian for the Delgamuukw and Gisdaywa court case (Burns, Doyle, Joseph, & Krebs, 2009). As the Xwi7xwa librarian Joseph further developed the subject headings and BDC-BC classification for the expanded scope of the new Aboriginal academic library. Then between 1996 and 1998 we (Joseph and Doyle) mapped the Xwi7xwa

bibliographic database to MARC format, migrated the data to the UBC Library catalogue, and barcoded the entire library collection to enable online circulation of Xwi7xwa materials to all borrowers with a UBC Library card. The Xwi7xwa Library catalogue was freely available to all on the web: Xwi7xwa was connected to the world!

This achievement was followed by a setback in May 2004 when a UBC Library ILS conversion resulted in the loss of the ability to browse Xwi7xwa's local subject headings (MARC 690) in the UBC Library catalogue. Consequently the Xwi7xwa Library collection, comprising less than one percent of the UBC Library 6 million record catalogue relied on ineffectual keyword search for access to its holdings. This presented significant challenges for Xwi7xwa reference and instructional services for several years, and subject heading development almost ceased during this time. Working towards a solution, UBC Library principal cataloguer, Susan Andrews, suggested a successful strategy: We applied to the Library of Congress (LC) MARC Standards Office to have the Xwi7xwa subject headings recognized as an internationally authorized thesaurus. The application was accepted in 2005 and the newly named First Nations House of Learning (FNHL) Subject Headings were established as an Indigenous thesaurus, which could then be fully indexed in the authorized subject headings MARC field (650) with full subfield coding, thus enabling both browseable indexes and faceted searching by subtopic.

Protracted discussions with the ILS vendor followed in order to make the FNHL subject headings uniquely identifiable in the public catalogue. Many months of negotiation (and a transfer of ownership of the ILS company) finally led to success. The subject heading conversion required decisions regarding new naming conventions and syntax, such as facet order, free floating subdivisions, distinctions between nations as names and nations as topics, and determining which headings subdivide geographically. This process occurred gradually between 2009-2010 during which time data entry staff were hired to rekey all of the unstructured local subject headings within each Xwi7xwa bibliographic record to incorporate each newly designed FNHL Subject Heading.

1.6 A Xwi7xwa framework for Indigenizing knowledge organization

Reflecting on this unlikely library journey over the years gives rise to an appreciation of the persistence of the First Nations political and educational leadership and the commitment to Indigenous education, the ongoing support of the wider Aboriginal community, the intellectual legacy of First Nations librarians, and the individual and collective efforts of many who advocated for an unknown entity - an Aboriginal academic library! This inheritance conjoined with experience gained in serving the diverse clientele of the Xwi7xwa Library, and the ongoing development of its KOS, leads to the formation of a provisional theoretical framework for Indigenizing knowledge organization at the Xwi7xwa Library. It is grounded in Indigenous epistemology, a commitment to Indigenous education (broadly defined), and rests on two basic assumptions: firstly, that collecting is both curatorial in nature and is the seminal step

in library KO, and secondly, that Indigenized KOSs are fundamental to effective Indigenous information and instructional services, programming and research.

Historically, libraries, archives and museums (LAMs) developed with different mandates, professional cultures, and collections although they shared core functions of collecting, conservation, public service and research (Duff, Carter, Cherry, MacNeil, & Howarth, 2013). Within Indigenous contexts convergence is nothing new (Lawson, 2004): a wholistic view of knowledge combined with a requirement for efficient use of resources often results in integrated memory institutions of library-archive-museum collections, and common access systems as is the case at the Xwi7xwa Library. Although Indigenous diversity precludes generalization, knowledge in Indigenous contexts is frequently characterized as wholistic, interrelational, interactional, and broad-based (Kovach, 2009). Xwi7xwa's foundational collection of photographs, prints, artwork, monographs, grey literature, curriculum kits, realia, and archival materials manifests an Indigenous inclusive aesthetic that values diverse forms and modes of knowledge and a wide range of documentary expressions (i.e. documents). We view the uniquely curated integrated LAM collection of documents at the Xwi7xwa Library as the heart of its knowledge organization system.

1.7 Indigenizing document theory

At a general level, knowledge organization systems (KOSs) may be defined as social systems and institutions that organize knowledge. For example, they are manifest in the structure of universities and the scientific disciplines. They may also be embodied in the built forms of material discourse, such as architecture, or enacted through social institutions such as ceremony and storytelling. Within LIS, knowledge organization is understood as the practice of creating indexes, thesauri and classifications, semantic networks and ontologies, however, it is also understood more broadly as playing a central role in the production and communication of knowledge within social, cultural, and historical contexts (Bowker & Star, 1999). Thus, we view KOSs as socially constructed, shaped by purpose and cultural context, as well as by location in place and time. They are intrinsic to broader institutional, social, and political processes.

We define KO as a field "concerned with the design, study, and critique of the processes of organizing and representing documents" (Tennis, 2008, p. 103), which are deemed important to preserve within a particular time and cultural context. As previously noted, we hold an inclusive view of the term document that includes all forms of media, from artistic and musical creations to visual images, three-dimensional objects (realia), and electronic media, as well as text, building upon the work of Native American scholars, such as Mahsetky Poolaw's analysis of Comanche women's dress as historical document (Mahsetky-Poolaw, 2000). Just as KOSs are products of particular social processes, so too are documents products of particular times and circumstances. Intellectual and cultural forces impel the creation of documents, and in this sense we can think of them as a type of cultural artifact, in fact, an Indigenous knowledge artifact (cf. Smiraglia, 2008), which are also part of larger relations within and among disciplines and social institutions.

The \underline{X} wi7 \underline{x} wa approach to KO is informed by Indigenous understandings of relationship, including interconnectedness and reciprocity. It recognizes a continuum between knowledge creation, curation, dissemination, and use in the knowledge life cycle, and the interrelationships among its actors. Originating communities often generate \underline{X} wi $7\underline{x}$ wa documents, and there may be personal and professional interrelationships between creators, librarian-curators, and readerscholars (Callison, 2014; Lawson, 2014). KO requires locating a document within its sociocultural context within the collection, and eliciting its relationship to a particular discourse or knowledge community. Contextualized location then might become generative in the sense of presenting connections, and thereby enable different or new connections in the use of recorded knowledge.

Another relational aspect of Indigenizing KO entails examining possible intersections between Indigenous frameworks and the information professions. We seek these intersections in order to explore ways in which KO might serve Indigenous interests, and ways in which to Indigenize the discipline of KO itself; this is both a critical and constructive undertaking. It involves critical analysis of the ways in which various processes of KO produce particular outcomes, such as the ways in which they position Indigenous knowledge as inferior knowledge. It is constructive in demonstrating ways in which Indigenous knowledge (i.e. Indigenous concepts, methodologies, and frameworks) contribute to creating new knowledge and new understandings within the fields of KO and LIS, and more broadly.

1.8 Indigenous warrant

Informed by Indigenous principles the Xwi7xwa KO framework recognizes multiple types of warrant (justification for design decisions), including Indigenous literary, cultural, pedagogical and ethical warrant. Indigenous literary warrant serves as evidence for classificatory structure and as a source of terminology and is based on Indigenous-authored or Indigenous-informed literature guided by the primary principle of Indigenous authority (Doyle, 2013). Indigenous cultural warrant is used, for example, in identifying Indigenous self-representation of names of nations, tribal councils and other forms of governance, as well as contemporary terminology for issues and movements. We may draw upon non-academic sources such as First Nations official websites, the Aboriginal press or e-media, contemporary art installations, film, or political movements in order to ensure relevance. As an academic library in a public university, Indigenous pedagogical warrant is an important basis for design decision-making. We describe documents in ways that are relevant to the interests of Indigenous and Indigenous studies students and faculty, however, at the same time, we design pathways and linkages intended to educate users and support intercultural education.

The misrepresentation of Aboriginal names and concepts engenders mistrust and damages librarians' credibility with knowledgeable library users. Inaccurate names are disrespectful and may be considered offensive as well as inaccurate. Offensive representation can cause harm by normalizing and authorizing misinformation, therefore we establish Indigenous ethical warrant guided by the principle of respect for self-

representation of individuals, collectives, and their concepts, and to clearly acknowledge the potential for harm in KO design. Administrative transparency in documenting sources of terminology is one element integral to Indigenous ethical warrant and methodology (cf. Mai, 2010).

2. The Xwi7xwa Framework: Framing Practice

The Xwi7xwa KO framework draws on these four types of Indigenous warrant, which are formative in Xwi7xwa collection design; developing and applying the First Nations House of Learning Subject Headings, Xwi7xwa classification scheme, and the Xwi7xwa cataloguing standard; and the reference and instructional services for the diverse audiences at the Xwi7xwa Library.

2.1 The collection

Xwi7xwa collects materials created by Aboriginal scholars, and materials produced by First Nations, First Nations organizations, tribal councils, schools, publishers, researchers, and writers, as well as materials respectful of First Nations perspectives. We collect the unique, the local, the emergent and historic, and small and often ephemeral serial publications, in conjunction with the scholarly -- Indigenous scholarly communications and productions of Indigenous knowledge communities. Indigenous publishing is often characterized by small print runs with limited distribution, and minimal publicity in mainstream information channels. As a result the material collected by Xwi7xwa is often rare and in many cases unique to a publicly accessible library. The \underline{X} wi7 \underline{x} wa collection serves as a documentary record of living traditions manifest in a wide range of disciplinary areas that support Indigenous interests in cultural continuity, revitalization, and innovation. The collection also serves to both enhance, and to provide counternarratives to, the wider collection of historic and anthropological materials about Indigenous people within the UBC Library holdings.

While the \underline{X} wi7 \underline{x} wa collection focuses on First Nations in British Columbia, it also includes contextual materials on national and international Indigenous issues, such as, residential schools, the apprehension of Aboriginal children, Aboriginal rights and title, endangered languages, and global Indigenous activism. Increasingly, there is a focus on contemporary Indigenous scholarship in emergent disciplines, creative expression, and new media. The collection and its knowledge organization systems are designed for Xwi7xwa's primary clientele of First Nations and Aboriginal students, faculty and staff, First Nations and Aboriginal organizations and community members. However, perhaps paradoxically, the library's largest clientele is non-Aboriginal and impels a strong secondary focus on intercultural education, and serving the general student population who may be registered in any of 108 courses with significant Indigenous content in 32 departments at the university (Note 4), the wider campus community and the general public (Xwi7xwa Library, 2015).

2.2 The First Nations House of Learning Subject Headings

The FNHL Subject Headings were created to provide subject metadata for cataloguing Xwi7xwa Library materials. They evidence Indigenous

theory and practice over time and the shifting complexities of Indigenous scholarship, which is ongoing. Although they are not fully developed or applied, currently there are approximately 11,000 subject headings that are freely available online for study and use via the UBC Catalogue using a subject browse or keyword search.

Syntax

The FNHL Subject Headings are structured using the following syntax in MARC coding:

650 -7 \$a main heading \$x topic \$z geographic \$y chronology \$v form \$2 fnhl

Example

\$a First Nations \$x Art \$z British Columbia \$y 1950- \$v Bibliography \$2 fnhl

The main subdivision (650\$a) includes Indigenous generic terms such as, First Nations, Indigenous peoples, Métis, Inuit or specific First Nation or Aboriginal group names. The development of a comprehensive authority file for names of First Nations represents an applied research project that would include understanding historical emergences, terminological changes and contentious issues related to naming; documenting decisions regarding naming conventions and relationships; and identifying alternate spellings, and non-preferred terms with possible mapping to other. The topic heading (650\$x) is a recurring subfield. The geographic heading (650\$z) includes a basic table of provinces, regions, towns and reserves in Canada, as well as local Indigenous place names if they are considered public. The chronological heading (650\$y) awaits development of periodization according to Indigenous perspectives and is considered a research project awaiting resources. The form subdivision is guided by a locally developed list of form divisions used at the \underline{X} wi7 \underline{x} wa library. The level of subject headings work is dependent on available resources in a given year and is a dynamic ongoing undertaking driven by the growing collection and emergent discourses.

2.3 The <u>X</u>wi7<u>x</u>wa classification scheme

Over the past forty years from the 1970s to 2015 at UBC, the classification scheme used at Xwi7xwa has undergone (at least) two major version changes, in addition to incremental expansions. Each version of the classification scheme was based on the mandate of the collection and that of the parent unit (Note 5). Gene Joseph developed the first version of the UBC Deer classification for the NITEP Resource Centre, and the second version for the Xwi7xwa Library. The latter has been further expanded over the years to include new classes relevant to contemporary contexts and scholarship, such as Indian residential schools, Indigenous intellectuals, two spirit people, and health related classes. The current Xwi7xwa classification remains as an enumerative system guided by classificatory principles of collocation, specificity, and relevance. The following discussion presents some examples of the classification scheme as it was originally designed, however, as discussed there have been constraints that have limited its full development or redevelopment and the exploration of the benefits of faceted design for \underline{X} wi7 \underline{x} wa and for Indigenized KO in general.

2.3.1 Collocation

The Interior Salish and Coast Salish are two related cultural groups within which there are multiple First Nations. The following example demonstrates collocation, bringing like materials together, based on socio-linguistic and geo-spatial relationships as the principle of division.

<u>Notation</u>	<u>Topic</u>
BK	Interior Salish
BKD	Stl'atl'imx (Lillooet)
BKE	Secwepemc (Shuswap)
BKN	Nlaka'pamux (Thompson)
BKO	Okanagan

The BK Interior Salish class also demonstrates two principles of warrant: the privileging of Indigenous authority (self-representation), as well as pedagogical warrant. The bracketed name is the anthropological equivalent used by LCSH and models a design decision based on pedagogical warrant -- a commitment to intercultural education, as well as a syndetic (cross) reference to alternative entry points in the UBC catalogue that uses LCSH. At that same time, we recognize that any classification is an approximation because geo-political boundaries may be contentious or considered fluid, and some nations and communities may be described as belonging to one or more entities depending on time and perspective.

2.3.2 Alphabetical scattering

By comparison the Library of Congress does not show spatial, social or cultural relationships among First Nations/Native American peoples. We draw on Hope Olson's metaphor of the ghetto and diaspora (Olson, 1998) to describe the dynamic: The LC E99 class places Aboriginal people in an historical ghetto, the *History of the Americas* class, and then alphabetically scatters Indigenous

tribes and nations across the class. There is no classificatory principle applied to show interrelationships other than the vagaries of the alphabet (alphabetical scattering) (Ranganathan, 1967).

E99 – Library of Congress – History of the Americas – Indian Tribes & Cultures

Ghetto	Alphabetical	Diaspora
	Scattering	
E99.T8	Tsimshian	British
		Columbia
E99.T83	Tubatulabal	California
E99.T845	Tukkuth Kutchin	Yukon
E99. T986	Tzotzil	Mexico

Tsimshian materials from the Pacific North West Coast of BC Canada, sit beside materials relating to the Tubatulabal people of the interior mountains of California, USA, which are beside those relating to the Tukkuth Kutchin people of the Yukon in northern Canada, which are beside the Tzotzil people of the Chiapas highlands in southern Mexico. This dynamic of dispersal of Indigenous groups through library classification is reminiscent of the dispersal of First Nations children, communities, and lands through colonial government policies.

2.3.3 Principles of division

Reflecting the historical development of the Library, the Indigenous education class is the largest and subdivides geographically by 13 provinces and territories in Canada. It includes a subclass for curriculum development (ES) that contains dissertations and theses devoted to the development of culturally relevant curriculum and

curriculum materials, it also includes research, methodology, assessment informed by Indigenous values and Indigenous knowledge, as well as critical analyses. It is followed by a classification for curriculum materials (ET) that is subdivided by K-12 (kindergarten to grade 12) school level: kindergarten and pre-school; elementary; and secondary. This rudimentary arrangement implemented quickly to accommodate growing curriculum materials was recognized as insufficient when it was designed. However, at the time there were no resources to further refine and expand it, for example, by subject, grade level, student audience, or genre.

ET Curriculum materials

ETA Kindergarten and pre-school

ETE Elementary

ETS Secondary

The curriculum resources classification raises an interesting question about the tension between different types of user warrant: warrant designed to serve Indigenous cultural integrity might classify curriculum resources developed by or about a particular nation with the nation. For example, elementary curriculum or curriculum resources about Secwepemc would shelve within BKE (Secwepemc) – subclass – curriculum. On the other hand, user warrant based on learners in teacher training programs might classify curriculum materials and curriculum resources together, preferably within school level, then by subject or nation.

2.3.4 Relevance

Sections of the classification reflect economic and corporate activities and interests relevant to First Nations such as forestry, fishery, agriculture, hunting and trapping. The political realities of First Nations are reflected in separate classes for constitutional law, the Indian Act, and taxation. There are large classes of materials for selfgovernment, and Aboriginal title and rights that subdivide by province. The burgeoning Indigenous literature class subdivides by genre: poetry, drama, and fiction. It also includes a growing section of literary criticism and comparative literature. The children's literature class contains subclasses that are unique to Xwi7xwa and are not found in the McCall-Joseph UBCIC version of the BDC or the most recent UBCIC classification by Cherry (2014). The Xwi7xwa Children's Literature Model Collection is intended for materials that have been selected as appropriate for use with Indigenous children and for use in public school classrooms: it subdivides by genre and level including primary-intermediate, intermediatejunior, junior-secondary.

Children's Literature Model Collection

YUA Primary-Intermediate - recommended

YUB Intermediate-Junior - recommended

YUC Junior-Secondary - recommended

YUD Needs careful interpretation and bridging

The YUD Needs careful interpretation and bridging subclass organizes materials collected for critical evaluation. This evaluative classification of children's literature continues to be useful in fulfilling the pedagogical role of the library and the classification although it does contravene received standards of classification design that aspire to neutral and objective treatment. However we take the position that classification is socially constructed and dependent on purpose. Even the most seemingly innocent processes of collection

selection (and exclusion) challenge the myth of objectivity. Given the particularly problematic nature of the treatment of Aboriginal people in Canada, and the misrepresentation of Indigenous people that is both historic and ongoing, we suggest a balance. As an integral part of teaching critical evaluation of Indigenous children's literature, we use the "Model Collection" classification to exhibit culturally appropriate materials for elementary school use as discussed further in the section on "Bringing students to the library."

2.4 Standards - The <u>X</u>wi7xwa Aboriginal enhanced MARC record

Current core cataloguing standards tend to create "hidden collections" of Indigenous content in libraries (including print and electronic formats), therefore, the Xwi7xwa Library has developed an Aboriginal Enhanced MARC record designed to improve access to that Aboriginal content. Xwi7xwa is strongly supported by the UBC Library Central Technical Services (CTS) staff members who create bibliographic records and descriptive cataloguing for our new acquisitions. The Xwi7xwa staff undertake the subject cataloguing and assign the \underline{X} wi $7\underline{x}$ wa call number (090); apply or create the First Nations House of Learning Subject Headings; and add data to create the Aboriginal Enhanced MARC record. The latter identifies Aboriginal contributors including: authors, creators, actors, producers, illustrators, and artists; enhanced information for media formats, such as the names of Aboriginal cast and crew; and Indigenous collaborators often omitted as unnamed 'informants' in conventional records. Making Indigenous actors visible in the bibliographic universe contributes to raising public awareness about shared histories in Canada and the active roles of Indigenous individuals and collectives in widely diverse social, political and economic spheres. Given the importance of language recovery and revitalization for many endangered First Nations languages, we also include enriched Indigenous language and dialect information, and notes on language diacritics and orthographies.

Appendix B: The Xwi7xwa Aboriginal Enhanced MARC Record summarizes the cataloguing practice. We use a Language Note (546) to specify the Indigenous dialects and languages in the item because the MARC language field code (041) does not include many Indigenous languages and dialects. The 546 field also details the use or presentation of the language in the item, for example, "text is presented simultaneously in English, Romanized Cree, and Cree syllabics." This acknowledges the complexity of First Nations language distribution and assists patrons in finding specific dialects or uses for the materials. The Notes fields (5xx) record content features such as significant glossaries, maps, portraits, and timelines. They may include First Nations identity and/or First Nations affiliation if a creator of a work self-identifies. An added entry in the Personal Name (700) or Corporate Name (710) field ensures that names of Indigenous contributors are retrieved on an author browse or keyword search of the catalogue and may include First Nations social roles, for example:

700 0 \$a Big Bear \$c (Cree chief)700 1 \$a Porter, Tom \$c (Mohawk elder)Table of Contents notes (505) are a default,

and a partial table of contents is created for a section or chapter with an Aboriginal author or Aboriginal content within a general non-Indigenous work. Donor information is carried in the field for Immediate Source of Acquisition (541). It acknowledges the close circles of, and value placed upon, relationships within Indigenous contexts, including authors, publishers, friends and patrons of the library, as well as the bonds between the community and academy. It is based on a wholistic understanding that Indigenous knowledge flows between creator, donor, collector, curator, and reader, often with ties to shared histories, experiences, places, and relatives.

Xwi7xwa's Aboriginal MARC record, Indigenous classification, and the First Nations House of Learning Subject Headings, are all components of the Xwi7xwa KOS. The heart of the KOS, as we have discussed, is the collection, and the ultimate purpose of this integrated whole is the provision of Indigenous library services. The services are designed and delivered by the librarians for Aboriginal students, to support the Indigenous programs, and strengthen the cultural and strategic goals of the First Nations House of Learning, the University, and wider social goals of Indigenous education. Our professional knowledge is extended through various modes of interaction with and support of the emerging networks of Indigenous scholars and Indigenous communities of knowledge. These components and processes form a fabric that supports student learning, research, and ongoing community relationships through dynamic processes of Indigenous knowledge creation-collectioncuration-dissemination-use-and re-creation.

2.5 Indigenous knowledge organization in action

We view information and instructional services as a form of Indigenous knowledge organization "in action" (cf. Archibald, 2008) because KO processes and tools are critical enablers of these Indigenous academic services. Knowledge organization enables and interacts with the library's core operations of teaching, learning and research. It shapes those activities through articulating concepts and relationships and creating pathways within and across Indigenous disciplinary and other knowledge domains. It is shaped by those activities as we engage with students, faculty, and the wider Aboriginal community. As an institution Xwi7xwa's distinctive historical emergence contributes to the disciplinary identities of the professionals who work within it (cf. Lawson, 2014). The librarians' professional activities of selection, acquisition, and representation of library materials shapes their skill sets and approaches to instruction which are honed through ongoing interaction with diverse groups of users and creators of materials both on and off campus.

2.5.1 Creating relationships

Xwi7xwa offers a welcoming environment for our diverse clientele: it is an intercultural and interdisciplinary space. For many people, Xwi7xwa is an interface between academic and Aboriginal communities. On campus, the main way that we develop and foster connections is through our reference, liaison and instruction activities. Access to the catalogue extends connections to a wider Aboriginal community of users. Our relationship with both academic and community patrons is affected by the findability of our documents, the value patrons

place on them, and the ease with which relevant documents are accessed. Xwi7xwa's KOS reflects Indigenous knowledge systems through effective and respectful representation of Indigenous concepts and relationships. It supports Aboriginal communities through good representation of Indigenous knowledge and perspectives, which counters stereotypes, misrepresentation and problematic framing of Aboriginal issues. Because the classification and subject headings are publicly available on the UBC Library Catalogue, First Nations community knowledge centres can copy the metadata to use or adapt to their own needs. When Indigenous people see their communities and nations respectfully represented, it provides a more solid foundation for building relationships whether with potential students, job candidates, or community leaders. Respectful representation brings people to our doors and builds trust.

2.5.2 Bringing students to the library

The increasing number of Aboriginal programs and courses at UBC and beyond results in increasing multi- and inter-disciplinary public service demands. Some Indigenous programs focus on Indigeneity as an area of study, while others have connections to Aboriginal communities or professional practice. Some disciplinary programs require Indigenous course work, such as the mandatory Aboriginal education in Canada course within the teacher training program (University of British Columbia. Teacher Education Office, 2015). Xwi7xwa's KOS facilitates finding Indigenous knowledges, perspectives, and research in our collections for this diverse academic patron audience, and thereby also facilitates research for teaching and learning, and for work related to any of the academy's Aboriginal initiatives. \underline{X} wi7 \underline{x} wa demonstrates the value of Indigenous research by making it visible and discoverable. This strengthens our credibility as a trusted source of broad representation of Indigenous scholarship and publishing. The KOS plays a role in establishing and disseminating Indigenous terminology and avoids replicating terminology that reinforces problematic concepts.

Students are often challenged in finding Indigenous perspectives within the disciplines because there is no explicit representational language for them. We teach students strategies to address this challenge by leveraging the \underline{X} wi $7\underline{x}$ wa classification and keywords. For example, the Biography class (YS), and Literature class (Y) contain consolidated sections of materials that represent Indigenous lived experience and Indigenous creative expression. The Elders class (PE) is relevant to students whose course assignments entail finding protocols for addressing Elders, understanding Elders' teachings, or who are seeking primary source material for learning about specific nations or historical events. There is also a discrete class for materials on Indigenous intellectual life and Indigenous contributions to global society (CXZ). In seeking to find Indigenous scholars, we teach students to use the phrase search "intellectual life" in combination with a catalogue location filter to limit to Xwi7xwa Library holdings. Alternatively a keyword search on any topic combined with the phrase "First Nations author" retrieves Indigenous authorship data carried in the Aboriginal Enhanced Record (MARC 590). For example, the Boolean search ("First Nations author" and astronomy) retrieves materials written by First Nations authors about astronomy.

2.5.3 Bringing the library to the students

In addition to bringing the students to the Library, we bring the Library to the students. Classroom instruction sessions are one vital opportunity for raising the profile of the Library and connecting with students. Another method is a pop-up reference table with a new books display at the weekly Longhouse lunch for the Aboriginal community on campus that brings the Library and the librarians to non-library spaces. Campus outreach contributes to developing relationships and builds the trust needed to promote our resources and the skills and expertise of staff. The Xwi7xwa KOS also brings the Library to distance education students, such as the NITEP field centre students. This unique program enables students in remote areas of the province to complete the first three years of a Bachelor of Education degree in a community that is close to home, thereby removing many barriers for students. Xwi7xwa librarians welcome invitations to the NITEP field centres to connect with the students and provide onsite classroom instruction as excellent opportunities to introduce our services, and help students gain a foothold in Indigenous bibliographic information and skills.

The online Indigenous research guides serve as multipurpose teaching tools that can bring students to the library by increasing collection findability through digital instruction. We structure each of the 14 Xwi7xwa Indigenous research guides with a core suite of top-level pages including: Getting Started, Books & Media, Articles, and subject specific headings. This helps to brand the Xwi7xwa guides as does Xwi7xwa subject headings and call numbers for digital and/ or shelf browsing. The guides are designed for

specific Indigenous studies disciplines, topics, or audiences. Some \underline{X} wi $7\underline{x}$ wa pages are integrated within disciplinary guides authored by subject librarians in other libraries, such as the Aboriginal midwifery page in the Biomedical Library Midwifery guide, thus bringing Aboriginal content into disciplines.

The classification supports browseability that is particularly important for students as it can eliminate significant time narrowing a search for both Indigenous materials and for audience. For example, the research guide and in-class instruction for Aboriginal children's literature usually include illustration of the Children's Literature Model Collection classes (YUA/YUB/ YUC). Students respond well to this "shortcut": Combining a Xwi7xwa call number for reading level, such as YUA for primary, with a topic keyword like "bannock" or "moose," yields on-target search results for their lesson plan assignments. Students can trust that this search strategy will retrieve books only at the Xwi7xwa library, and therefore meet our collection criteria of Indigenous content.

2.6 Indigenous information literacy: Making the invisible visible

While the \underline{X} wi7 \underline{x} wa KOS help to make Indigenous perspectives more visible, we also teach students to be aware of, and to be critical of, the processes of knowledge organization itself in Indigenous contexts. We conceptualize this as part of *Indigenous Information Literacy* and are increasingly called upon to conduct classroom and library staff instruction in this area. Teaching students to consider the components of surrogate records and metadata, compare library subject

vocabularies and evaluate author keywords is time consuming, but it is very effective for making KO visible and raising the awareness of researchers about their own search strategies and patterns. In making the invisible visible, we seek 'teachable moments' to bring together examples with researchers' immediate needs in order to make the power of KO more apparent. Because in practice Xwi7xwa librarians use, and teach patrons to use, the UBC Library catalogue and navigate its thousands of databases, e-books, and e-serials, as well as Google (!) our instructional strategies are designed to demonstrate ways to traverse multiple controlled and uncontrolled vocabularies for Indigenous topics in multiple disciplines.

In this complex Indigenous information ecosystem, we teach patrons to understand that the respectful or most accurate term for their concept does not necessarily retrieve the best search results. Sometimes, searching the opposite term for a concept is a good strategy. For example, reliable literature on 'youth resilience' may be found using descriptors such as troubled youth or suicide. Unfortunately, there are many effective or useful search terms that are not accurate or respectful. Even within the UBC Library catalogue there are many subject headings for Indigenous peoples including: Indians of North America, First Nations, Native peoples, Indigenous peoples, Inuit, Métis, and specific names of First Nations, bands, and tribal councils and other forms of Indigenous governance, many of which have variant spellings. There is no established term for the concept of Indigeneity itself, and the terminology used for it differs significantly (and may be contested) within and between disciplines, communities and geographic regions.

Aboriginal research topics with what seem to be basic questions may need advanced research skills. Understanding the preferred terminologies of specific disciplines, knowledge communities, political and theoretical discourses, and even database vendors, assists in navigating Indigenous information ecosystems. Library instruction on KO processes helps students develop strategies for finding and evaluating information resources by incorporating discipline-specific as well as contested terminology, and to critically evaluate the sources and motivations of knowledge creators. Accessing a wide range of materials provides students with rich learning experiences by giving them more diverse voices and perspectives to incorporate into their research and classroom discussions. The accelerating use of technology and move to online resources in academic libraries amplifies the need for new discovery services (New Media Consortium, 2014) and, we suggest, highlights the promise of Indigenized KO within complex Indigenous information ecosystems.

2.7 Future possibilities: Convergences and collaborations

Like many academic libraries across North America, the UBC Library is rebalancing its learning spaces and reducing its collection footprint in order to increase opportunities for interactive learning. As part of this larger initiative, the Xwi7xwa Library is planning to relocate some of its collection to multiple distributed storage facilities, and to digitize more of its materials. In maintaining the integrity of the Xwi7xwa Library we conceptualize the Xwi7xwa collection as a single coherent entity that is distributed across physical and digital spaces but unified by shared

characteristics and commitments. We draw upon convergences between Indigenous knowledge organization principles and new technologies to consider the possibilities of this approach.

Scholars observe that new digital environments and the ideal of improved public accessibility have motivated greater collaboration that encourages information professionals to work across institutional and disciplinary boundaries. This produces an increased focus on more unified discovery and access that moves beyond disciplinary silos and fragmentation of knowledge through conventional curatorial practices. Some say that a lack of framework for integration presents a conceptual problem, as well as pragmatic issues (Duff et al., 2013), however we argue that Indigenized KO principles and values provide a conceptual framework for integration and new technologies offer a pragmatic platform.

Wholistic views of knowledge, appreciation of relational processes, and sustainable stewardship of resources are hallmarks of Indigenous traditions that are integrated into professional information practices at Xwi7xwa. These principles informed convergences (of what are conventionally viewed as library-archival-museum materials) within the Xwi7xwa collection and its catalogue used for discovery and access. They also foster our collaborations at different levels across units and branches and among institutions, thus promoting digital convergence and organizational convergence, as well as collection convergence. Unified discovery and access technologies using Indigenized approaches to KO, in combination with the institutional and social processes required to implement them, might preserve the unique characteristics of the Xwi7xwa collection as a curated distributed collection, and serve as a model for others. We view the collection and its Indigenized metadata as a dynamic documentary record (i.e. knowledge record) of Indigenous continuity and living traditions that serves Indigenous scholarship and Indigenous knowledge communities. It simultaneously and organically serves to balance the wider UBC historical disciplinary collections and provide Indigenous counternarratives to it. Comparisons between them might reveal substantive shared commonalities, as well as substantive differences in collections and in disciplinary approaches. Similarly, they might also highlight commonalities and differences within professional information services and practices and thereby also identify opportunities to build partnerships (Martin, 2007).

Institutions are motivated by the ideal of better user service and improved support for scholarly activity afforded by new technologies, and the promise of offering students and researchers the ability to see relationships between different forms of knowledge. Indigenous principles that view interrelationships among the processes of the knowledge production-disseminationuse cycle as both significant and formative also align with new possibilities for convergence within digital environments and collaborations across professions and disciplines. These interconnections might change our views of objects and blur traditional divisions between, for example, document and surrogate or between information professionals' practices, as well as types of disciplinary boundaries. Research suggests that institutional convergences (among information disciplinary forms and practices) generate more sustainable and innovative

institutions. Rethinking the traditional role of curation to a more transversal (crossing different information disciplines) and open model shifts the role of the curator to one that is focused equally on generating or overseeing a discourse, not only a material collection. The traditional idea of curation then shifts from a one based on conservation and growth of collections and planning exhibits to one that is "more cohesive and research-oriented" (Duff et al., 2013).

New technologies for unified discovery and access might provide a platform to begin designing networks of intersections across Indigenous information spaces that connect, and assist others in connecting, disparate views, such as those on Indigeneity as described in the section on Indigenous information ecosystems, or as Olson (1998) suggests as mapping across boundaries. At the same time it draws on principles of convergence already extant within academic library catalogues that contain multiple controlled vocabularies and multiple classification systems. This type of approach is consistent with Indigenized KO processes co-existing with and in interaction with others to increase accessibility, as well as openness to contributions by, and partnerships with, academic and non-academic partners (cf. Garwood-Houng & Blackburn, 2014).

At the same time, drawing on Thorpe and Galassi (2014), we recognize that libraries require new frameworks for measuring impact through research and programme evaluation in general, and specifically in order to assess the impact of Indigenized KO on criteria relating to social and cultural wellbeing in practice. This includes developing methods to understand and describe impacts that do not only constitute factors such as search and retrieval metrics, but also

consider "intangible, emotional, psychological, spiritual, and cultural outcomes" – both positive and negative – as consequences of various kinds of KO processes and products (cf. Duff, Flinn, Suurtamm, & Wallace, 2013, p. 342). For example, we have proposed that increased trust, respect and good relationships may be engendered through the Indigenization of KO processes and products in public institutions.

3. Conclusion

As we reflect on experiences at the \underline{X} wi7 \underline{x} wa Library, we are guided by Raven's vision of transformation and view the Indigenization of knowledge organization in academic contexts as processes that centre Indigenous academic and community scholarship, and thereby act as a catalyst for institutional, disciplinary and social change. Each of these interrelated dual dimensions holds multiple arenas and opportunities. Looking back, the Indigenization of knowledge organization at the Xwi7xwa Library has been, and continues to be, an incremental process occurring over many years through First Nations individual and collective leadership and diverse collaborative efforts. It began with Indigenous leadership, guided by the principle of Indigenous control of Indigenous education, which resulted in the formation of NITEP, its resource collection and the building of the Longhouse facility. The foresight of the FNHL planning committee created the vision of a separate Aboriginal library. The leadership of lone librarians furthered the vision of Indigenous-centered representation. Aboriginal community members, students and faculty members, and wider, sometimes unexpected circles, expanded the original library collection. The governance of the University of British Columbia and the UBC Library recognized the role of libraries in Aboriginal student and academic services, and the value of Indigenous scholarship. Most recently the increasing demands on the \underline{X} wi7 \underline{x} wa Library for Indigenous studies support, intercultural education, and consulting on Indigenous cultural and intercultural property in the context of campus Indigenization initiatives, and national reconciliation efforts has underlined the benefits of social, political, and technical convergences and collaborations.

This paper has overviewed the historical emergence of the Library and its knowledge organization systems (KOSs), described its current KO theoretical framework and practice, discussed the implications of KO for Indigenous teaching, learning and research, and envisioned possibilities for the future of the Indigenization of knowledge organization at the Xwi7xwa library. The paper has demonstrated that knowledge organization and its practices do not constitute an isolated endeavor that takes place in the back rooms of a technical services area or as decontextualized theoretical research. Rather, we suggest that knowledge organization is fundamental to teaching, learning, research and is deeply embedded in organizational, political, social contexts of a particular time and place, and within the global relations of those dimensions: its possibilities enabled or constrained within those contexts.

Acknowledgements

The authors are grateful to Gene Joseph, \underline{X} wi7 \underline{x} wa librarian emerita and founding \underline{X} wi7 \underline{x} wa librarian, for her review and comments. Her input has strengthened the work, and any omissions or errors are those of the authors. We

thank Susan Andrews, Principal Cataloguer, UBC Library Cataloguing Division and for her review of the cataloguing content and ongoing assistance. We appreciate the contributions of Eleanore Wellwood, Xwi7xwa Library Technical Services Assistant, for cataloguing services, and an unruly range of duties and loyalties. We extend thanks to Linda Allen (now retired) for her service, commitment, and wit.

Notes

- Note 1 NITEP has now become a name instead of an acronym. The name has not changed due to the loyalty that its graduates hold for it (Archibald & DeRose, 2014).
- Note 2 At this time, Keltie Frances McCall was often known as Keltie McCall.
- Note 3 Refer to Peter McFarlane (1993) for a biography of George Manual and dates at the UBCIC.
- Note 4 The Xwi7xwa Library prepares annual lists of UBC courses with significant Indigenous content as an integral part of collection development and instruction design (2005-2015).
- Note 5 A comprehensive record of the development and spread of the original Brian Deer classification system at UBC and in Canada may be difficult to document. The Xwi7xwa Library continues to inventory and describe its archival records, including records of the development of its knowledge organization systems and the development of the NITEP and Xwi7xwa KO systems, in order to provide research materials for future researchers.

Appendix A

A Brief History: Indigenization of Knowledge Organization at \underline{X} wi $7\underline{x}$ wa

	<i>i</i> 0	<u> </u>
	Xwi7xwa Library Vision to Reality	Indigenizing Knowledge Organization
1960s -	· First Nations leaders advocate for First Nations students in BC	1970 - Indian Education Resource Centre (IERC) established at Brock Hall UBC
1969 -	British Columbia Native Indian Teachers Association (BCNITA) submits funding proposal for Native teacher training program	1970s - BCNITA research collection for NITEP is housed at the IERC. The IERC collection is transferred to NITEP on closure.
1974 -	Native Indian Teacher Education Program (NITEP) program established	1980s - Gene Joseph adapts the Brian Deer Classification (BC version) for the NITEP resource centre, and designs subject headings list as her graduate student research project
1993 -	Opening of First Nations House of Learning (FNHL) Longhouse and Library	1993 - NITEP collection is transferred to the new First Nations Library that will be named Xwi7xwa by Chief Simon Baker, Squamish Nation.
1995 -	\underline{X} wi7 \underline{x} wa Head Librarian position established by the University Senate	1995 - Gene Joseph expands Xwi7xwa classification and subject headings
		1996 - Xwi7xwa bibliographic records and subject headings mapped to MARC format and migrated to the UBC Library Catalogue
		1997-1998 - Xwi7xwa collection is barcoded and items linked to the bibliographic records providing online borrower and circulation services via the UBC Library ILS.
	Xwi7xwa Library Assistant position established Gene Joseph Honouring Ceremony held in recognition of Gene Joseph's leadership	
		2004 - May - UBC Library system conversion excludes local subject headings (690) from the catalogue subject index
		2004 - Xwi7xwa & UBC Cataloging Division apply to Library of Congress MARC Standards Office to establish FNHL Subject Headings as an internationally recognized standard
2005 -	The Xwi7xwa Library becomes a branch of University of British Columbia Library	2005 - LC MARC Standards Office authorizes the First Nations House Indigenous thesaurus, and establishes FNHL Subject Headings
2006 -	October – <u>X</u> wi7 <u>x</u> wa Reference Librarian position established	
2008 -	March – Xwi7xwa Technical Services Assistant position established	
		2009-2010 - Conversion of 11,500 unstructured local subject headings (690) to structured FNHL Subject Headings (650)
2013 -	Xwi7xwa celebrates 20th Anniversary	
2014 -	January - <u>X</u> wi7 <u>x</u> wa Aboriginal Engagement position established (.5 FTE)	2014 - Xwi7xwa Distributed Collections project

Appendix B

$\underline{\mathbf{X}}$ wi $\mathbf{7}\underline{\mathbf{x}}$ wa Library Aboriginal Enhanced MARC Record

Tag	Instructions	Examples
246	When the title transcribed in the 245 has omitted special characters, for purposes of access and retrieval in the public catalogue, make a 246 for the truest representation of the title as represented on the title page.	246 \$i Title page reads : \$a N?del?kwagən
500	Indicate presence of the following: significant glossaries, maps, portraits, and timelines, presence of Native scripts or syllabics.	 500 \$a Includes glossary of Indigenous plant names. 500 \$a Includes map of Indigenous settlements on the northwest coast of British Columbia in 1853. 500 \$a Includes glossary of words in Cree with English definitions.
505	Default treatment is to include a full 505. Use partial 505 for an Indigenous authored chapter in a non-Indigenous material.	505 0- \$a
508	Media only. Take from the production credits on the container or the web site of the producer or distributor. Transcribe as found.	508 \$a Sound, D'Arcy O'Connor, Celia Haig-Brown; director of photography and editor, Helen Haig-Brown; assistant editor, Trevor Mack; graphics and animation, Luis Almazan; music, Joel Solomon.
511	Media only. Add when the Indigenous cast members or performers are listed on either the container or the web site of the producer or distributor. Transcribe as found.	511 1- \$a Conversation with, Larry Grant, Wade Grant, Henry Yu; participants, Gina Grant, Howard E. Grant, Wade Grant, Daniel Heath Justice, Spencer Lindsay, Sarah Ling, Amy Perreault, Sue Rowley, Patricia A. Shaw, Audrey Siegl, Henry Yu.
541	Name of donor and organization if applicable.	541 \$a Donated by Rose Point, Musqueam Elder, July 2005. \$5 CaBVau
546	Add if more than one language represented in the content. Note the presence of scripts or syllabics.	546 \$a Text in English and Cree. 546 \$a Text in Inuktitut syllabics and English.
590	Use when an author or illustrator self-identifies as First Nations.	590 \$a First Nations author 590 \$a First Nations illustrator
700	Added entries for significant persons.	700 1- \$a Archibald, Jo-ann
		710 2- \$a Union of British Columbia Indian Chiefs.

References

- Allen, L. (2005). News from \underline{X} wi7 \underline{x} wa Library: A look back. *The Longhouse News*, 12(1), 20.
- Archibald, J.-A. (2008). *Indigenous storywork:*Educating the heart, mind, body, and spirit. Vancouver, Canada: UBC Press. doi: 10.5860/CHOICE.46-0373
- Archibald, J.-A., & DeRose, D. (2014). Is B.C. getting it right? Moving toward Aboriginal education success in British Columbia. *Education Canada*, 54(3), 17-19.
- Bowker, G. C., & Star, S. L. (1999). Sorting things out: Classification and its consequences.

 Cambridge, MA: MIT Press.
- Burns, K., Doyle, A., Joseph, G., & Krebs, A. (2009). Indigenous librarianship: Profile: Gene Joseph. In M. J. Bates & M. N. Maaks (Eds.), *Encyclopedia of library and information sciences* (3rd ed., pp. 17-18). Boca Raton, FL: Taylor & Francis. Revised version retrieved from https://circle.ubc.ca/handle/2429/51923
- Callison, C. (2014). Indigenous peoples' new canoe. In D. Lee & M. Kumaran (Eds.), Aboriginal and visible minority librarians: Oral histories from Canada (pp. 135-146). Lanham, MD: Rowan & Littlefield.
- Canada. Royal Commission on Aboriginal Peoples, Erasmus, G., & Dussault, R. (1996). Report of the Royal Commission on Aboriginal Peoples. Ottawa, Canada: The Commission.
- Carter, N. C. (2002). American Indians and law libraries: Acknowledging the third sovereign. *Law Library Journal*, 94(1), 7-26.

- Cherry, A. (2014, December 16). *UBCIC*Resource Centre Classification plan [Draft].

 Vancouver, Canada: UBCIC. Retrieved from http://www.ubcic.bc.ca/files/PDF/

 UBCICClassification.pdf
- Cherry, A. (2015). A case study in Indigenous classification: Revisiting and reviving the Brian Deer scheme [Special issue]. Cataloging & Classification Quarterly, 53(5/6), 548-567. doi: 10.1080/01639374.2015.1008717
- Doyle, A. M. (2013). Naming, claiming, and (re) creating: Indigenous knowledge organization at the cultural interface (Doctoral dissertation). Retrieved from https://circle.ubc.ca/handle/2429/44262
- Doyle, A. M., & Metoyer, C. A. (Eds.). (2015). Indigenous knowledge organization [Special issue]. *Cataloging & Classification Quarterly*, 53(5/6). doi: 10.1080/01639374.2015.1027984
- Duarte, M. E., & Belarde-Lewis, M. (2015). Imagining: Creating spaces for Indigenous ontologies [Special issue]. *Cataloging & Classification Quarterly*, 53(5/6), 677-702. doi: 10.1080/01639374.2015.1018396
- Duff, W. M., Carter, J., Cherry, J. M., MacNeil, H., & Howarth, L. C. (2013). From coexistence to convergence: Studying partnerships and collaboration among libraries, archives and museums. *Information Research*, 18(3), paper 585. Retrieved from http:// InformationR.net/ir/18-3/paper585.html
- Duff, W. M., Flinn, A., Suurtamm, K. E., & Wallace, D. A. (2013). Social justice impact

- of archives: A preliminary investigation. *Archival Science*, *13*(4), 317-348. doi: 10.1007/s10502-012-9198-x
- First Peoples' Cultural Council. (2015). 2015/2016

 2017/2018 service plan. Brentwood
 Bay, BC: First Peoples' Cultural Council.
 Retrieved from http://www.bcbudget.gov.
 bc.ca/2015/sp/pdf/agency/fpcc.pdf
- Garwood-Houng, A., & Blackburn, F. (2014). The ATSILIRN protocols: A twenty-first century guide to appropriate library services for and about Aboriginal and Torres Strait Islander peoples. Australian Library Journal, 63(1), 4-15. doi: 10.1080/00049670.2014.890018
- Grant, A. (1995). The challenge for universities. In M. A. Battiste & J. Barman (Eds.), *First Nations education in Canada: The circle unfolds* (pp. 208-223). Vancouver, Canada: UBC Press.
- Hawthorn, H. B. (1967). A survey of the contemporary Indians of Canada: A report on economic, political, educational needs and policies (Vol. 2). Ottawa, Canada: Indian Affairs Branch.
- Indian Education Resource Centre. (1970-1977). *Indian Education Resource Centre Newsletter*. Vancouver, Canada: University of British Columbia. Retrieved from http://circle.ubc.ca/handle/2429/32618
- Kirkness, V. J., Archibald, J.-A., & University of British Columbia First Nations House of Learning. (2001). *The First Nations Longhouse: Our home away from home.* Vancouver, Canada: First Nations House of Learning.

- Kovach, M. (2009). *Indigenous methodologies:*Characteristics, conversations and contexts.

 Toronto, Canada: University of Toronto Press.
- Lawson, K. L. (2004). Precious fragments: First
 Nations materials in archives, libraries
 and museums (Rev. ed.) (Master's thesis).
 Retrieved from https://circle.ubc.ca/
 handle/2429/15608
- Lawson, K. L. (2014). Academic inquiries at an Aboriginal reference desk during Canada's Truth and Reconciliation Commission's BC national event. In D. Lee & M. Kumaran (Eds.), Aboriginal and visible minority librarians: Oral histories from Canada (pp. 157-167). Lanham, MD: Rowan & Littlefield.
- Lin, B. (2006). Stubborness kept unique library open. *Raven's Eye*, 9(8). Retrieved from http://www.ammsa.com/publications/ravenseye/stubbornness-kept-unique-library-open
- MacIvor, M. (2005). Xwi7xwa Library: A branch of the university library. *The Longhouse News*, 12(1), 1.
- Mahsetky-Poolaw, W. A. (2000). Descriptive classification analysis of Comanche women's dress (Unpublished master's thesis). University of Oklahoma, Norman.
- Mai, J.-E. (2010). Classification in a social world: Bias and trust. *Journal of Documentation*, 66(5), 627-642. doi:10.1108/00220411011066763
- Martin, R. S. (2007). Intersecting missions, converging practice. *RBM: A Journal of Rare Books, Manuscripts, and Cultural Heritage*, 8(1), 80-88.

- McFarlane, P. (1993). Brotherhood to nationhood:

 George Manuel and the making of the

 modern Indian movement. Toronto, Canada:

 Between the Lines.
- Moorcroft, H. (1993). The construction of silence. *The Australian Library Journal*, *42*(1), 27-32. doi: 10.1080/00049670.1993.10755624
- National Indian Brotherhood. (1972). *Indian* control of Indian education. Ottawa, Canada: National Indian Brotherhood.
- New Media Consortium. (2014). *Horizon report* > 2014 library edition. Retrieved from http://redarchive.nmc.org/publications/2014-horizon-report-library
- Olson, H. A. (1998). Mapping beyond Dewey's boundaries: Constructing classificatory space for marginalized knowledge domains. *Library Trends*, *47*(2), 233-254.
- Olson, H. A., & Schlegl, R. (2001). Standardization, objectivity, and user focus: A meta-analysis of subject access critiques. *Cataloging & Classification Quarterly*, 32(2), 61-80. doi: 10.1300/J104v32n02 06
- Pidgeon, M. (2008). It takes more than good intentions: Institutional accountability and responsibility to Indigenous higher education (Doctoral dissertation). Retrieved from https://circle.ubc.ca/handle/2429/2329
- Ranganathan, S. R. (1967). *Prolegomena to library classification* (2nd ed.). London, England: Library Association.
- Russell, L. (2005). Indigenous knowledge and archives: Accessing hidden history and understandings. Australian Academic &

- Research Libraries, 36(2), 161-171. doi:10.1 080/00048623.2005.10721256
- Smiraglia, R. P. (2008). Rethinking what we catalog: Documents as cultural artifacts. *Cataloging & Classification Quarterly*, 45(3), 25-37. doi:10.1300/J104v45n03_04
- Tennis, J. T. (2008). Epistemology, theory, and methodology in knowledge organization: Toward a classification, metatheory and research framework. *Knowledge Organization*, 35(2/3), 102-112.
- Thorpe, K., & Galassi, M. (2014). Rediscovering Indigenous languages: The role and impact of libraries and archives in cultural revitalisation. *Australian Academic & Research Libraries*, 45(2), 81-100. doi:10.10 80/00048623.2014.910858
- University of British Columbia. Teacher Education Office. (2015). *Aboriginal Education Educ 440*. Retrieved from http://teach.educ.ubc.ca/students/courses/aboriginal-education/
- Webster, K., & Doyle, A. (2008). Don't class me in antiquities! Giving voice to Native American materials. In K. R. Roberto (Ed.), Radical cataloging: Essays at the front (pp. 189-197). Jefferson, NC: McFarland. Retrieved from https://circle.ubc.ca/handle/2429/52721
- White, J. P., Maxim, P. S., & Beavon, D. J. K. (2003). *Aboriginal conditions: Research as a foundation for public policy*. Vancouver, Canada: UBC Press.
- Wodarczak, E. (2010). The Indian Education Resource Centre fonds. Vancouver: University of British Columbia Archives.

Retrieved from http://www.library.ubc.ca/ archives/u_arch/ierc.pdf

Xwi7xwa Library. (2015). *UBC courses with Aboriginal content 2014-2015*. Retrieved from http://branchxwi7xwa.sites.olt.ubc. ca/files/2015/01/UBC-Courses-with-Indigenous-Content-Winter-2014-2015-Updated-Jan.-15-2015.pdf

(Received: 2015/3/11; Accepted: 2015/6/2)

Yeh, T. Y.-R. (1971). The treatment of the American Indian in the Library of Congress E-F schedule. *Library Resources and Technical Services*, 15(2), 122-128. Retrieved from http://downloads.alcts.ala.org/lrts/ lrtsv15no2.pdf

加拿大Xwi7xwa圖書館之知識組織在地化

Indigenization of Knowledge Organization at the Xwi7xwa Library

Ann M. Doyle¹, Kimberley Lawson², Sarah Dupont³

摘要

本文透過概念分析與描述性個案研究,檢視加拿大英屬哥倫比亞大學之原住民族學術圖書館—Xwi7xwa圖書館之知識組織在地化狀況。我們首先定位Xwi7xwa圖書館之場域與時間,並在加拿大原住民族教育之脈絡下回溯其歷史發展,接著描述此圖書館獨特的原住民族分類設計與相關原住民族主題詞表之發展。研究中以地域為基礎之分析,清楚地闡釋「在地化」,並產出一個指引Xwi7xwa圖書館之現行知識組織設計與行動式知識組織之概念框架。本框架建立於兩項基本假設上:首先,館藏發展是圖書館知識組織的起步;其次,Xwi7xwa圖書館的知識組織系統在地化,對於原住民族資訊與資源服務、程式設計及研究,具有關鍵性的效用。本文最後一節則提出未來知識組織在地化發展的可能方向,包括利用新科技,匯聚各方資源,及與原住民族學者、原住民族社群合作。

關鍵字:原住民知識組織、加拿大第一民族圖書館、編目、原住民分類系統、原住民主題 詞表

Xwi7xwa Library, University of British Columbia, Canada

 $^{^{12.3}}$ 加拿大英屬哥倫比亞大學Xwi7xwa圖書館

^{*} 通訊作者Corresponding Author: Ann M. Doyle, E-mail: ann.doyle@ubc.ca

註: 本中文摘要由圖書資訊學刊編輯提供。

以APA格式引用本文:Doyle, A. M., Lawson, K., & Dupont, S. (2015). Indigenization of knowledge organization at the Xwi7xwa library. *Journal of Library and Information Studies*, *13*(2), 107-134. doi: 10.6182/jlis.2015.13(2).107

以Chicago格式引用本文:Ann M. Doyle, Kimberley Lawson and Sarah Dupont. "Indigenization of knowledge organization at the <u>Xwi7xwa library</u>." *Journal of Library and Information Studies* 13, no. 2 (2015): 107-134. doi: 10.6182/jlis.2015.13(2).107