Narrative Section of a Successful Application

The attached document contains the grant narrative of a previously funded grant application. It is not intended to serve as a model, but to give you a sense of how a successful application may be crafted. Every successful application is different, and each applicant is urged to prepare a proposal that reflects its unique project and aspirations. Prospective applicants should consult the NEH Division of Preservation and Access application guidelines at http://www.neh.gov/divisions/preservation for instructions. Applicants are also strongly encouraged to consult with the NEH Division of Preservation and Access staff well before a grant deadline.

Note: The attachment only contains the grant narrative, not the entire funded application. In addition, certain portions may have been redacted to protect the privacy interests of an individual and/or to protect confidential commercial and financial information and/or to protect copyrighted materials.

Project Title: Local Contexts 2.0: Implementing Traditional Knowledge Labels

Institution: New York University

Project Director: Jane E. Anderson

Grant Program: Research and Development
1. PROJECT DESCRIPTION for LOCAL CONTEXTS 2.0

We are applying for a Tier II Advanced Implementation Research and Development grant through the Division of Preservation and Access to support the further development and implementation of the Local Contexts online platform (www.localcontexts.org) aimed at defining extra-legal solutions to the curatorial challenges posed by Native American and First Nations collections in relation to access and expanding the public record. In its third phase of development, Local Contexts has already provided educational materials related to intellectual property rights, digital stewardships, co-curation, and a new set of innovative Traditional Knowledge Labels for both Native/First Nations and non-Native collecting institutions. This next proposed phase would extend this platform to create a practical set of tools, models, and workflow for digital curation of Native/First Nations collections across stakeholders. This project will unite Native/First Nations and non-Native communities and institutions who manage and hold their cultural heritage by extending the existing Local Contexts platform into a national, institutional-wide model, focusing on the development and implementation of a new set of standards for providing access to, and structuring use of Native/First Nations cultural heritage collections online.

After 20 years of the Native American Graves Protection and Repatriation Act (NAGPRA) legislation setting forth moves to physically repatriate cultural objects, there is clear evidence of a shift toward collaborative curation across repositories. Building from these new collaborative relationships between Native/First Nations and non-Native collecting institutions that address colonial legacies of collecting cultural heritage, Local Contexts identifies and advances the current momentum to the management of digital heritage in America and globally. At this critical juncture for establishing sustainable and respectful models of access to cultural heritage, Local Contexts sets new standards for the curation, display, and integration of local community information into the public historical record. This project expands legally managed relations to practical, social, and cultural commitments with the help of pro-active educational models and innovate information technology. Flexibility, international scope, public access, and engaged owner/user publics lie at the core of our vision to offer support and build capacity across institutions and within local community contexts.

Specifically, the Local Contexts site and new curatorial model address the unique problem of public domain materials and third party owned content that is divorced from local communities and missing rich narration and curation. One of the key devices developed within Local Contexts for engaging this curatorial challenge is the suite of Traditional Knowledge (TK) Labels. In an increasingly complex legal, social and cultural environment, the TK Labels offer Native/First Nations stakeholders the tools to add cultural and historical context to their cultural heritage content in non-Native digital archives, libraries, and museums in the United States and/or their own local digital heritage archives. The TK Labels are an addition to already existing records and thus, an enhancement to the metadata of the records and at the same time a crucial step in vetting content that may have cultural sensitivities. In addition to the TK Labels, Local Contexts offers educational and training information for Native/First Nations communities and non-Native collecting institutions around copyright and intellectual property policies, as well as templates and forms, such as Memorandums of Understanding (MOUs) and tribal resolutions, for the further development of equitable and ethical collaborative relationships between Native/First Nations communities and collecting institutions. To date, we have provided one-on-one training workshops, technical and educational support and localized TK Label production and implementation to tribal partners and collecting institutions in the United States and Canada.

With a Research and Development grant from the NEH, we would advance Local Contexts from its current localized testing to the next stage of national implementation and the creation of national models and workflows that cut across institutions and are flexible within the technological landscape. Outcomes from the next phase of production, research, and development of this project include:

- Enhanced educational modules for online training for Native/First Nations communities, tribal repositories, and collecting institutions for navigating and making informed decisions around ownership and access to cultural heritage materials;
- Development of an online forum for community experiences in collaboration and institutional engagement so as to provide practical, on-the-ground models for other communities and repositories;
- Finalizing the complete TK Label Adaptor and developing the TK Label Browser Extender allowing for national customized Label production and application online across sites and within any content management system; and,
- Development of a new Native/First Nations digital stewardship collection workflow and related standards (from gathering content, to vetting, to customization, to catalogue location) for the diversity of collecting institutions and tribal archives, libraries and museums.
# 2. TABLE OF CONTENTS

1. Project Description
2. Table of Contents
3. Narrative
   3.1 Significance
      3.1.1 Beginnings
      3.1.2 Futures of Sharing
      3.1.3 Access and Ownership as the Key Problems for Native American Collections
      3.1.4 The Post-NAGPRA Condition: Working Outside Legislative Frameworks
      3.1.5 Development: From Mukurtu and the Plateau Peoples’ Web Portal to Local Contexts
      3.1.6 The Traditional Knowledge Labels
      3.1.7 Education and Informational Component
   3.2 Background of Applicant
   3.3 History, Scope, Duration
      3.3.1 Work To Date
   3.4 Methodology and Standards
   3.5 Workplan
   3.6 Staff
   3.7 Sustainability and Evaluation
   3.8 Dissemination
4. Budget
   4.1 Sub-Budget for Center for Digital Archaeology
5. Appendices
   A. Bibliography of Relevant Sources
   B. Brief Resumes for Staff
   C. Dissemination Plan
   D. Samples of Final Work 1 – TK Label Adapter and TK Label Browser Extender
   E. Samples of Final Work 2 – Native Collections Digital Workflow
   F. Samples of Final Work 3 – Local Contexts Series Workshops
   G. Results from Previous Work 1 – Screenshots from Local Contexts and Test Projects
   H. Results from Previous Work 2 – Select Examples of Dissemination
   I. Letters of Commitment from Participants
   J. Letters of Support
6. Project Participants
7. History of Grants
3. NARRATIVE

3.1 SIGNIFICANCE
3.1.1 Beginnings
We are applying for a Tier II Advanced Implementation Research and Development grant through the Division of Preservation and Access to support the further development and implementation of the *Local Contexts* online platform. Very few local communities have the resources to define the extent of their stake in national collections or to define the types of access and management strategies necessary to meet their local curatorial goals. Over the last three years, the *Local Contexts* team has worked one-on-one with local communities to identify their digital stewardship needs, define areas of challenge in relation to legal and extra-legal frameworks, create customizable TK Labels, and produce reusable workflows for ongoing digitization and management of collections. For example, the Scowlitz Band of the Sto:lo Nation in Canada have been working through Virtual Museums Canada to develop an educational website that explains Scowlitz history, cultural heritage and engagement with the discipline of archaeology to Scowlitz and non-Scowlitz audiences. One curation problem identified early in the project was how to convey Scowlitz expectations regarding access, ownership, and use of materials on the website. While the site is being designed for a global public, and has been developed and vetted through community protocols and workshops, there remained the problem of conveying specific cultural expectations of seeing and using this material. Representatives working with the Scowlitz Band reached out to the *Local Contexts* project team for support in relation to these questions and as a result the Scowlitz community became one of the first communities to test the functionality and flexibility of a key tool being produced within this project: the Traditional Knowledge (TK) Labels. The innovation of this labeling function is that it can easily convey Scowlitz expectations and protocols of access and therefore educate users about these culturally specific expectations for using significant cultural heritage materials in a non-legal frame. Significantly this also includes providing appropriate means of attribution and acknowledgement for any future use of this material. The Scowlitz adaption and implementation of the TK Labels provides an additional set of local and culturally specific guidelines for reading and engaging with content provided on the site. Thus, the educational goals of the site are amplified and the digital content has expanded and embedded metadata for re-use in other community or third party contexts.
From the 13 Labels that *Local Contexts* has created (see below) the Scowlitz community gathered at the workshop (including Chief Andy Philips) decided to use five of these for their website and three in particular to shape and direct how audiences engaged with the site as a whole. While *Local Contexts* provides an initial generalizable text for all of its Labels, we have worked one-on-one to create customized versions open to adaptation and translation at a community level. In this case, the Scowlitz translated each label into the local Halkamelem language and provided short descriptions of each Label in their own words. All this work happened through two on-site workshops designed and delivered by the *Local Contexts* project team and held several months apart from each other. The Scowlitz Traditional Knowledge Labels now directly reflect negotiated and agreed upon concerns and needs about access and use of cultural heritage derived from the Scowlitz community itself. In the above screenshot from the website in development (launching July 2016), the TK Label icons are found in the top right hand corner under the Virtual Museums Canada logo. Clicking on the image opens a box (see screenshot above) that explains the label and its intentions from a Scowlitz perspective. In this example, making a label about name and attribution simultaneously points to a historical paradigm of misnaming and misattributing Scowlitz cultural heritage, whilst at the same time correcting the historical record and creating possibilities for future engagement. As one community member, Betty Charlie, put it: “We want the world to know we are still here and that we have knowledge we want to share. We would like to go into schools and share our histories and our knowledge if people contacted us.”

The application of the TK Label to this Scowlitz cultural heritage website functions to localize meaning. It gives any user who encounters the site more information about the Scowlitz community and their intentions and expectations in sharing their culture and cultural heritage. Importantly, the intent for sharing is being explained through Scowlitz terms, with recognition of and respect for the special cultural rules that govern knowledge and its connection to history, to people and families, and importantly to tribal territory. The idea of labeling gets at the key problems of access, circulation, and management of cultural heritage that figure as urgent needs to be addressed in the future management and stewardship of Native/First Nations digital cultural heritage.

3.1.2 Futures of Sharing

Native/First Nations cultural heritage collections are unique in composition, content, and in their social and cultural value to the communities from where they derive and to non-Native publics seeking to better understand the complexity of Native/First Nations cultures and cultural practices. Due to the history of collecting, for archives, libraries, and museums these collections are inherently political and therefore present a range of unusual and difficult management issues. These issues range on a spectrum from: adequately and appropriately identifying and uniting collections; including historically specific and culturally relevant information within catalogue entries; and, providing new standards for access within digital platforms. But the most consistently problematic area for collecting institutions is in the negotiation with communities over the legal, ethical, and cultural rights to these collections: who owns them, who controls them and who should access them now and into the future? Unlike other collections, Indigenous cultural heritage is caught-up in various legal regimes of protection that are difficult to understand and untangle, even for the most seasoned legal council. Moreover, in their increasing movement into digital formats, the new rights that are generated only compound the problems of responding to Native/First Nations concerns about ownership and circulation of materials. These legal entanglements impede access and use and make already difficult negotiations with institutions and other rights holders even harder. There is currently no platform where communities and institutions alike can go to find information about legal and extra-legal solutions as they apply to these kinds of collections. There are no services available for helping communities navigate the terrain of ownership and stewardship as they pertain to their unique cultural heritage materials. There is no tool that actively works to correct or augment the public historical record according to cultural sensitivities and responsibilities in practice. There is no national initiative in place that offers a different kind of workflow that acknowledges the difficulties and dilemmas for multiple stakeholders in managing collections and providing access to such valuable materials. There is no practical standard-setting vehicle dedicated to bridging past practices and finding ways for new kinds of reciprocal and collaborative relationships that addresses a collection in its totality, including its past, present and future legal and cultural status. To fill this void, *Local Contexts* 2.0 offers an intervention within this complex of rights, access, ownership and responsibility.

In its current third phase of development and testing, *Local Contexts* provides educational materials and online resources as practical ways for Indigenous peoples to manage, share, and preserve their digital
cultural heritage collections, providing access that is at once contextualized and culturally appropriate. In addition the co-Directors of the project, Jane Anderson and Kim Christen Withey they have created hands on workshops that take communities through the process of curation with their own collections and bring together collecting institutions in conversation with Native/First Nations communities to promote a collaborative approach to the curation of shared collections. Working from this set of resources and the developed series of workshops, the next phase builds out a standardized model for digital stewardship and curation promoting a process of vetting, contextualizing, and expansion of the public record and at the same time promoting ethical curation through engaging with Native/First Nations stakeholders.

Local Contexts 2.0 goals are to support Native and First Nations communities, non-Native collecting institutions, and a research focused public in the following four ways:

- Through the development of educational and training modules on intellectual property rights, including copyright and related rights, provide Native and First Nations communities and collecting institutions with increased capacity to disentangle, understand and make better decisions about the legal rights and responsibilities that govern these unique collections;
- Through the further advancement of the Traditional Knowledge Labels, provide Native and First Nations communities with the capacity to add important and missing information about the significance of these cultural heritage materials;
- With on the ground training and workshops with Native and First Nations communities and collecting institutions to develop a new workflow model for the collaborative stewardship of digital cultural heritage material;
- Through implementation of the TK Labels in community and institutional contexts, advance non-Native users’ knowledge and understanding about fair and equitable use of Native/First Nations cultural heritage.

Local Contexts 2.0 not only aims to demystify and make the legal and ethical regimes that affect access to and use of Native/First Nations cultural heritage collections clearer, but also to offer a strategic intervention into how these collections can be better understood and shared through the non-legal educative mechanisms including labeling and a new digital stewardship workflow model. The suite of TK Labels that Local Contexts have already developed are both flexible digital and community-driven tools for adding new knowledge into the public historical record, and also support the development of new workflows around vetting the rights and protocols for Indigenous content that supports ethical and educational models of collaboration in national and international contexts. In one of the only publications on information technology and Indigenous communities worldwide, Laurel Evelyn Dyson, Max Hendricks and Stephen Grant observe that: “The multimedia capabilities, storage capacity and communication tools offered by information technology provide new opportunities to preserve and revitalize Indigenous cultures and languages, and to repatriate material back to communities from national cultural institutions.” (2007: xvi) The Local Contexts 2.0 project takes this insight as its point of departure for the development of a national informational and educational platform that includes a unique labeling tool that is adaptable, portable, localizable and culturally nuanced for the culturally appropriate digital stewardship needs of Native/First Nations communities and collecting institutions.

3.1.3 Access and Ownership as the Key Problems for Native/First Nations Collections
Through the colonial collecting endeavor, Native American, First Nations and Aboriginal peoples’ lives and cultural practices were collected, documented and recorded at unprecedented levels (Deloria 1978; Krebs 2012; O’Neal 2014; Anderson 2014). During this period, cultural heritage was removed from communities and detached from local knowledge systems (Hagan 1978; Kramer 2004; Peers and Brown 2011; Kemptoch and Peers 2013; Christen 2014). These early colonial collecting endeavors were haphazard and largely contingent on personalities, alliances and allegiances to individuals both in ‘the field’ and those within the institutions requesting specific kinds of Native American and First Nations material. Often it was one individual working in Native American and First Nations locations who was employed by multiple institutions and other private collectors (Cole 1985). Later, it was individual folklorists, hobbyists, and opportunists that continued their own pursuit in the documentation of Indigenous cultures. As a result, collections and documentation became mixed, messy and inconsistent.
The dispersal of Native/First Nations collections is a significant impediment for access by communities seeking to find and reconnect with cultural heritage, cultural practices, and related traditional knowledge. Importantly, it is also a problem for researchers and institutions who are only able to access and offer partial and incomplete accounts of these colonial encounters. Projects like the NEH funded Plateau Peoples’ Web Portal at Washington State University and the Reciprocal Research Network at the University of British Columbia’s Museum of Anthropology directly address this complexity and serve to connect communities back to their cultural heritage through advancing diverse workflows and digital heritage management models that include scholars, Native/First Nations communities, and collecting institutions. These projects illustrate just how valuable it is to extend the curatorial model to local communities who have been systematically and structurally separated from it. They also highlight the range of issues that follow from re-connection and collaboration. For it is in the moment that communities are reconnected back to their collections, that they face the major questions of its legal, social and ethical ownership. The legal, social and ethical questions of access and use arise because almost all Native/First Nations cultural heritage material is not actually owned by Indigenous people, but rather by the people, the anthropologists, the hobbyists, the folklorists who ‘made’ the film, sound recording, photographs and manuscripts. Due to Western intellectual property rights laws, Indigenous peoples are seldom the legal copyright owners of the cultural heritage materials that document their lives, their family’s lives, their languages, their ancestors and their cultural practices. This means that they have very little say in how these valuable materials are used and accessed by others or by their own communities. For collecting institutions then, tensions being experienced through the reconnection of material back to communities do not just revolve around providing access, but also inevitably engage with the legal and social rights and entitlements that were arbitrarily made in the moment of the materials’ production. As Haidy Geismar notes, we need to pay attention to the implicit power relations that permit digital returns and to the hierarchies that “keeping-while-giving” establishes, in which [digital] objects may circulate but title or ownership remains centralized.” (2013: 257)

For Native/First Nations cultural heritage material in the public domain, there is a different but related problem that unfolds: how to insert and inscribe the appropriate cultural protocols and social responsibility back into material that can now be legally used by anyone at anytime in any way imagined? How can community-specific guidelines for respectful and responsible use of these valuable materials be integrated into material that now has no controls on circulation and use? In the copyright continuum from restricted use (copyright) to un-fettered and universal access (public domain), there is an urgent need to address Native Americans and First Nations concerns about access, circulation, re-use and ownership of their cultural heritage collections. This means understanding the current legal framework itself, as well as finding solutions that can transcend it through the deliberate and collaborative crafting of workflow alternatives that acknowledge that with Native/First Nations collections, different kinds of consideration and management are required.

3.1.4 The Post-NAGPRA Condition: Working Outside Legislative Frameworks

Native/First Nations cultural heritage collections are unique in formation, in their legal status, and in their curation and management needs. In the last twenty years, globally, collecting institutions—museums, libraries and archives—have heeded the calls by Indigenous peoples to integrate Indigenous curatorial models and knowledge into mainstream museum and archive practices, from cataloging to display modes. There is no doubt that in the United States the 1990 passage of the Native American Graves Protection and Repatriation Act (NAGPRA) altered the fields of relations between Native American nations and communities, scholars and collecting institutions. Cultural heritage materials in the form of still and moving images, sound-recordings and written texts sit outside the legislative reach of NAGPRA. While there is no overriding international or national legislative framework that offers further structured support for the negotiated return of this kind of

---

1 Directed by co-Director of Local Contexts, Dr. Kim Christen Withey, the Plateau Peoples’ Web Portal is a collaboratively curated online site for Plateau cultural materials. The Portal is a collaborative project between the Yakama Indian Nation, the Confederated Tribes of the Umatilla Reservation, the Confederated Tribes of the Colville Reservation, The Spokane Tribe of Indians, the Confederated Tribes of the Warm Springs Reservation and the Coeur d’Alene Tribe; the Washington State University Libraries; Manuscripts, Archives, and Special Collections (MASC), the Northwest Museum of Art and Culture, the Smithsonian Institution’s National Anthropological Archives and National Museum of the American Indian.

2 Reciprocal Research Network connects National collections with First Nations communities inviting a reciprocal model of narrating museum collections.
cultural heritage material, questions of access and informed sharing of this material remain central to Indigenous concerns. Most actions taken to address these issues are local and specific in nature, as individual communities selectively engage with institutions and slowly regain control over culturally vital heritage material and belongings and their future circulations.

For instance, the Penobscot Nation in Maine is currently completing a three year Administration for Native Americans (ANA) language grant titled “Recovering Our Voices: Language Immersion Project” which involves the digitization and structured support for the return of vital language collections. One key component in this project is ‘Protecting Voices’ which involves the development of tools and policies to secure the involvement of the Penobscot Nation in future decisions about the use of the Penobscot language held in US institutions. In this instance, access is one key issue that the Penobscot Nation is working towards resolving, but it is inherently connected with the problematic of ownership and informed sharing of these same collections. A first step towards this goal of protection has been working with the American Philosophical Society (APS) on the establishment of an Native American Advisory Board and Protocols for the Treatment of Indigenous Materials as well as the further development of more specific Memorandums of Understanding between the APS and the Penobscot Nation about the ownership, access and future use of these collections. (Indeed the APS recognizes its own concerns about access to these collections and is committed to developing a new Digital Guide that can help provide improved access to its collections.)

In another instance, anthropologist Robin Gray has begun her own community’s first repatriation project on sound files recorded in the 1940s. Robin is a Tsimshian woman from the Northwest Coast of British Columbia and in 2012 she unexpectedly became involved with the Laura Boulton Collection of Traditional and Liturgical Music at Columbia University. Not unlike other Native/First Nations collections, the Laura Boulton collection is spread across five institutions including Columbia University, Library of Congress, Harvard University, the Smithsonian Institution, and Indiana University. The Columbia University collection consists of 30,000 field recordings and accompanying documentation that was purchased by Columbia in 1967. No Tsimshian person has ever accessed and heard this material, and in the first listening of these songs in over 70 years, Robin was immediately able to discern the difference between Tsimshian, Gitxsan and Haida songs that had previously all been classified as ‘Northwest Coast material’ – the specificity of each community lost in the metadata and classificatory models available at the time.3 Robin’s access and unique cultural knowledge immediately opened up the collection in ways previously precluded. In connecting poorly documented recordings back into the communities from which they derived, a new kind of awakening of the material occurs. From a Tsimshian perspective these songs have had ‘life breathed back into them’ as ancestors speak into the present, and the singers names and their Clan and House names and responsibilities also reveal themselves. From a researcher perspective, knowledge about the rights and responsibilities of the singers towards the songs that they shared opens up new meaning about the complexity of Tsimshian cultural practice. But the legal conditions of ownership of this collection continue to affect the capacity for Tsimishan protocols of responsibility and access to be incorporated into this collection for other users to be aware of, and to help inform decisions about respectful and thoughtful use.

These newly emerging, diverse collaborations between communities and institutions are generating innovative initiatives and contexts for the sharing and interpretation of these wide ranging collections. But they remain institution and community specific despite the similarity of concerns and problems for wider Native American, First Nations and Indigenous communities internationally. What these initiatives clearly show is that concerns for access often go hand in hand with concerns for finding ways to incorporate appropriate protocols for use and circulation of these cultural heritage materials. To date that has only really been possible for communities that utilize pioneering digital archive platforms like Mukuru where these issues are central to design and infrastructure.4 We are at a watershed moment where Indigenous communities all around the country and indeed, all across the world are facing exactly the same problems about what to do about access, ownership and the informed sharing of digital cultural heritage collections. This is particularly acute for the enormous collections in the public domain that circulate with missing or inaccurate information, and because of this, re-inscribe colonial inaccuracies about Indigenous culture and lifeways. There remains the pressing question of initiatives and models of collaborative action that are multi-

4 Mukuru CMS is an NEH and IMLS funded free and open source content management system built from the ground up with Indigenous cultural heritage needs in mind (www.mukuru.org). The Local Contexts project is a direct outgrowth of Mukuru CMS (see below).
institutional and multi-tribal, getting at the reality that tribes have their cultural heritage collections in multiple institutions, and that collecting institutions can have collections from hundreds of tribes.

As a direct intervention, the Local Contexts project acts as functional tool to support multi-community and multi-institutional needs for collaborative models, development of a new digital heritage stewardship workflow and tools that are able to add missing or alter incorrect information, and to find new mechanisms for incorporating ethical and culturally responsible norms for the future use of this material. In understanding our current unique legal and cultural environment, Local Contexts offers itself as a vehicle for increasing community capacity about the range of possibilities for diversifying collections management and curation practices, as well as offering labeling options for access and sharing that convey local community perspectives, concerns and responsibilities. In this way it is not only communities that utilize Mukurtu CMS that will have the options to add protocols of access to material: any Native/First Nations community could use Local Contexts to develop and implement their own locally driven TK Label options, and any institution working with local communities could collaboratively develop and add labels to their digital collections and metadata fields. The innovation here, and what we are seeking further NEH support to develop, is a new model for Native/First Nations cultural heritage collections management and curation that acknowledges the legitimacy of Indigenous protocols of access, traditional knowledge, and new means for their incorporation in practice.

3.1.5 Development: From Mukurtu CMS and the Plateau Peoples’ Web Portal to Local Contexts

The physical distances between Indigenous communities and their cultural heritage and oftentimes very personal histories held in museums and archives is part of the legacy of colonial nation-building where museums were seen as part of the checklist for being a nation. Since the mid 1990s, museums, archives, and libraries worldwide have recognized the need to include Indigenous communities in their outreach activities and curation process. Mukurtu CMS is an answer to this call by providing a solution to Indigenous cultural heritage management needs that were not addressed in commercial products. For instance, Mukurtu provides flexible cultural protocol based item level content management, expanded metadata fields to include traditional knowledge narratives and text, expanded and customizable categories and subject headings that account for local taxonomies, and customizable licensing and labeling schema for content at the item and collection level. Funded by an NEH Office of Digital Humanities Digital Start-Up grant 2010, and an Institute of Museum and Library Services National Leadership Grant in 2011, Mukurtu CMS is now at a 2.0 release with a global community of users that are highlighting the diversity of collections management and the re-circulation of Native/First Nations collections.

The Plateau Peoples’ Web Portal is built on the Mukurtu CMS platform and was, in fact, the beta version of Mukurtu. The Portal is a collaboratively curated site where six tribes in the inland Northwest along with Washington State University (WSU) and national partners at the Smithsonian Institution collaboratively curate and reciprocally manage Plateau collections. In the Portal, tribal members enter ‘tribal knowledge’ and ‘cultural narratives’ alongside the standard Dublin Core metadata from the collecting institutions. For example, whereas the catalog record from the WSU McWhorter Collection from 1911 is titled ‘Three Yakama Women’ and the metadata associated with the image gives no information about the place, the women, the customs, etc., the added metadata from Jolena Tillequots and Vivain Adams, two Yakama tribal members and advisors on the project, provides the location of the women, a rich description of their Native dress, their ceremonial ties, their oral history traditions, and a list of their likely family connections. This added tribal knowledge touches on the main audiences for the Portal: tribal nations, scholars and the general public. Not only is this enhanced record beneficial for tribal members, but also for scholars and the public who may never be able to speak to anyone on the Yakama reservation, now have access to first-hand knowledge about ceremonial use of regalia, everyday contact, oral histories and the deep family connections still alive.

The Plateau Peoples’ Web Portal allows humanities scholars to access to a wide range of materials that will be linked by the knowledge and expertise of Plateau people. For example, historians studying the impact of allotment on Pacific Northwest reservations can easily access allotment maps, photographs, oral histories, and contemporary discussions of the policy’s impact. Coupled with the rich knowledge provided by Native people, these resources can be the foundation for new interpretations and understandings of many issues in Native American history and culture throughout the region and beyond. Building on this local work, and taking this model of collaborative curation and extending it within Local Contexts, we aim to develop a national model workflow for digital stewardship. This is an inclusive and expansive model beginning with
how to manage and care for cultural materials in the entire life cycle of curation – from the physical object or record to digitization and management in a content management system, to access online – and providing step by step processes, educational modules, and guidelines for workflows, will allow for an expansion of public records, deeper relationships between Native American and First Nations communities and non-Native collecting institutions and a more informed public (see below in 3.1.7).

From the outset of Mukurtu’s development and its further expansion and iteration through the Plateau Peoples’ Web Portal, there was recognition of the problematic relationship of access and control that Indigenous communities have to their cultural heritage. While Mukurtu was designed to facilitate more culturally appropriate access and pioneer new standards for digital stewardship, it faced familiar difficulties in dealing with the already legally existing conditions of ownership that precluded Indigenous control over their own heritage. For instance, the original technical specifications for Mukurtu’s metadata rights fields included traditional copyright and Creative Commons licenses. But communities using Mukurtu consistently found that both of these options fell short of their needs because they did not address more culturally specific concerns about responsibility in relation to access. This led to the initial development of a special set of Traditional Knowledge (TK) Licenses embedded within Mukurtu CMS. Both version 1.0 and 1.5 of Mukurtu CMS included customized TK fields allowing community members to test these ‘licenses under development’ for their internal, community-owned collections. However, a further challenge emerged when it became clear that the bulk of cultural heritage content that was being incorporated into Mukurtu archives were cultural heritage materials that Indigenous people do not legally own or control. This meant that no new licenses could be used or tested. Because the current copyright conditions were complicated to understand in both community and institutional contexts and to develop strategies to deal with, ideas began to take shape for a stand-alone platform that could simultaneously assist in addressing the unique legal problems facing Native/First Nations cultural heritage collections, deliver practical information about legal and cultural rights and responsibilities, and offer strategic tools for the repositioning of Indigenous peoples via their collections, even if they were not the legally recognized owners. In 2012, Local Contexts, as its own discrete initiative with Jane Anderson and Kim Christen Withey as its co-Directors, and Michael Ashley as Technical Director, was born (for further information about funding see 7. History of Grants).

3.1.6 The Traditional Knowledge Labels
The Local Contexts initiative has two objectives. Firstly, to enhance and legitimize locally based decision-making and Indigenous governance frameworks for determining ownership, access and culturally appropriate conditions for sharing historical and contemporary collections of cultural heritage. Secondly, to promote a new classificatory, curatorial and display paradigm and workflow for museums, libraries and archives that hold extensive Native/First Nations collections. By elevating the visibility of erased or marginalized voices from collection and exhibition practice, the Local Contexts initiative works to significantly impact how Indigenous perspectives about the management of these ethnographic collections are recognized, legitimized and incorporated into contemporary practice. By adding critical and missing information, and facilitating new collaborative and reciprocal relationships between Indigenous communities and cultural institutions, this project will increase knowledge about how ethnographic collections should be accessed, shared, governed, circulated, used and curated within institutions and by other non-Indigenous users of this cultural content.

With the bulk of Indigenous cultural heritage material existing in the public domain, the Local Contexts project team made an early decision to focus on the development of a set of TK Labels as a way to provide an educational and social “mark” on this large body of content. This focus was confirmed at an invited presentation of Local Contexts in Geneva at the World Intellectual Property Organization in 2012, where our discussion with UN Member States’ representatives identified the labels as an easier and quicker option for delivering direct on the ground results. For labeling options, we were initially inspired by the combined idea of community-based locality marks, such as geographical indications, alongside the innovation and success of fair-trade labeling. This latter form of labeling in particular has been used to render visible more ethical relationships of production in areas that have historically suffered from exploitation. These include, for instance, coffee, tea and clothing markets. Fair-trade labels encourage a form of social responsibility by making past exploitative practices visible in non-confrontational but socially effective ways. When given more information via a label, responsibility falls to the user to make a different decision about a purchase. In the case of Indigenous digital heritage materials, we were also largely seeing a strategy to target users of this unique cultural heritage: how could we give users additional information to help them make more ethically sound and responsible decisions about use of these unique cultural heritage collections? We decided
to extend this concept of fair-trade labels in production into fair-use labels in collecting institutions. Consciously using this specific naming convention, we directly reference the concept of 'fair-use' as it exists within a US copyright context. As a copyright exception, Patricia Aufderheide and Peter Jaszi argue that fair-use offers itself as an important component for ameliorating the harsh exclusions of copyright. It is precisely because of the flexibility within the concept that allows for multiple interpretations of what constitutes 'fair-use' to be developed. They suggest that fair-use must, by definition, retain flexibility as social and cultural norms for what constitutes 'fair' change over time and are often made in response to differently situated parties (Aufderheide and Jaszi 2011). The TK Labels are a practical articulation of the possibilities that Aufderheide and Jaszi note within their analysis of fair-use. The TK Labels situate community-determined interpretations of what constitutes fair and equitable use at their center, and this helps a range of other parties, including users, understand more about what fair and responsible use looks like from another cultural perspective.

The TK Labels provide an extension of fair-use by providing a flexible option for conveying important information about cultural heritage materials — their proper use, guidelines for action, or responsible stewardship and re-use. The TK Labels can be used in libraries, museums, and archives and within tribal institutions and online projects in development (see for instance the Scowlitz Band example at the beginning of this Narrative) to extend already existing catalog records, provide additional context, and define responsible re-use of the materials. The TK Labels can be used to include information that might be considered 'missing' (for instance the name of community from where it derives), what conditions of use are deemed appropriate (for instance if the material has gendered or initiate restrictions associated with it), whether correct protocols for vetting materials have been followed (for instance many tribes now have tribal policies and agreements for conducting research on tribal lands), and importantly, how to contact the relevant family, clan or community to arrange appropriate permissions. (See screenshots of TK Label examples from Musqueam First Nation and Scowlitz Band of the Sti'oli Nation in Appendix G). Importantly, the TK Labels are informational and educational — they ask users to make a choice, a conscious decision to follow the protocols of the source communities.

There are currently 13 TK Labels that have been developed.

1. Attribution
2. Commercial
3. Non-commercial
4. Men's Restricted
5. Men's General
6. Women's Restricted
7. Women's General
8. Outreach
9. Community Use Only
10. Secret/Sacred/Private
11. Seasonal
12. Family Use
13. Verified

Most of the TK Labels were initially produced through already existing knowledge and work on cultural protocols in the US, Australian, and Canadian contexts from Anderson and Chrisjen Withey’s prior work. Several recent labels were developed through specific workshops and focused testing with tribal partners. For instance, the Family Use label grew directly from our work with the Musqueam First Nation in Canada to highlight the importance of family knowledge and responsibility from a Musqueam First Nations perspective.
In this case, the community label we had was not specific enough to get at the layered knowledge within families that functions as the first level for larger sets of community knowledge about cultural materials and practices (See Appendix G). Each of the TK Labels has a unique icon and accompanying descriptive texts that recognize the different users of these Labels. For instance, there is a description for those applying a Label (TK holders), and a description for a user encountering a Label with a work (TK users), see the Attribution Label and icon below and the accompanying text explaining its purpose and use.

The Attribution Label

**Description**

**TK Holder:** This label should be used when you would like anyone who uses this material to know who the correct sources, custodians, owners are. This is especially useful if this material has been wrongly attributed or important names of the people involved in making this material or safeguarding this material, are missing. This label allows you to correct historical mistakes in terms of naming and acknowledging the legitimate authorities for this material. This label asks for future users to also apply the correct names and attribution.

**TK User:** This label is being used to correct historical mistakes or exclusions pertaining to this material. This is especially in relation to the names of the people involved in performing or making this work and/or correctly naming the community from which it originally derives. As a user you are being asked to also apply the correct attribution in any future use of this work.

In all local contexts where the TK Labels are being used, the icon remains the same, but the text can be customized to reflect local values and definitions. Keeping the icons stable produces a visual form of standardization across contexts and institutions for Label use (much like Creative Commons license icons are now easily recognizable). The flexibility for community-driven expression of attribution, for instance, exists in the textual component that can be adjusted according to translation and community articulation. This community expression is supported through our *Local Contexts* ‘Series Workshops’ (see Appendix F). The text that *Local Contexts* provides on its platform functions as a template for further re-use, mixing, refinement and localization. This customability reflects a core need to be sensitive to the specificity of each context and that each community that we work with has the right to self-define how and when a label should be used within the parameters of their own cultural heritage material. Indeed, the need to keep local contexts at the center of our work was the genesis of the name for the project.

The labeling initiative portion of the larger *Local Contexts* project can achieve several inter-related goals that historically have been difficult to get at in the current model of curation of digital content. The TK Labels render visible past practices of invisibility, while also bringing protocols of access and use into collections in dynamic and contemporary ways. The TK Labels also enhance possibilities of understanding and engaging with current Indigenous communities. One of the primary advantages of labeling is in the way it empowers Indigenous communities to include important access information about cultural heritage and this also provides more information to the public record. As the TK Labels have advanced in development through our testing both within Mukuru CMS, the Plateau Peoples’ Web Portal and beyond in other local customized community sites, it has become clear that the Labels not only serve Indigenous communities and non-Indigenous cultural heritage users, but also opens a space for a different dialogue with collecting institutions about access and the extra-legal and cultural forms of ownership that have been haunting these collections. Importantly, the Labels are also a vehicle for providing a new set of procedural workflows that emphasize vetting content, collaborative curation, and ethical management and outreach practices.

### 3.1.7 Developing Native/First Nations Digital Content Workflow

Typical models of curation (see image below) begin with “discovery” or “collection” that implies a neutral cultural, social and historical field and promote “describing” and “sharing” without notions of vetting materials beyond Western legal systems of copyright. Instead, a model of digital heritage stewardship infusing Native/First Nations knowledge circulation systems through the idea of labels, for instance, promotes the care and stewarding of belongings based in *reciprocal* curation. This model of curation involves a set of practices that redefine and interrupt the standard workflow of the digital content lifecycle, where content seems devoid of context or culture and where processes of discovery and re-use do not take into account
colonial collecting practices, current political situations, and the biased classification systems that permeate curation models. Standardized digital life cycle models continue to unwittingly shore up Western understandings of information and objects detached from sets of social relations, histories of genocide, and systems of kin obligations that promote responsible sharing and circulation of knowledge between people.

Labeling offers an inroad at many levels of the digital content lifecycle (see image below). While adding a label at the 'creating' stage might be the best time to do so, it is certainly not the only time it can happen. What the process of labeling achieves at these other stages is an opening to new meaning, new conversations and new interpretation: not only do they add a critical voice and add important and previously missing information to the public record, but they enable an expansion of the very curatorial stage itself. If a non-Native collecting institution collaborates with a Native/First Nations community on a labeling project for a specific collection, every stage of the digital lifecycle will shift and benefit from thinking through how, when, and where to apply labels and which ones to use at series, collection and item level. For instance, when added to 'Describing', the TK Label adds historical and cultural context to the item; at the 'Management' stage the TK Labels provide information about the responsible and ethical standards of access and use; at the 'Discovery' stage the TK Labels increase knowledge and meaning at an item or a collection level; at the 'Using and Re-using' stage the TK Labels facilitate the collaborative curation of shared collections through the inclusion of community naming protocols and information about contact and accessing tribal policies for research and engagement.
Through the labeling intervention we can get at enduring questions from Indigenous, institutional and general user perspectives. Labeling provides more information and encourages a researcher, for instance, encountering a collection for the first time, to make different decision about how to use, how to cite, how to attribute this newly marked song, photograph, or sound file.

**Example One: Plateau Peoples' Web Portal**
The Plateau Peoples' Web Portal (mentioned earlier) allows for TK Labels to be added directly to both institutional catalog records and to tribal catalogue records. As the earliest intervention into a process identified as collaborative curation, the Portal integrates the TK Labels as an additional metadata field allowing tribal stakeholders to further add information to their own materials and for added contextual information for public collections that are part of the Portal. The workflow for the addition of the TK Labels begins at the point of digitization. Once a tribe has chosen physical materials for digitization the tribal representatives add their own metadata to the tribal catalogue record. As an extra field added on to the “rights and permissions” section, the TK Labels call attention to the educational emphasis of the Portal. While the records from the institutions are “public” by default, the Labels add a layer of context and highlight a form of “permission” that is extra-legal. Attribution, in this case, identifies the tribes that are stakeholders in the co-management and co-curation of these collections, regardless of the legal status.

**Example Two: American Folklife Center at the Library of Congress**
Collecting institutions are critical agents in holding, preserving and providing access to Native/First Nations cultural heritage. In this project, the American Folklife Center at the Library of Congress (LOC) identified a set of wax cylinders in need of digitization for preservation purposes and at the same time recognized that this collection of Passamaquoddy recordings should be co-curated with the tribe because the metadata was insufficient, it was likely there was sensitive materials on the cylinders, and the Library has been committed for decades to including community knowledge to their records. Some legwork had been done in the 1980s to reach out to the tribe, but now that the cylinders were in need of digitization for preservation purposes and the Library wanted an active consultation process to involve the tribe, which could also work to support and update the LOC’s own metadata and catalogue records. The Library is now working with the Local Contexts team and the Passamaquoddy Tribe in Maine to give the series of 31 1890s wax cylinder recordings — some of the first that were ever made documenting Native culture in the Americas — new TK Labels to help users understand the importance and significance of these materials. In this instance, the TK Labels provide an avenue for new kinds of conversations and engagements between the Library and the Passamaquoddy Tribe. A central element of this alternative curation workflow is a new technological intervention in the form of a ‘TK Label Adapter’ (an offline app that runs on an iPad) that will allow local information produced within Passamaquoddy contexts to be ported directly into the Library of Congress online catalogue. This workflow includes allowing the TK Labels to be generated as embed code that can be added to the Library’s own online catalogue system and classification schema. Passamaquoddy members can identify items of significance within the collection and the TK Label Adapter produces the code in a format compliant with the LOC web platform. Importantly, as we move through this development we are creating a template that will work across platforms and one that will produce codes that can be used within any system. The results from the TK Label Adapter will be format and platform neutral and will generate both human and machine-readable code.

As is evidenced in these two examples above, and the Scowlitz Attribution Label example that begins this Narrative, the TK labeling intervention opens these collections for new information, for new use, and for new meaning. It also begins to offer an alternative digital lifecycle workflow for Native/First Nations digital collections. This new workflow (see image below) brings into focus the cultural contexts that continue to inform these collections. While these are somewhat invisible in the current digital content workflow, they are nevertheless present (see image of this in Appendix E). The labeling process acknowledges this already existing context and adds capacity for cultural conditions of access and informed sharing to be included. In doing so, a new generalizable workflow is produced that enables the connection of current communities to their past collections and facilitates respectful and appropriate uses of this material into the future.
In the first three years of active initial research and development, we have made significant progress in testing and advancing the Local Contexts project in multiple communities and institutions in the US and Canada. We have a clear understanding of the alternative workflow that Local Contexts and the TK Labels produce. The next natural phase is to scale these to a national model with attendant educational resources, web based, modules, and a replicable TK Label Adapter and TK Label Browser Extension to apply across platforms, online or offline and in diverse content management systems. In this proposed phase of work, Local Contexts builds out the current state of collaborative curation and extends it as a national, institutional-wide model, focusing on a set of standards for providing access to, and structuring use of Native/First Nations collections.

3.1.8 Education and Informational Support

From the inception of the Local Contexts project, we recognized that one of the impediments for navigating the difficult questions of access and informed sharing of Native/First Nations cultural heritage is clear and accessible legal information about intellectual property law and copyright in particular. Providing this information is a cornerstone of our project and we are developing this to constitute the bulk of the Local Contexts site. Our learning and training modules seek to address legal, non-legal and ethical frameworks of practice, as we believe that these will help both Native/First Nations communities and institutions, make better and more informed decisions about when and whether copyright matters and works. Certainly Native/First Nations communities are not unique in having limited access to this kind of information and Creative Commons has done a service to the public by providing easily digestible frameworks for some uses of copyright. Native/First Nations collections provide a unique case (much like software did for Creative Commons). When Native/First Nations collections disproportionately involve engagement with this area of IP law, not having access to educational materials concerning its use perpetuates conditions of exclusion and produces greater animosities towards holders of these collections. Our aim in Local Contexts is to demystify copyright, to provide clear and direct information about how it affects cultural heritage material. For instance, this includes making the different time periods of protection for the different ‘types’ of material (like photographs, films, sound recordings and written material) in a US context clearer. This helps communities understand the different kinds of rights that exist with their material, when their material might be going to enter into the public domain, and what kind of planning and negotiation with collecting institutions might be necessary. One aim of this NEH grant is to further develop this part of the Local Contexts platform with informational multi-media tutorials and to develop visual and aural user aids for conveying this otherwise dense legal information. The current site has a baseline set of “What is…” topics that will be expanded in this next phase using short videos, infographics, and textual resources. In this way Local Contexts becomes a key reference and resource for communities and institutions that struggle with understanding these complex issues. Providing accessible resources empower communities to make more informed decisions about
whether copyright is the right tool for long-term preservation and access of materials, including those cultural heritage materials communities are also currently creating.

3.2. BACKGROUND OF APPLICANT
New York University is the lead institution in the Local Contexts 2.0 Project. NYU is a Research Category One University with deep information and technical resources for support of faculty research. NYU’s global programs and outreach also assist in the circulation and dissemination of important and groundbreaking research conducted at NYU. The PIs (Anderson) joint departments, Department of Anthropology and the Museums Studies Program, are internationally recognized for their substantive contribution to scholarly research and training in the institutional sector. The Department of Anthropology at New York University is one of the country’s leading programs for Sociocultural Anthropology, Linguistic Anthropology, Archaeological Anthropology, and Biological Anthropology. The scope of the discipline’s interests effectively bridges the humanities, the social sciences, and the natural sciences. The Department houses an extensive film and video collection. For more than thirty years, the Program in Museum Studies at New York University has offered an innovative course of study in the contemporary theory and practice of museum work. Emphasizing both the interdisciplinary study of museums and courses of practical training, the program has prepared more than three hundred graduates for positions of increasing responsibility in museums throughout the world. Museum Studies at NYU actively crosses disciplinary boundaries in two ways, assembling scholars from many academic fields whose work engages museum theory and practice, and training students to perform a variety of roles within all types of museums.

3.3 HISTORY, SCOPE, DURATION
Funded originally by an NEH Office of Digital Humanities Digital Start up grant in 2010, Mukurtu CMS is now at a 2.0 release with a global community of users. The original beta version of the TK Labels were developed and tested in Mukurtu and have been adapted in Mukurtu 2.0 and configured as part of the core metadata fields (See Appendix G). Between the launch of Mukurtu 1.0 in 2012 and the current release in April 2015, over 200 instances of Mukurtu have been spun up, tested, and configured in communities worldwide. As stated above, Local Contexts and the TK Labels originated within the Mukurtu CMS platform, but from 2012 have been developed as its own stand-alone project: www.localcontexts.org

3.3.1 Work to Date
In it's third phase of development, Local Contexts has already provided educational materials related to intellectual property rights, digital stewardships, co-curation, and a set of Traditional Knowledge Labels for both Native and non-Native collecting institutions. Initial seed funding came from the United Nations agency, the World Intellectual Property Organization (WIPO) and the Canadian SSHRC project 'Intellectual Property Issues in Cultural Heritage.' Phase One (2012-2013) saw the conceptual and technical build-out of the Local Contexts platform and website. This phase included the development of the initial platform framing, identification of audiences, development of TK Labels with graphic icons and simple explanatory texts for each, the production of two videos explaining the need for Local Contexts as well as TK Labels (these can be viewed at www.localcontexts.org), establishment of website sections to support tribal decision-making around copyright and intellectual property generally, and the production of a walk-through demo of how to develop and apply a Label. During this phase, we also completed the positioning of TK Label options within Mukurtu CMS and the Plateau Peoples’ Web Portal. Upon completion of the preliminary Local Contexts, we created and sent a questionnaire for feedback from potential community and institutional users.

Phase Two (2013-2014) saw the initial testing phase of Local Contexts beginning with the Musqueam First Nation in British Columbia, Canada (the TK Labels), the Penobscot Nation in Maine (IP advice and policy development) and the Karuk Tribe in California (Tribal Collection Agreements and IP policy advice) and the development of initial planning for a project testing the TK Labels and updated Adapter at the American Folklife Center at the Library of Congress. This work was delivered through hands-on workshops and one-on-one training. We also held informal meetings with representatives from collecting institutions including the Smithsonian Institutions National Anthropological Archives and National Museum of the American Indian, the Yale Indian Papers Project, the Beinecke Rare Books and Manuscripts Library at Yale, the Colombia University Libraries, the University of Washington, University of Oregon, Northern Arizona University, and Western Washington University Special Collections, the American Museum of Natural
History, the Museum of Anthropology at the University of British Colombia, and the Australian Institute for Aboriginal and Torres Strait Islander Studies.

**Phase Three (2014-ongoing)** has seen the further development and implementation of customized TK Labels with the Scowlitz Band of the StooLo First Nation in British Columbia; further work with the Penobscot Nation (development of MOUs for cultural heritage management) and Karuk Tribe (initiating the Karuk Traditional Knowledge Labels); and, informational workshops on the TK Labels with the Hopi Nation and, at the University of New Hampshire with the Tomaquag Museum, Indigenous Resources Collaborative and Passamaquoddy Heritage Center and Museum. Within this phase we received a grant from the Arcadia Foundation for the Library of Congress and the Passamaquoddy Tribe in Maine project scoped in Phase Two to complete the digitization and TK Labeling of Jesse Fewkes 1893 wax-cylinder sound recordings. This work includes establishing a model for institution to multi-tribal collaboration in the development and implementation of TK Labels within Library of Congress online catalogue and the technical building of the TK Label Adapter. *Local Contexts* also received the New York University 'Research Challenge Fund' award for the further refinement of the *Local Contexts* website, incorporating experiences from our collaborators involved in testing the TK Labels and producing new learning materials and visual aids in the form of short explanatory videos for the 13 TK Labels. This third phase has also included informal as well as advanced discussions with the Zibiwin Centre for Anishinabe Culture and Lifeways, the StooLo Center for Resource and Research Management, Yale Indian Papers Project at Yale University, the Field Museum in Chicago, the American Museum of Natural History in New York, University College of London and Oxford University in London. Additionally the tools and functions of *Local Contexts* will be presented to other tribal archives, libraries, and museums through a full-day workshop at the 2015 Association of Tribal Archives, Libraries and Museums (ATALM) International Conference in Washington DC.

The two co-Directors of *Local Contexts*, Jane Anderson (PI) and Kim Christen Withey have published three peer-review articles on this project, and one summary for an Australian legal organization *Arts Law* Australia. Jane Anderson is currently working on a manuscript proposal for Duke University Press that explores the legal, museology and applied anthropology issues that emerge in this project. Two other chapters in books are set for completion in Summer 2015. See:

- **Christen, Kimberly.** 2015. ‘Tribal Archives, Traditional Knowledge and Local Contexts: Why the ‘s’ Matters’, *Journal of Western Archives* 6(1) 2015; 1-19.
- **Anderson, Jane.** From Creative Commons to Traditional Knowledge and Local Contexts (manuscript in preparation)

With this NEH funding we aim to implement *Local Contexts* 2.0 over the three-year funding cycle (01/01/16 – 12/31/18) as the premier national platform for resources and tools that serve the diverse stakeholders invested in the ongoing stewardship of digital Native/First Nations cultural heritage. By producing a new workflow for Native/First Nations digital heritage curation, models for reciprocal and collaborative practice that can engage multi-tribal and multi-institutional needs, educational resources that address the complex legal terrain of collections and advance the TK Labeling initiative, this funding will support *Local Contexts* as a leader for change nationally and internationally.
In this fourth phase we have support and commitment from the following tribes, tribal centers and research institutions to forward Local Contexts as a resource and tool for the future management of Native/First Nations collections:

- Penobscot Nation, Maine
- Karuk Tribe, California
- Stó:lo First Nation, Canada – Stó:lo Research and Resource Management Center
- Ziibiwing Center for Anishinabe Culture and Lifeways
- Yale University – Yale Indian Papers Project
- Columbia University – Center for Ethnomusicology
- New York University – New Special Collection of Indigenous Media from the National Museum of the American Indian

3.4 METHODOLOGY AND STANDARDS
In the interest of being responsive to varied sets of stakeholder needs, over the first three phases of development the Local Contexts project has followed an ‘agile community development model’ for all aspects of the project including: website creation and design, TK Label generator demo and model creation, workshops and testing with Native/First Nations communities and consultation and collaboration with collecting institutions. Agile Software Development (http://www.agile-process.org/) is an effective response to traditional "waterfall" development, where a fully formed requirement specifications result in ‘as designed’ software some 6-18 months later. Typically, waterfall design will produce products that do not require input from stakeholders or interest groups. In the case of the Local Contexts project and the sets of deliverables we have produced to date, we encouraged active community participation and feedback throughout the entire development period by engaging in short, clearly defined “sprints” of work lasting 2-3 weeks. This process allowed us to cull varied community and institutional needs and unite them into the project at different points. For example, two of our newest labels came directly from face to face workshops with communities, and we were able to respond to those custom needs because both our workflow and our technology are flexible and adaptable. Similarly, we modified our first designs for a TK Label generator so as to account for the varied content management systems (CMS) that institutions use. Working directly with the Library of Congress American Folklife Center staff on a project integrating the TK Labels into one of their collections showed us that we need a Label generator that can produce format agnostic labels – both in human and machine readable formats.

In this next phase of design, implementation, and development we will maintain the agile community development model for all of our deliverables. In addition, we will create a parallel communication channel for capturing community responses and recommendations, not only for site improvements, but also user experiences working with the TK Labels, and in the creation of education modules and a model workflow for digital heritage curation. Combining face-to-face feedback with online communication will allow us to integrate larger sets of feedback and results in a larger sample set for each activity and subsequent outcome.

With respect to copyright, our labeling initiative is being tested with collections and materials that are in the public domain or for which the Native/First Nation community holds copyright. Intellectual property rights in the materials from regional and national partners will remain with their institutions and it will be their responsibility to get clearance if any materials are not in the public domain. Intellectual property rights in any materials produced by tribes in the course of this project will remain with the originating tribes. All code and software produced for this grant will be open source and made available on GitHub.

3.5 WORK PLAN
Our work plan is designed to leverage the already successful development and momentum of Local Contexts and the TK Labels as evidenced through our three previous development and testing phases. Our overall objective is to establish national models and standards that truly reflect stakeholder experience in the stewardship of Native/First Nations cultural heritage. The current strength of the Local Contexts platform is in its flexibility and identification of multi-level needs. In this next phase of development and implementation we will expand and continue to integrate the core activities of the project: educational resources, workshops, labeling, and modeling, as well as complete work on the technical infrastructure of the TK Label Adapter and
our planned TK Label Browser Extender. (See Appendix D for further details of this TK Label Browser Extender).

The major deliverables include:

- Enhanced educational modules and training resources around copyright, protocols of access, development of IP policy, and governance structures for the development of equitable and reciprocal relationships for sharing Native/First Nations cultural heritage. These resources are designed for Indigenous communities, collecting institutions, and cultural heritage user-publics.
- Online forum for community and institutional experiences and uses of the TK Labels. This resource will extend the national models through specific community and repository examples. Taken together these examples inform the larger national model.
- Finalize TK Label Adapter and develop TK Label Browser Extender in order to provide the largest coverage for the digital embedding and application of the TK Labels.
- Further advancement of TK Labels and their implementation within tribal and institutional sites through our Local Contexts Series Workshops (see Appendix F for further explanation of these).
- Development of a national workflow model for the incorporation of protocols of access into standard digital collection management, curation and display.
- Development of base standards for collaborative and reciprocal relationships between tribes and institutions that hold Native/First Nations cultural heritage materials.

The Work plan is divided into six phases:

**Phase I: Strategy, Research, Collaboration**
This phase will be conducted by staff and will involve the collaborating representatives from the Penobscot Nation, Karuk Tribe, Sto:lo First Nation, Ziibiwing Centre for Anishinaabe Culture and Lifeways, Yale Indian Papers Project, Columbia University and New York University.

**Phase II: Advanced Development and Evaluation**
This phase will be conducted by Jane Anderson (PI) and Kim Christen Withey and representatives from Penobscot Nation, Sto:lo First Nation, Karuk Tribe and Yale Indian Papers Project.

**Phase III: TK Labeler Adapter and Implementation**
This phase will be conducted by all staff and implemented by grant subcontractors at the Center for Digital Archaeology building on their first two phases of work.

**Phase IV: Advanced Implementation 1**
This phase will be conducted by all staff and collaborating representatives from Ziibiwing Center for Anishinaabe Culture and Lifeways, Columbia University and New York University, Penobscot Nation, Sto:lo First Nation and Karuk Tribe.

**Phase V: Training, Education, Evaluation**
This phase will be conducted by Jane Anderson.

**Phase VI: Advanced Implementation 2, Dissemination, Delivery**
This final will involve all staff and collaborating representatives from Sto:lo First Nation, Penobscot Nation, Karuk Tribe, Ziibiwing Center for Anishinaabe Culture and Lifeways, Yale Indian Papers Project, Columbia University and New York University.


**Activities and Outcomes: 6 months, January 2016-May 2016.**

- Project Planning: refine project roadmap, establish timeframe for workshops.
- Performance Teams: Skype and phone meetings to assure essential team member availability and to set project schedule.
- Workshop Planning: with our community and institutional collaborators establish timeline for when the series workshops are going to be delivered within each context.
- Education and Training Development: development and enhancement of legal resources and training materials.
• Indicator Development: initiating the production of a set of indicators for measuring and evaluating the success, uptake and use of Local Contexts and the TK Labels.
• Sprint Planning: develop estimate and schedule based on team requirements.
• Collaborative Network Development.
• Module and Workflow Framing: begin development of training and tutorial advice and consider mechanism for effective delivery of new workflow and associated models.

Activities and Outcomes: 4 months, June 2016-September 2016.
• Workshop Delivery: Local Contexts Series Workshop (Informational) delivered to the Penobscot Nation, Stó:lo First Nation, Karuk Tribe and Yale Indian Papers Project.
• Post-Workshop Follow up and Evaluation.
• Workflow Build: Following the series workshops incorporate examples into Native/First Nations collections digital workflow.
• Sprint Planning: finalize development of Sprint schedule.
• NAISA, ATALM and SAAs 2016: Present tribal and institutional collaborative models and processes currently being developed out of Local Contexts.

Activities and Outcomes: 8 months, October 2016-May 2017.
• Development: Sprints for TK Label Browser Extender: four week sprints followed by two week testing in the 4 tribal and institutional sites of the Phase II Series Workshops.
• Demos: Each four week sprint and testing culminates with functional, tested capabilities for Label application and portability.
• Workshop Planning: Refining current Series Workshop and prepare for Customize/Implementation workshops (see Appendix F for more details).
• Educational and Training Module Development.
• AAM and AAAs: presentation of practice and process of project as part of applied anthropology and museology practices.

Activities and Outcomes: 4 months, June 2016-September 2017.
• Workshop Delivery: Local Contexts Series Workshop (Informational) delivered to Ziibiwing Center for Anishinabe Culture and Lifeways, Columbia University and New York University. Local Contexts Series Workshop (Customize and Implement) to Penobscot Nation, Stó:lo First Nation and Karuk Tribe.
• TK Label Adapter and TK Label Browser Extender further refined.
• Post-Workshop Follow up and Evaluation.
• Workflow Build: Following the series workshops incorporate examples into Native/First Nations collections digital workflow.
• Update Local Contexts website with educational materials, interviews and testimonies and examples from workshops.
• SAAs: Presentation and workshops including updating and advising the Cultural Heritage Working Group about the developing workflow.
• ATALM: presentations and workshops introducing new tribal affiliates and collecting institutions to the project and demonstrating its capabilities.

Activities and Outcomes: 8 months, October 2017 - May 2018.

- User-training tutorials, videos and documentation produced and updated on Local Contexts platform.
- Development Sprints for TK Label Browser Extender: four week sprints followed by two week testing in the 4 tribal and institutional sites of the Phase II Series Workshops.
- Community, institutional and user feedback, statistics and evaluations produced and circulated.
- Collecting Institution Meeting at NYU (separate funding to be secured from NYU for this workshop).
- Indicator and Measurement Production feedback.
- ALA, AAM meetings and special workshop at NYU for collecting institutions to be convened.

Phase VI: Advanced Implementation 2, Dissemination, Release. Milestones: Local Contexts 2.0 complete, released; documentation and training materials

Activities and Outcomes: 7 months, June 2018-December 2018.

- Final implementation of TK Labels with community and institutional collaborators (Sto:lo First Nation, Penobscot Nation, Karuk Tribe, Ziibiwing Center for Anishnabe Culture and Lifeways, Yale Indian Papers Project, Columbia University and New York University).
- Training and tutorial videos and documentation available on Local Context site.
- TK Label Browser Extender for CMS use is ready for release.
- Final Local Contexts website update.
- Community and user feedback, statistics and evaluations synthesized into NEH project report.
- Standards and Indicators for protocols of access released.

3.6 STAFF

Jane Anderson, PhD. Assistant Professor, Department of Anthropology and Program in Museum Studies at New York University and co-Director of Local Contexts (Principal Investigator). In this project she will coordinate the Local Contexts educational and training output and facilitate outreach to tribal partners; facilitate and produce the Native/First Nations collections digital workflow; work together with the tribal communities to facilitate the development and translation of the TK Labels; travel to tribal locations for training and outreach workshops. She is committing 24% of her time to this project.

Kimberly Christen Withey, PhD. Associate Professor, Department of Critical Culture, Gender and Race Studies Washington State University and co-Director of Local Contexts. Dr. Christen is the Project Director of the Plateau Peoples’ Web Portal, and Project Director of Mukurtu CMS. In this project she will coordinate the Local Contexts technical team and facilitate outreach to tribal partners; manage the production of the software; work together with the tribal communities to facilitate the development and translation of the TK Labels; traveled to tribal locations for training and outreach; and over-see the development of the TK Label 'roundtrip' process. She is committing 5% of her time to this project.

Michael Ashley, PhD, Director, Center for Digital Archaeology and Local Contexts and Mukurtu Director of Technology. Dr. Ashley facilitates the technical development of the Local Contexts platform and the TK Labeling initiative, including developing the TK Label Adapter and the TK Label Browser Extender. He is committing 90 hours to this project for its duration.

This interdisciplinary team brings legal, museology, anthropology, cultural theory and technical development skills to this project. This project is the natural extension of the theoretical and practically oriented work that Anderson and Christen Withey have been conducting for the last 15 years in the United States, Canada and Australia. This includes Anderson’s ongoing work with the World Intellectual Property Organization in Geneva and Christen Withey’s work in the development of Mukurtu and the Sustainable Heritage Network.

Advisory Board

Sonya Atalay, PhD, Associate Professor, University of Massachusetts, Amherst.
Aaron Glass, PhD, Assistant Professor, Museums and Anthropology, Bard Graduate Centre.
Guha Shankar, Folklore Specialist, American Folklife Center, Library of Congress.
Jason Schnitzius, Clinical Professor of Law, New York University School of Law.
Natalia Lyons, PhD, Director and Senior Archaeologist, Ursus Heritage Consulting.
Greg Younging, PhD, Professor of Indigenous Studies, Irving K. Barber School of Arts and Sciences, Okanagan Campus, University of British Columbia.

Our Advisory Board has been developed to advise project staff on matters including: project development and testing; outreach to Native/First Nations communities; best practices/changing standards; community and participatory research projects; cultural heritage collections management; outreach to collecting institution sector; sustainability, growth and expansion of project across the Humanities and tribal Nations; intellectual property and non-legislative interventions; and, scholarly outreach and impact. We will contact our Advisory Board members on both an individual basis and as a group for reference. NYU will host a yearly meeting to discuss the project’s progress, development and dissemination.

3.7 SUSTAINABILITY AND EVALUATION

In our previous phases of work we have recognized the importance of both front-end and formative modes of evaluation and feedback. For instance in our first iteration of the Local Contexts platform we developed a very specific survey about the site and its accessibility and functionality for users, and our last two years have been ‘testing’ phases where we have been testing elements of the project while it is happening. This has given us important output and outcome-based evaluations necessary for forwarding Local Contexts to its next stage of development. Our evaluation plans for this project will continue and extend these already existing types of evaluation. In particular we will include:

Formal Surveys: Participants in the workshops will be asked to respond to formal surveys assessing the benefits and utility of TK Labels and their localized development. The results of these surveys will be analyzed and made available through the project’s website. We will also conduct specific interviews with community members developing Labels to share with others on our website. Our online Local Contexts platform will have a direct feedback loop linked to each page asking for user feedback. In addition, we will use our online survey tool to follow up with workshop participants twice in the year following their initial workshop attendance — this is because the engagement with Labels by community members at this point is largely pedagogical and related to discovery, eg. discovery that there is such an effective tool out there to help promote/protect/preserve their own values.

Roundtable Discussions: Roundtable discussions of issues in digital cultural heritage stewardship will be held in conjunction with the workshops as well as with our presentations at the Association of Tribal Archives, Libraries and Museums, Society for American Archivists, American Library Association and American Alliance of Museums annual meetings. The round tables will be open to all interested parties, and institutional collaborating participants will be encouraged to attend. Assessing the effectiveness of current Local Contexts site as a resource, the label development/technical delivery and Native digital content model will be discussed.

Advisory Board: An important part of the evaluation process will be the input of the project’s advisors. The advisory board will have a central role in assessing the materials for the workshops and the online materials.

Access Indicators: Through our complimentary modes of evaluation we will also work to develop a set of ‘access indicators’ that will help in the measurement of user practice when engaging with newly labeled content.

Sustainability for this project is ensured by three key components: the adoption by communities, the publication and circulation of content on the Local Contexts platform, and the integration of the Labels into multiple institutional CMSs. The communities, tribal archives and collecting institutions that we will be working with in this project have been selected based on existing interest and engagement with the TK Labels and the willingness to explore, test, collaborate on the development of a new digital model for the stewardship of Native/First Nations material. Each community and institution has capacity, infrastructure and personnel that can ensure ongoing support and community participation, and also evaluate how the Labels are working in different media and contexts. Through these collaborations we will also develop a sustainability plan for the long-term and projected use of the labels: for instance how they might evolve, and also how the technologies involved in actually digitally constructing and applying the Labels might change over time. The sustainability of Local Contexts rests on users being able to access the tool, educational
resources, and implementation aids. In addition, our workshops are giving tribal and non-tribal librarians, archivists and museum specialists the chance to work with Local Contexts staff to customize their system.

3.8 DISSEMINATION
From the beginning of Local Contexts, dissemination has been key to the goal of facilitating change in the stewardship of Native/First Nations digital cultural heritage collections. As a result, dissemination has been built into the project from the outset as we have identified three discrete target audiences for this work – namely Native and First Nations communities, Native and non-Native collecting institutions and non-Indigenous users of these collections. In order to address these different audiences, the primary goal of our first phase of development was to produce an accessible web platform. This platform plays an important role in dissemination through the educational materials, explanations of the project and the TK Labels, and the workflow descriptions that currently exist for these different audiences. We are in the process of updating the site to include examples from our previous stages of work and to provide greater multi-media explanations of the TK Labels and more advanced information about copyright. In this update we are also focused on reducing dependency upon textual explanations. This recognizes that our target platform audiences include people with various digital literacy capabilities. In addition to this web platform, the Local Contexts team runs site-specific workshops for communities and Native/First Nations and non-Native institutions. These expand upon various components within the website and are designed to enhance education, testing and implementation. For instance, through our previous phases of development we have run legal workshops explaining intellectual property and copyright, explaining what Memorandums of Understanding are and how to utilize them and elaborating upon what kinds of tribal governance questions need attention. We also run a Local Contexts Series Workshop designed especially for the TK Labels. These workshops have two components – a legal and informational workshop and, a customize and implement workshop. (These workshops are explained in more detail in Appendix F). These workshops to support communities in identifying and expressing already existing governance systems for their cultural heritage. They also support institutions in engaging with the complex historical, legal and political elements embedded within their collections.

Additional dissemination occurs through the development and incorporation of the TK Labels within both Mukuru CMS and the Plateau Peoples’ Web Portal. This allows a different range of communities and institutions to have access to the TK Labels and the Local Contexts platform. This also allows extension of the TK Labels into other international contexts where Mukuru CMS is being used – especially for instance, Australia and New Zealand.

Both Local Contexts co-Directors are invited to give public lectures. Examples of significant public lectures to date include: Library of Congress Botkin Lecture, Distinguished Lecture on Cultural Heritage at the Smithsonian and the UNESCO 2012 Memory of the World Conference. At the invitation of the World Intellectual Property Organization in 2012 the Local Contexts team presented the project to United Nations Member States at a special side event during negotiations for new international legislative options for protecting traditional knowledge. We also speak regularly at conferences and share examples of the Local Contexts work in progress. These public presentations of the site and its capabilities are an effective means for informing our diverse publics, and especially researcher user publics, about the issues that face Native/First Nations digital heritage collections. We will continue to organize panels and workshops at national conferences like National American and Indigenous Studies Association (NAISA), Association of Tribal Libraries, Archives, Libraries and Museums (ATALM), American Anthropological Association (AAA), Law and Society and Society for American Archivists (SAA) that allow our tribal and institutional partners to share their experiences about the project and why and how the TK Labels are being utilized (see also Appendix H. Results from Previous Work 2 – Select Examples of Dissemination). In addition, both co-Directors have published 3 peer-reviewed articles on this project and there is a manuscript and 2 other book chapters in production.

In addition to these dissemination initiatives, we will be producing short You-Tube videos on the TK Labels for the Sustainable Heritage Network and conducting further outreach with institutions who have expressed interest in this project but are not involved directly in this grant – namely the American Museum of Natural History and the Field Museum in Chicago. For further details on our Dissemination Strategy, please see Appendix C.